

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

Responsible Party

Responsible Party: Enterprise Field Services, LLC	OGRID: 241602
Contact Name: Thomas Long	Contact Telephone: 505-599-2286
Contact email: tjlong@eprod.com	Incident # (assigned by OCD) nAPP2326946647
Contact mailing address: 614 Reilly Ave, Farmington, NM 87401	

Location of Release Source

Latitude **36.267572** Longitude **-106.944883** (NAD 83 in decimal degrees to 5 decimal places)

Site Name Lateral 2C-125	Site Type Natural Gas Gathering Pipeline
Date Release Discovered: 09/26/2023	Serial Number (if applicable): N/A

Unit Letter	Section	Township	Range	County
G	33	24N	01W	Rio Arriba

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (Name: **BLM**)

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> Condensate	Volume Released (bbls): Estimated 15-20 BBLs	Volume Recovered (bbls): None
<input checked="" type="checkbox"/> Natural Gas	Volume Released (Mcf): 8.5 MCF	Volume Recovered (Mcf): None
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

Cause of Release On August 30, 2023, Enterprise had a release of natural gas and natural gas liquids from the Lateral 2C-125 pipeline. The pipeline was isolated, depressurized, locked and tagged out. No fire nor injuries occurred. No liquids were observed on the ground surface. Repairs and remediation began September 26, 2023, at which time Enterprise determined the release reportable per NMODC regulation due the volume of impacted subsurface soil. Remediation was completed on October 5, 2023. The final excavation dimensions measured approximately 57.5 feet long by 34 feet wide by 10 feet deep. Approximately 1,148 cubic yards of hydrocarbon impacted soil was excavated and transported to a New Mexico Oil Conservation Division (NMODC) approved land farm. A third party closure report is included with this "Final" C-141.

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Thomas Long Title: Senior Environmental Scientist

Signature:  Date: 11-29-2023

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

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by:  Date: 02/21/2024

Printed Name: Nelson Velez Title: Environmental Specialist – Adv



CLOSURE REPORT

Property:

Lateral 2C-125 (09/26/23)
Unit Letter G, S33 T24N R01W
Rio Arriba County, New Mexico

New Mexico EMNRD OCD Incident ID No. NAPP2326946647

November 29, 2023

Ensolum Project No. 05A1226283

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

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1	Site Description & Background.....	1
1.2	Project Objective.....	1
2.0	CLOSURE CRITERIA.....	1
3.0	SOIL REMEDIATION ACTIVITIES.....	3
4.0	SOIL SAMPLING PROGRAM.....	3
5.0	SOIL LABORATORY ANALYTICAL METHODS.....	4
6.0	SOIL DATA EVALUATION.....	4
7.0	RECLAMATION.....	5
8.0	FINDINGS AND RECOMMENDATION.....	5
9.0	STANDARDS OF CARE, LIMITATIONS, AND RELIANCE.....	5
9.1	Standard of Care.....	5
9.2	Limitations.....	5
9.3	Reliance.....	5

LIST OF APPENDICES

Appendix A – Figures

Figure 1: Topographic Map
Figure 2: Site Vicinity Map
Figure 3: Site Map with Soil Analytical Results

Appendix B – Siting Figures and Documentation

Figure A: 1.0 Mile Radius Water Well/POD Location Map
Figure B: Cathodic Protection Well Recorded Depth to Water
Figure C: 300 Foot Radius Watercourse and Drainage Identification
Figure D: 300 Foot Radius Occupied Structure Identification
Figure E: Water Well and Natural Spring Location
Figure F: Wetlands
Figure G: Mines, Mills, and Quarries
Figure H: 100-Year Flood Plain Map

Appendix C – Executed C-138 Solid Waste Acceptance Form

Appendix D – Photographic Documentation

Appendix E – Regulatory Correspondence

Appendix F – Table 1 - Soil Analytical Summary

Appendix G – Laboratory Data Sheets & Chain of Custody Documentation

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Lateral 2C-125 (09/26/23) (Site)
NM EMNRD OCD Incident ID No.	NAPP2326946647
Location:	36.267572° North, 106.944883° West Unit Letter G, Section 33, Township 24 North, Range 01 West Rio Arriba County, New Mexico
Property:	United States Bureau of Land Management (BLM)
Regulatory:	New Mexico (NM) Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On August 30, 2023, a release of natural gas and associate pipeline liquids from the Lateral 2C-125 pipeline was identified by Enterprise personnel. Enterprise subsequently isolated and locked the pipeline out of service. On September 25, 2023, Enterprise initiated activities to repair the pipeline and remediate petroleum hydrocarbon impact. On September 26, 2023, Enterprise determined the release was “reportable” due to the estimated volume of impacted soil. The NM EMNRD OCD was subsequently notified.

A **Topographic Map** depicting the location of the Site is included as **Figure 1**, and a **Site Vicinity Map** is included as **Figure 2** in **Appendix A**.

1.2 Project Objective

The primary objective of the closure activities was to reduce constituent of concern (COC) concentrations in the on-site soils to below the applicable NM EMNRD OCD closure criteria.

2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the NM EMNRD OCD. Ensolum, LLC (Ensolum) referenced New Mexico Administrative Code (NMAC) 19.15.29 *Releases*, which establishes investigation and abatement action requirements for oil and gas release sites that are subject to reporting and/or corrective action, during the evaluation and remediation of the Site. The appropriate closure criteria for sites are determined using the siting requirements outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC. Ensolum utilized the general site characteristics and information available from NM state agency databases and federal agency geospatial databases to determine the appropriate closure criteria for the Site. Supporting figures and documentation associated with the following Siting bullets are provided in **Appendix B**.

- The NM Office of the State Engineer (OSE) tracks the usage and assignment of water rights and water well installations and records this information in the Water Rights Reporting System (WRRS) database. Water wells and other points of diversion (PODs) are each assigned POD numbers in the database (which is searchable and includes an interactive map). No PODs were identified in the same Public Land Survey System (PLSS) section as the Site. Two PODs (RG-71779 and RG-82030) were identified in an adjacent section. There are no recorded depths to water for these PODs. These PODs are associated with livestock watering. RG-82030 is located approximately 0.85 miles northwest of the Site and RG-71779 is located approximately 1.3 miles west of the Site. (**Figure A, Appendix B**).

- No cathodic protection wells (CPWs) were identified in the NM EMNRD OCD imaging database in the same PLSS section as the Site or in the adjacent PLSS sections (**Figure B, Appendix B**).
- The Site is located within 300 feet of a NM EMNRD OCD-defined continuously flowing watercourse or significant watercourse (**Figure C, Appendix B**). The Site is adjacent to Almagre Arroyo.
- The Site is not located within 200 feet of a lakebed, sinkhole, or playa lake.
- The Site is not located within 300 feet of a permanent residence, school, hospital, institution, or church (**Figure D, Appendix B**).
- No springs, or private domestic freshwater wells used by less than five households for domestic or stock watering purposes were identified within 500 feet of the Site (**Figure E, Appendix B**).
- No freshwater wells or springs were identified within 1,000 feet of the Site (**Figure E, Appendix B**).
- The Site is not located within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to New Mexico Statutes Annotated (NMSA) 1978, Section 3-27-3.
- Based on information identified in the U.S. Fish & Wildlife Service National Wetlands Inventory Wetlands Mapper, the Site is not within 300 feet of a wetland (**Figure F, Appendix B**).
- Based on information identified in the NM Mining and Minerals Division's Geographic Information System (GIS) Maps and Mine Data database, the Site is not within an area overlying a subsurface mine (**Figure G, Appendix B**).
- The Site is not located within an unstable area per Paragraph (6) of Subsection U of 19.15.2.7 NMAC.
- Based on information provided by the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) geospatial database, the Site is not within a 100-year floodplain (**Figure H, Appendix B**).

Based on available information, the applicable closure criteria for soils remaining in place at the Site include:

Tier I Closure Criteria for Soils Impacted by a Release		
Constituent ¹	Method	Limit
Chloride	EPA 300.0 or SM4500 Cl B	600 mg/kg
TPH (GRO+DRO+MRO) ²	EPA SW-846 Method 8015	100 mg/kg
BTEX ³	EPA SW-846 Method 8021 or 8260	50 mg/kg
Benzene	EPA SW-846 Method 8021 or 8260	10 mg/kg

¹ – Constituent concentrations are in milligrams per kilogram (mg/kg).

² – Total Petroleum Hydrocarbons (TPH). Gasoline Range Organics (GRO). Diesel Range Organics (DRO). Motor Oil/Lube Oil Range Organics (MRO).

³ – Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX).

3.0 SOIL REMEDIATION ACTIVITIES

On September 25, 2023, Enterprise initiated activities to repair the pipeline and remediate petroleum hydrocarbon impact resulting from the release. During the remediation and corrective action activities, Sunland Construction Inc, provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final excavation measured approximately 57.5 feet long and 34 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 10 feet bgs. The lithology encountered during the completion of remediation activities consisted primarily of sand and clay.

Approximately 1,148 cubic yards (yd³) of petroleum hydrocarbon-affected soils were transported to the Envirotech, Inc., (Envirotech) landfarm in San Juan County, NM for disposal/remediation. The executed C-138 solid waste acceptance form is provided in **Appendix C**. Enterprise has not yet determined a permanent repair strategy for the pipeline; therefore, the excavation has not yet been backfilled at the time this document was finalized. Once the permanent repairs are completed, the pipeline excavation will be backfilled with imported fill and then contoured to the surrounding grade.

Figure 3 is a map that identifies approximate soil sample locations and depicts the approximate dimensions of the excavation with respect to the pipeline (**Appendix A**). Photographic documentation of the field activities is included in **Appendix D**.

4.0 SOIL SAMPLING PROGRAM

Ensolum field screened the soil samples from the excavation utilizing a calibrated Dexsil PetroFLAG[®] hydrocarbon analyzer system and a photoionization detector (PID) fitted with a 10.6 eV lamp to guide excavation extents.

Ensolum's soil sampling program included the collection of 21 composite soil samples (S-1 through S-15, S-15a, and S-16 through S-20) from the excavation for laboratory analysis. The composite samples were comprised of five aliquots each and represent an estimated 200 square foot (ft²) or less sample area per guidelines outlined in Section D of 19.15.29.12 NMAC. Hand tools or the excavator bucket were utilized to obtain fresh aliquots from each area of the excavation. Regulatory correspondence is provided in **Appendix E**.

First Sampling Event

On September 29, 2023, sampling was performed at the Site. The NM EMNRD OCD was notified of the sampling event although no representative was present during sampling activities. Composite soil samples S-1 (10'), S-2 (10'), S-3 (10'), S-4 (10'), S-5 (10'), S-6 (10'), S-7 (10'), and S-8 (10') were collected from the floor of the excavation. Composite soil samples S-9 (0' to 10'), S-10 (0' to 10'), S-11 (0' to 10'), S-12 (0' to 10'), S-13 (0' to 10'), S-14 (0' to 10'), and S-15 (0' to 10') were collected from the walls of the excavation. Subsequent soil analytical results identified TPH concentrations that exceeded the NM EMNRD OCD closure criteria for composite soil sample S-15

Second Sampling Event

In response to the exceedances of composite sample S-15 during the first sampling event, the impacted soils were removed by excavation and transported to the landfarm for disposal/remediation. On October 4, 2023, sampling was again performed at the Site. The NM EMNRD OCD was notified of the sampling event although no representative was present during sampling activities. Composite soil samples S-16 (10') and S-17 (10') were collected from the

floor of the excavation. Composite soil samples S-15a (0' to 10'), S-18 (0' to 10'), and S-19 (0' to 10') were collected from the walls of the excavation.

Third Sampling Event

On October 5, 2023, a third sampling event was performed at the Site. Composite soil sample S-20 (0' to 10') was collected from a wall of the excavation.

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 of Albuquerque, NM, under proper chain-of-custody procedures.

5.0 SOIL LABORATORY ANALYTICAL METHODS

The composite soil samples were analyzed for BTEX using Environmental Protection Agency (EPA) SW-846 Method 8021; TPH GRO/DRO/MRO using EPA SW-846 Method 8015; and chlorides using EPA Method 300.0.

The laboratory analytical results are summarized in **Table 1 (Appendix F)**. The laboratory data sheets and executed chain-of-custody forms are provided in **Appendix G**.

6.0 SOIL DATA EVALUATION

Ensolum compared the benzene, BTEX, TPH, and chloride laboratory analytical results or laboratory practical quantitation limits (PQLs) / reporting limits (RLs) associated with the composite soil samples (S-1 through S-14, S-15a, and S-16 through S-20) to the applicable NM EMNRD OCD closure criteria. The soil associated with composite soil sample S-15 was removed from the Site, and therefore, is not included in the following discussion. The laboratory analytical results are summarized in **Table 1 (Appendix F)**.

- The laboratory analytical results for the composite soil samples associated with soil remaining at the Site indicate total benzene is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the NM EMNRD OCD closure criteria of 10 mg/kg.
- The laboratory analytical results for the composite soil samples associated with soil remaining at the Site indicate total BTEX is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the NM EMNRD OCD closure criteria of 50 mg/kg.
- The laboratory analytical results for composite soil samples S-9, S-10, S-11, S-12, S-14, S-17, S-18, and S-19 indicate total combined TPH GRO/DRO/MRO concentrations ranging from 10 mg/kg (S-17, S-18, and S-19) to 76 mg/kg (S-14), which are less than the New Mexico EMNRD OCD closure criteria of 100 mg/kg. The laboratory analytical results for the other composite soil samples associated with soil remaining at the Site indicate total combined TPH GRO/DRO/MRO is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the New Mexico EMNRD OCD closure criteria of 100 mg/kg.
- The laboratory analytical results for the composite soil samples associated with soil remaining at the Site indicate chloride is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the NM EMNRD OCD closure criteria of 600 mg/kg.

7.0 RECLAMATION

Enterprise has not yet determined a permanent repair strategy for the pipeline; therefore, the excavation has not yet been backfilled at the time this document was finalized. Once permanent pipeline repairs are completed, Enterprise will backfill the excavation with imported fill and then contour to the surrounding grade.

8.0 FINDINGS AND RECOMMENDATION

- Twenty-one composite soil samples were collected from the Site. Based on laboratory analytical results, no benzene, BTEX, chloride, or total combined TPH GRO/DRO/MRO exceedances were identified in the soils remaining at the Site.
- Approximately 1,148 yd³ of petroleum hydrocarbon-affected soils were transported to the Envirotech landfarm for disposal/remediation.

Based on field observations and laboratory analytical results, no additional investigation or corrective action appears warranted at this time.

9.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

9.1 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).

9.2 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.

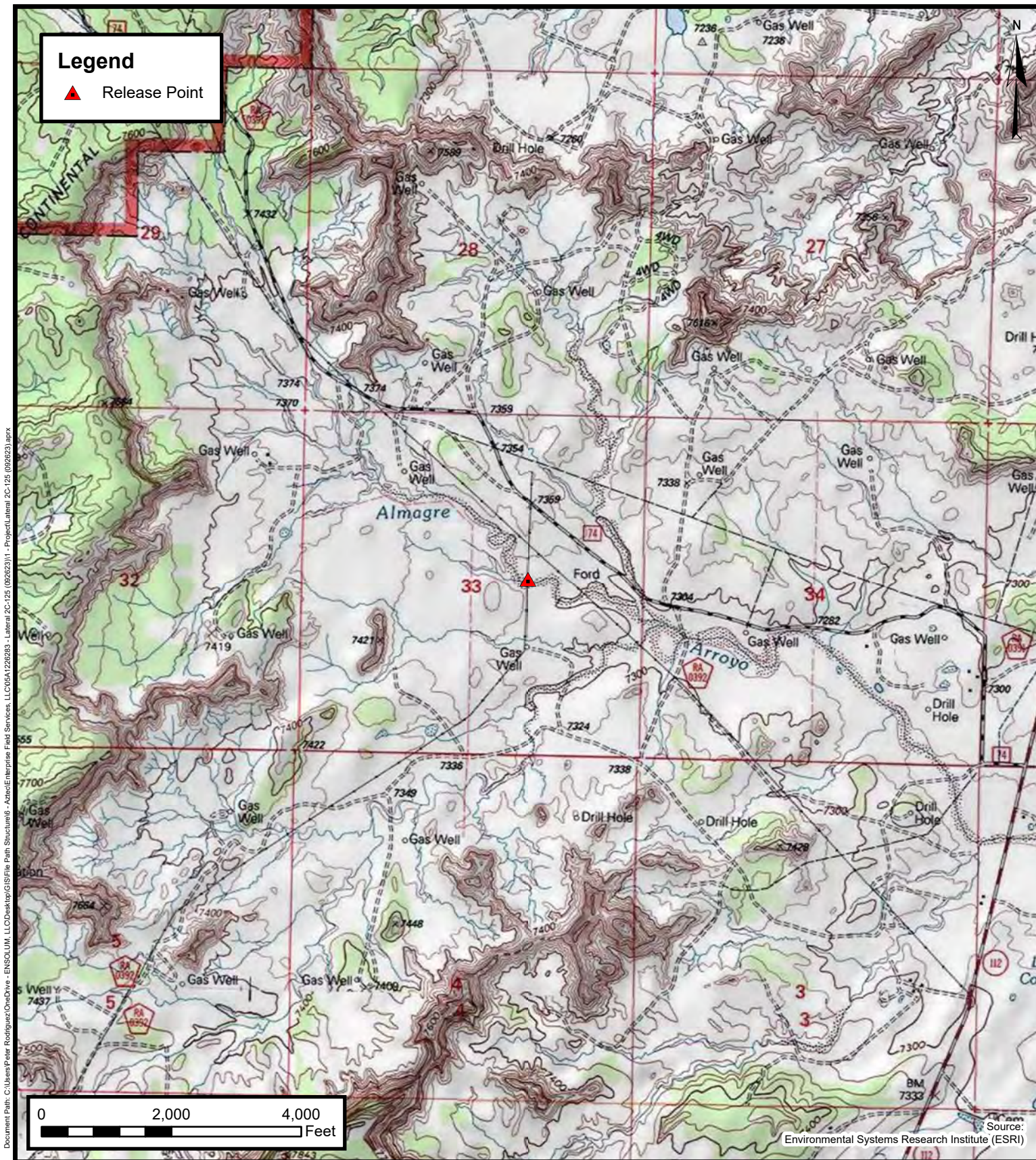
9.3 Reliance

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.



APPENDIX A

Figures



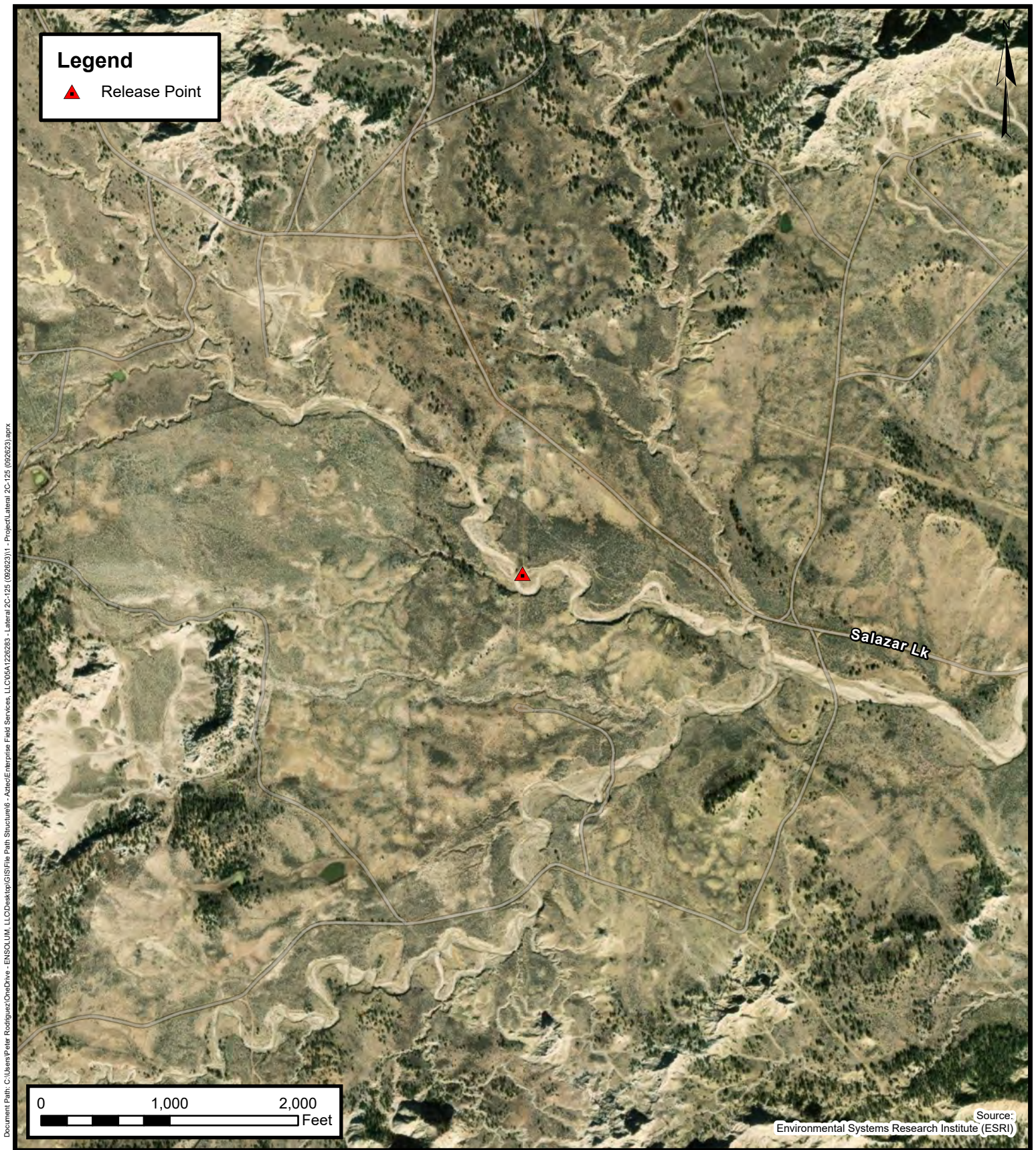
Topographic Map

Enterprise Field Services, LLC
Lateral 2C-125 (09/26/23)

Project Number: 05A1226283

Unit Letter G, S33 T24N R01W, Rio Arriba County, New Mexico
36.267572, -106.944883

FIGURE
1



Site Vicinity Map

Enterprise Field Services, LLC
Lateral 2C-125 (09/26/23)

Project Number: 05A1226283

Unit Letter G, S33 T24N R01W, Rio Arriba County, New Mexico
36.267572, -106.944883

FIGURE

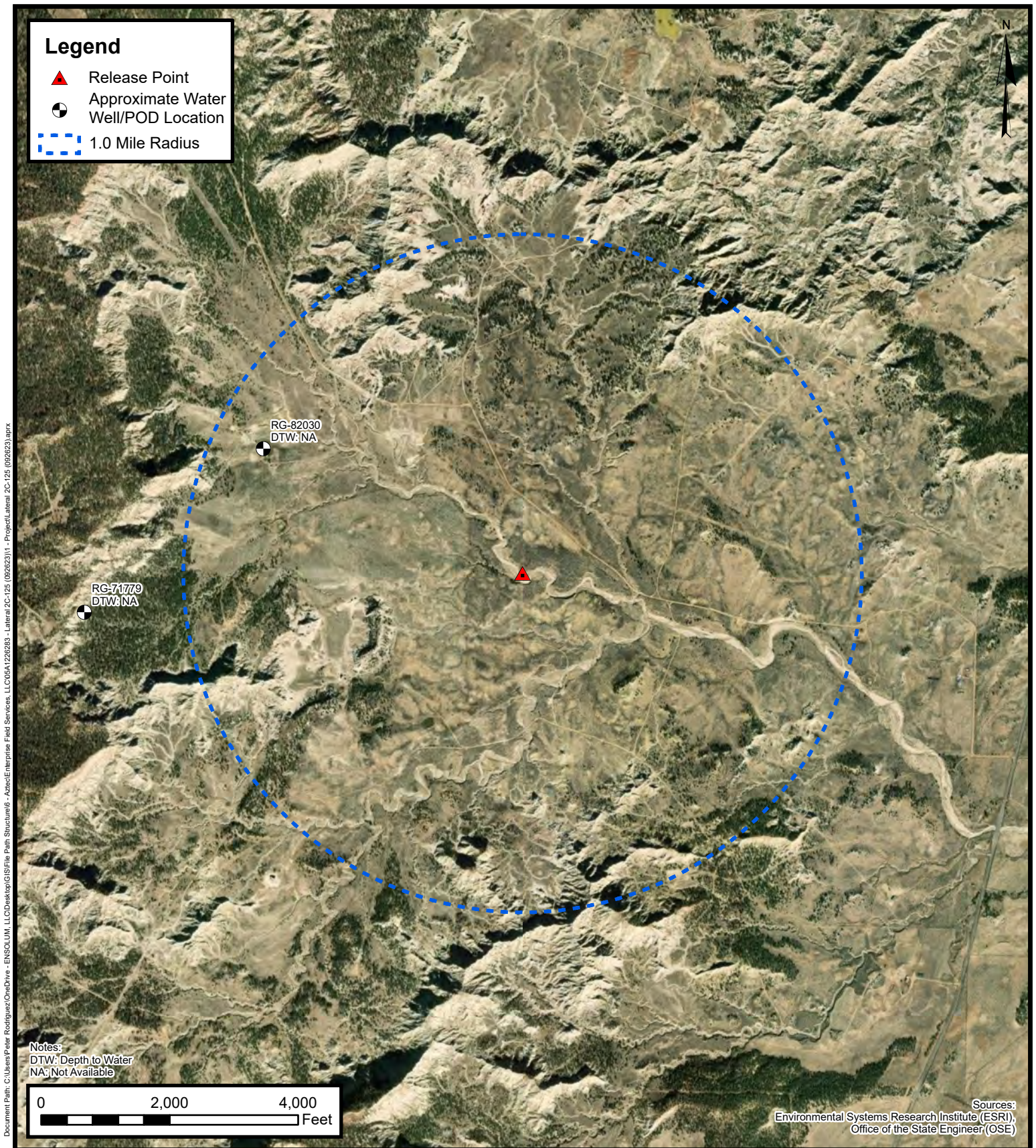
2





APPENDIX B

Siting Figures and Documentation

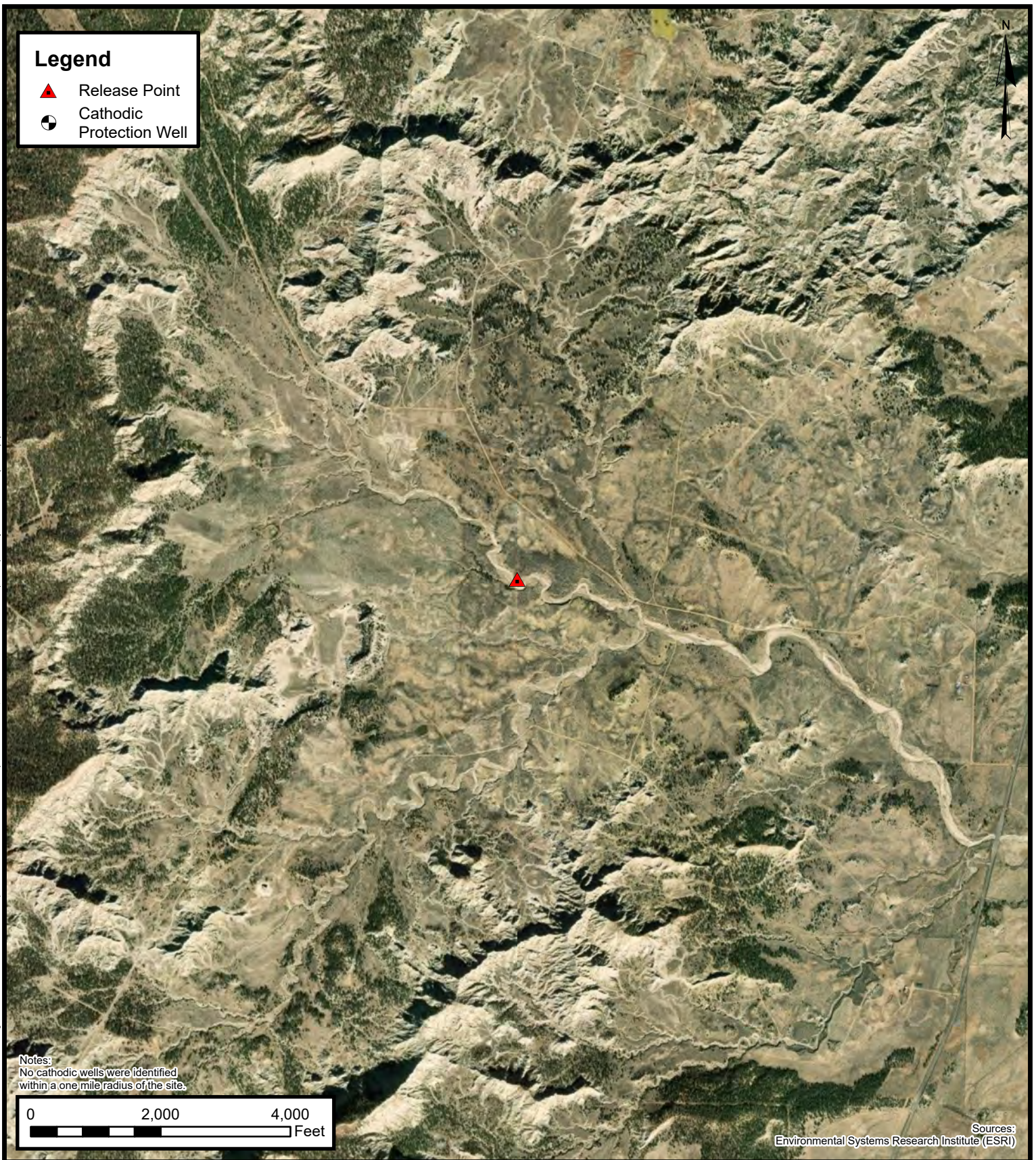


1.0 Mile Radius Water Well/POD Location Map

Enterprise Field Services, LLC
Lateral 2C-125 (09/26/23)
Project Number: 05A1226283
Unit Letter G, S33 T24N R01W, Rio Arriba County, New Mexico
36.267572, -106.944883

FIGURE
A

Document Path: C:\Users\Peter.Rodriguez\OneDrive - ENSOLUM, LLC\Desktop\GIS\File Path Structure\6 - Arriba\Enterprise Field Services, LLC\05A1226283 - Lateral 2C-125 (09/26/23)\1 - Project\Lateral 2C-125 (09/26/23).aprx



Cathodic Protection Well Recorded Depth to Water

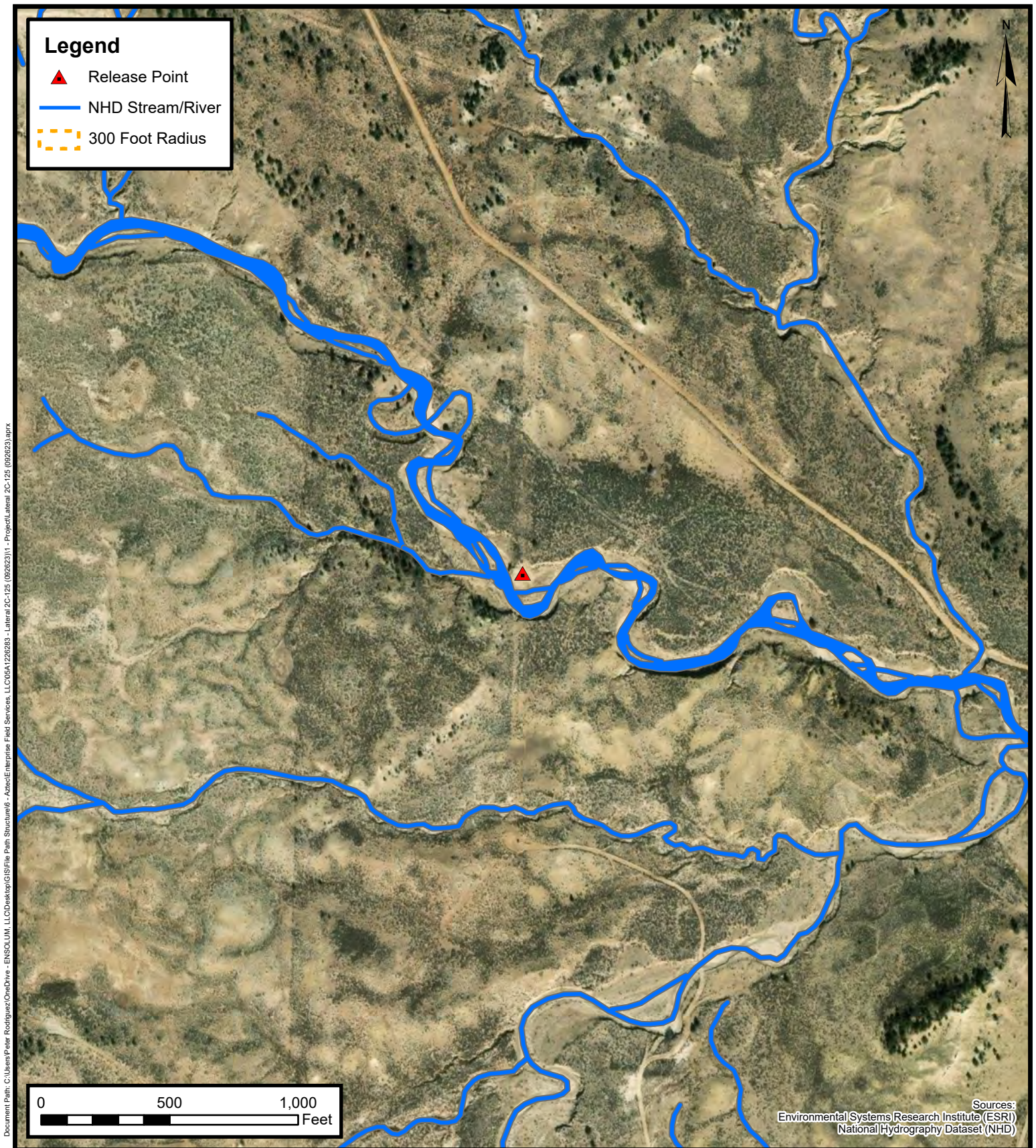
Enterprise Field Services, LLC

Lateral 2C-125 (09/26/23)

Project Number: 05A1226283

Unit Letter G, S33 T24N R01W, Rio Arriba County, New Mexico
36.267572, -106.944883

**FIGURE
B**



300 Foot Radius Watercourse and Drainage Identification

Enterprise Field Services, LLC

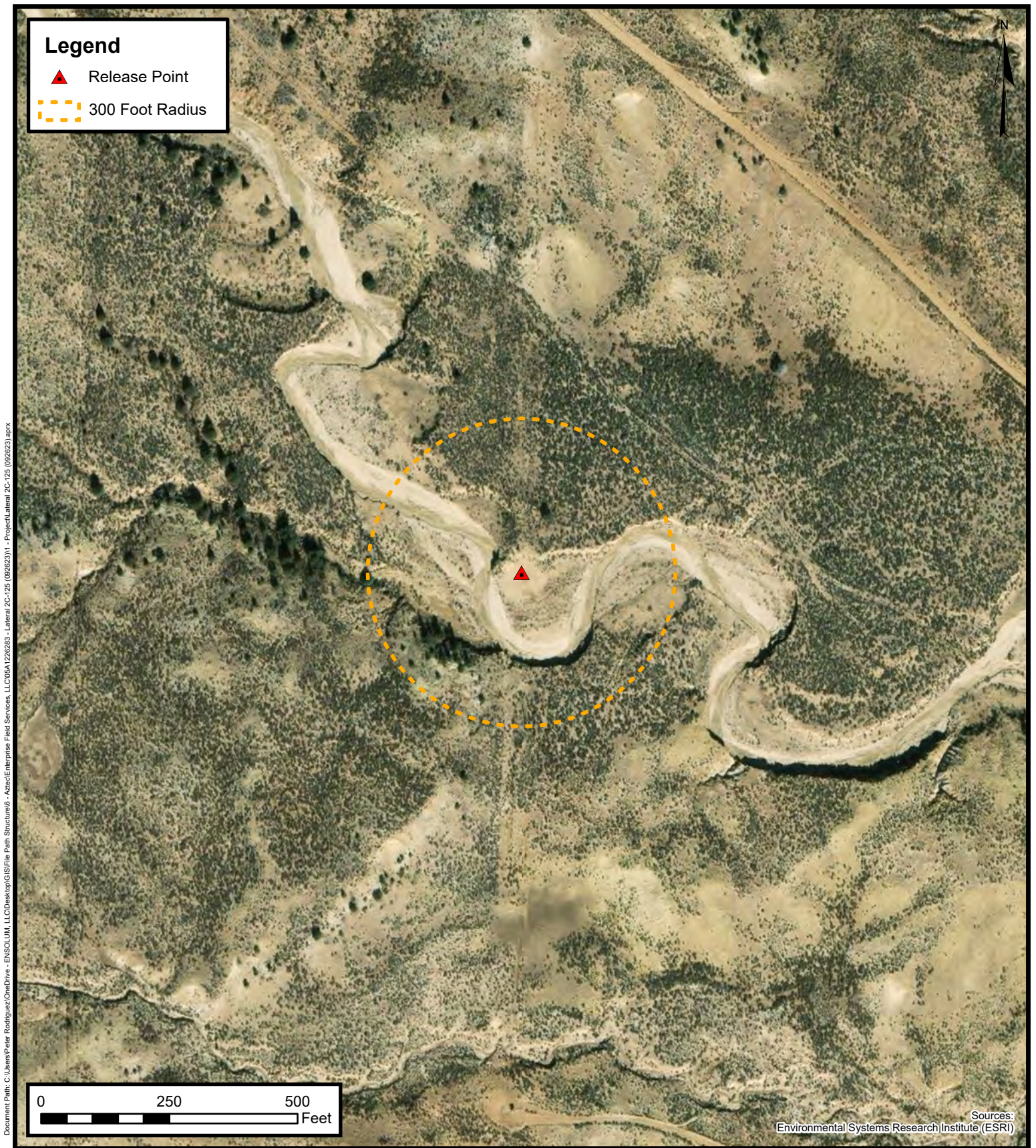
Lateral 2C-125 (09/26/23)

Project Number: 05A1226283

Unit Letter G, S33 T24N R01W, Rio Arriba County, New Mexico
36.267572, -106.944883

FIGURE

C



**300 Foot Radius Occupied
Structure Identification**

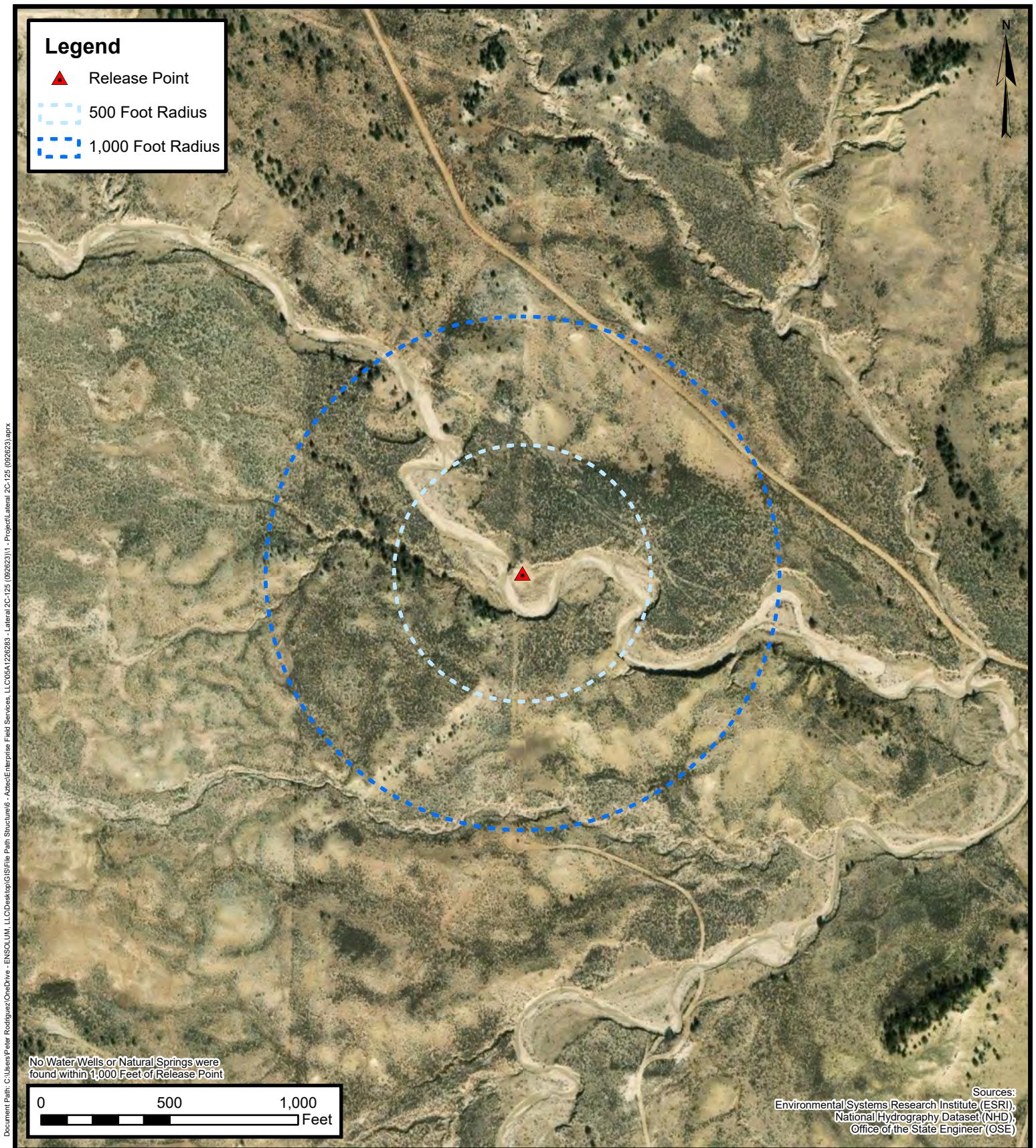
Enterprise Field Services, LLC

Lateral 2C-125 (09/26/23)

Project Number: 05A1226283

Unit Letter G, S33 T24N R01W, Rio Arriba County, New Mexico
36.267572, -106.944883

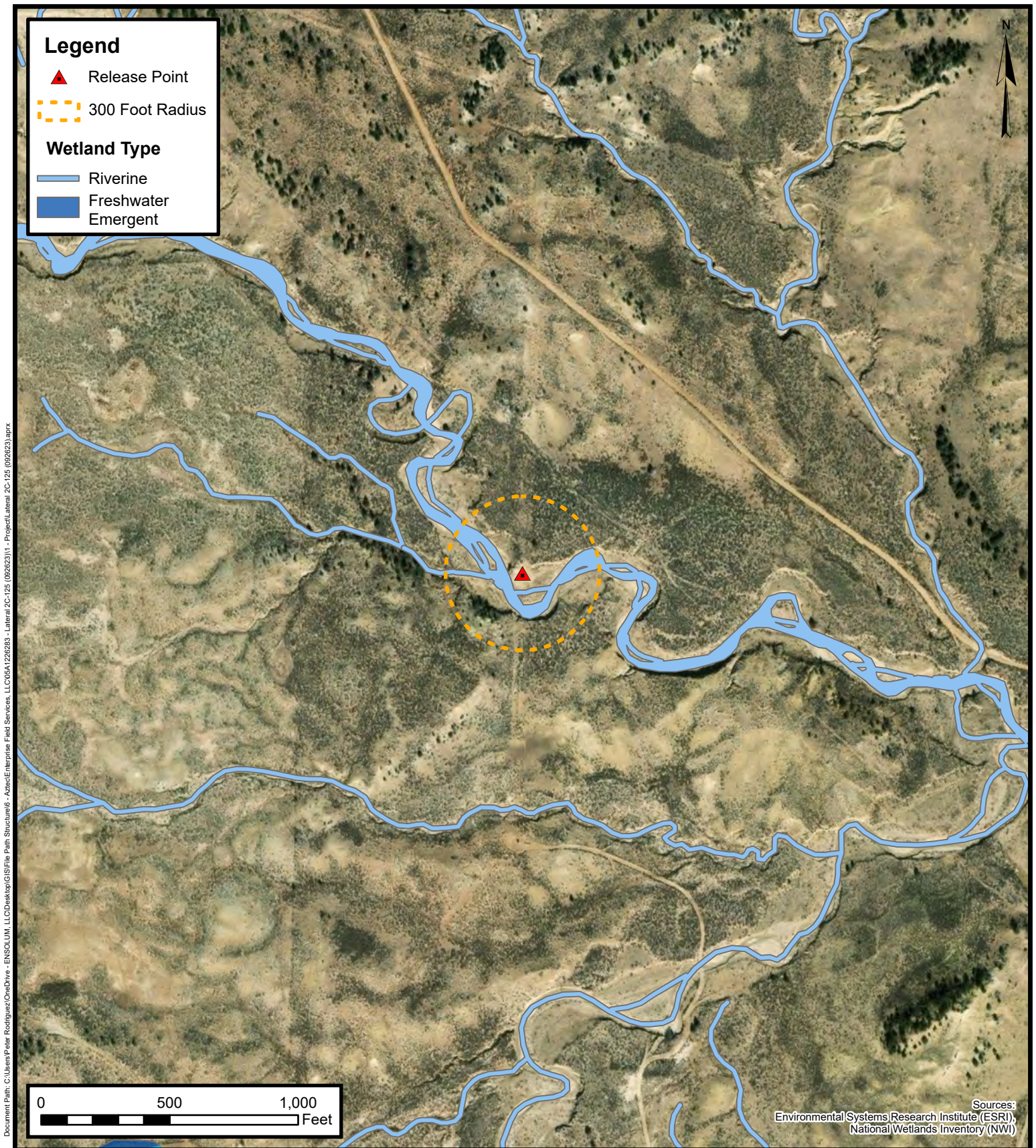
**FIGURE
D**



**Water Well and
Natural Spring Location**
Enterprise Field Services, LLC
Lateral 2C-125 (09/26/23)
Project Number: 05A1226283

Unit Letter G, S33 T24N R01W, Rio Arriba County, New Mexico
36.267572, -106.944883

**FIGURE
E**



Wetlands

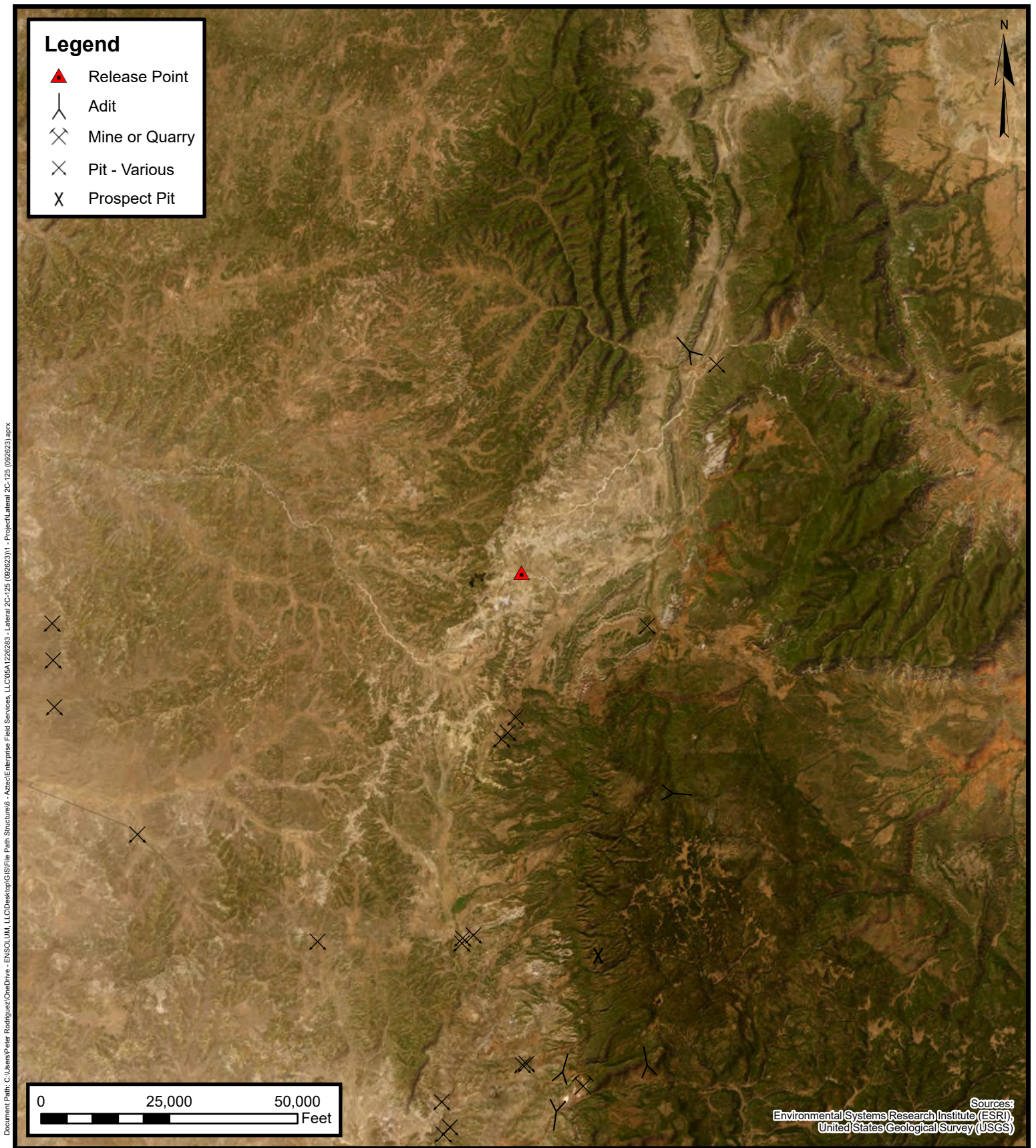
Enterprise Field Services, LLC
Lateral 2C-125 (09/26/23)

Project Number: 05A1226283

Unit Letter G, S33 T24N R01W, Rio Arriba County, New Mexico
36.267572, -106.944883

FIGURE

F



Mines, Mills, and Quarries

Enterprise Field Services, LLC

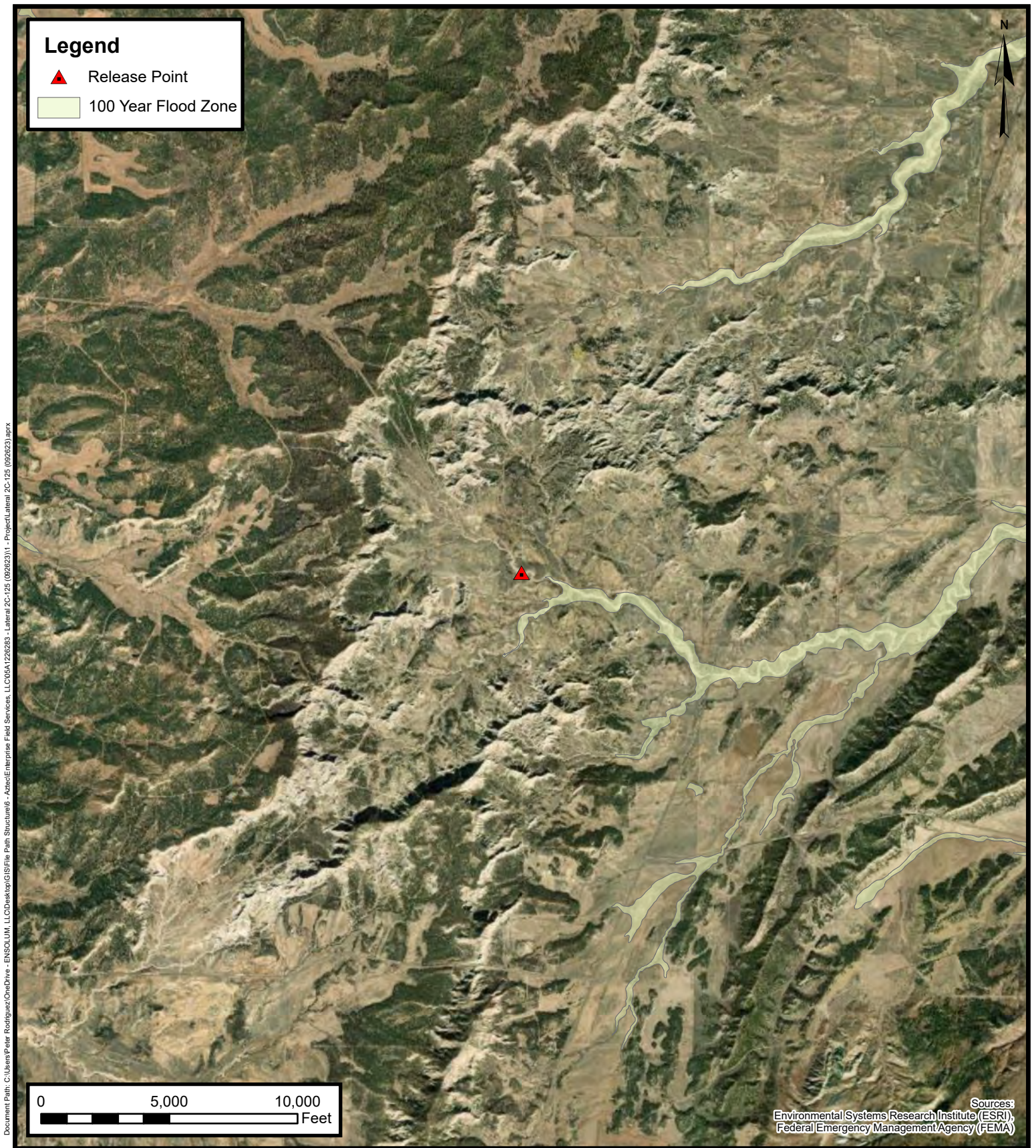
Lateral 2C-125 (09/26/23)

Project Number: 05A1226283

Unit Letter G, S33 T24N R01W, Rio Arriba County, New Mexico
36.267572, -106.944883

FIGURE

G



100-Year Flood Plain Map

Enterprise Field Services, LLC

Lateral 2C-125 (09/26/23)

Project Number: 05A1226283

Unit Letter G, S33 T24N R01W, Rio Arriba County, New Mexico
36.267572, -106.944883

FIGURE

H



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,
O=orphaned,
C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
RG 71779	CH	RA		2	3	32		24N	01W	323217	4015196*	1000		
RG 82030	CH	RA		4	2	2	32	24N	01W	324066	4015972	300		

Average Depth to Water: --

Minimum Depth: --

Maximum Depth: --

Record Count: 2

PLSS Search:

Section(s): 33, 27, 28, 29, 32, 34 Township: 24N Range: 01W

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

9/26/23 12:58 PM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

No records found.

PLSS Search:

Section(s): 3, 4, 5

Township: 23N

Range: 01W

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

9/26/23 1:01 PM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER



APPENDIX C

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.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401	
2. Originating Site: Lateral 2C-125	AFE: N67400 PM: Dwayne Dixon Pay Key: AM14058
2. Location of Material (Street Address, City, State or ULSTR): UL G Section 33 T24N R1W; 36.267572, -106.944883	
4. Source and Description of Waste: Source: Hydrocarbon contaminated soil/water/sludge associated with cleaning a natural condensate tank. Description: Hydrocarbon contaminated soil/water/sludge associated with cleaning a natural condensate tank.. Estimated Volume <u>50</u> yd ³ /bbls Known Volume (to be entered by the operator at the end of the haul) <u>1148</u> yd ³ /bbls	
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS I, Thomas Long <i>Thomas Long</i> , 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) <input checked="" type="checkbox"/> RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. <u>Operator Use Only: Waste Acceptance Frequency</u> <input type="checkbox"/> Monthly <input type="checkbox"/> Weekly <input type="checkbox"/> Per Load <input type="checkbox"/> 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) <input type="checkbox"/> MSDS Information <input type="checkbox"/> RCRA Hazardous Waste Analysis <input type="checkbox"/> Process Knowledge <input type="checkbox"/> Other (Provide description in Box 4) GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS I, Thomas Long <i>Thomas Long</i> 9-25-2023, representative for Enterprise Products Operating authorize to complete Generator Signature the required testing/sign the Generator Waste Testing Certification. I, <u>G. Crabtree</u> , representative for <u>Envirotech, Inc.</u> 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: Enterprise Contractors

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: 9/25/23

SIGNATURE: *[Signature]*
Surface Waste Management Facility Authorized Agent

TELEPHONE NO.: 505-632-0615



APPENDIX D

Photographic Documentation

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Lateral 2C-125 (09/26/23)
Ensolum Project No. 05A1226283

**Photograph 1**

Photograph Description: View of the in-process excavation activities.

**Photograph 2**

Photograph Description: View of the in-process excavation activities.

**Photograph 3**

Photograph Description: View of the in-process excavation activities.



SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Lateral 2C-125 (09/26/23)
Ensolum Project No. 05A1226283



Photograph 4

Photograph Description: View of the final excavation.





APPENDIX E

Regulatory Correspondence

From: [Kyle Summers](#)
To: [Chad D"Aponti](#)
Cc: [Ranee Deechilly](#)
Subject: FW: [EXTERNAL] Lateral 2C-125 - UL G Section 33 T24N R1W; 36.267572, -106.944883; NMOCD Incident # nAPP2326946647
Date: Tuesday, October 3, 2023 1:06:23 PM
Attachments: [image002.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)



Kyle Summers

Principal

903-821-5603

Ensolum, LLC

in f

From: Craun, James N <jcraun@blm.gov>
Sent: Tuesday, October 3, 2023 1:05 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>; Long, Thomas <tjlong@eprod.com>; Adeloye, Abiodun A <aadeloye@blm.gov>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: Re: [EXTERNAL] Lateral 2C-125 - UL G Section 33 T24N R1W; 36.267572, -106.944883; NMOCD Incident # nAPP2326946647

You don't often get email from jcraun@blm.gov. [Learn why this is important](#)

[**EXTERNAL EMAIL**]

Hi Tom,

BLM hereby approves your variance request.

Best,

Nolan

J. Nolan Craun

Supervisory Realty Specialist

Farmington Field Office

Office: (505) 564-7775

Cell: (505) 444-1704

Email: jcraun@blm.gov

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>

Sent: Tuesday, October 3, 2023 12:57

To: Long, Thomas <tjlong@eprod.com>; Adeloye, Abiodun A <aadeloye@blm.gov>; Craun, James N <jcraun@blm.gov>

Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>

Subject: Re: [EXTERNAL] Lateral 2C-125 - UL G Section 33 T24N R1W; 36.267572, -106.944883; NMOCD Incident # nAPP2326946647

Tom,

Thank you for the notice. Your variance request specifically addressing 19.15.29.12D (1a) NMAC is approved.

If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC or from an OCD pre-approved sampling plan. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

Regards,

Nelson Velez • Environmental Specialist - Adv

Environmental Bureau | EMNRD - Oil Conservation Division

1000 Rio Brazos Road | Aztec, NM 87410

(505) 469-6146 | nelson.velez@emnrd.nm.gov

<http://www.emnrd.state.nm.us/OCD/>



From: Long, Thomas <tjlong@eprod.com>
Sent: Tuesday, October 3, 2023 12:31 PM
To: Adeloeye, Abiodun A <aadeloeye@blm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>; Craun, James N <jcraun@blm.gov>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: RE: [EXTERNAL] Lateral 2C-125 - UL G Section 33 T24N R1W; 36.267572, -106.944883; NMOCD Incident # nAPP2326946647

Nelson/Nolan,

This email is a notification and variance request. Some of the samples collected last week exceeded NMOCD standards. Enterprise is requesting a variance for required 48-hour notification per 19.15.29.12D (1a) NMAC. Enterprise would like to collect closure samples on Wednesday, October 4, 2023 at 10:00 a.m. Please acknowledge this variance request. 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: Adeloeye, Abiodun A <aadeloeye@blm.gov>
Sent: Thursday, September 28, 2023 8:11 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>; Long, Thomas <tjlong@eprod.com>; Craun, James N <jcraun@blm.gov>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: RE: [EXTERNAL] Lateral 2C-125 - UL G Section 33 T24N R1W; 36.267572, -106.944883; NMOCD Incident # nAPP2326946647

[Use caution with links/attachments]

Hi, Tom, please include Nolan (James, Craun) in all your future ROWs releases, he's the Realty Supervisor. I have included him with this reply.
Thank you.

Abiodun Adeloye (Emmanuel)
Natural Resources Specialist (NRS)
6251 College Blvd., Suite A
Farmington, NM 87402
Office: 505-564-7665
Mobile: 505-635-0984

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Wednesday, September 27, 2023 7:09 AM
To: Long, Thomas <tjlong@eprod.com>; Adeloye, Abiodun A <aadeloye@blm.gov>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: Re: [EXTERNAL] Lateral 2C-125 - UL G Section 33 T24N R1W; 36.267572, -106.944883; NMOCD Incident # nAPP2326946647

Good morning Tom,

Thank you for the notice. If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC or from an OCD pre-approved sampling plan. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

Regards,

Nelson Velez • Environmental Specialist - Adv

Environmental Bureau | EMNRD - Oil Conservation Division

1000 Rio Brazos Road | Aztec, NM 87410

(505) 469-6146 | nelson.velez@emnrd.nm.gov

<http://www.emnrd.state.nm.us/OCD/>



From: Long, Thomas <tjlong@eprod.com>

Sent: Tuesday, September 26, 2023 1:06 PM

To: Velez, Nelson, EMNRD <Nelson.Velez@emnrn.nm.gov>; 'aadeloye@blm.gov' <aadeloye@blm.gov>

Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>

Subject: [EXTERNAL] Lateral 2C-125 - UL G Section 33 T24N R1W; 36.267572, -106.944883; NMOCD Incident # nAPP2326946647

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Nelson/Emanuel,

This email is a notification that Enterprise had a release of natural gas and condensate on the Lateral 2C-125 on 8-30-2023. The pipeline was isolated, depressurized, lock and tagged out. A small area of staining was observed on the ground surface. No washes were affected. No fire nor injuries occurred. Enterprise began remediation of the release on 9-25-2023 and determined the release reportable per NMOCD regulation due to the volume of impacted subsurface soil on 9-26-2023.

The email also serves as a sample notification. Enterprise will collect closure samples at the Lateral 2C-125 excavation on Thursday, September 28, 2023 at 11:00 a.m. 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



This message (including any attachments) is confidential and intended for a specific individual and purpose. If you are not the intended recipient, please notify the sender immediately and delete this

message.



APPENDIX F

Table 1 – Soil Analytical Summary



TABLE 1
Lateral 2C-125 (09/26/23)
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	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 (Tier I)				10	NE	NE	NE	50	NE	NE	NE	100	600
Composite Soil Samples Removed by Excavation and Transported to the Landfarm for Disposal/Remediation													
S-15	9.29.23	C	0 to 10	<0.016	<0.033	<0.033	<0.065	ND	<3.3	93	63	160	<59
Excavation Composite Soil Samples													
S-1	9.29.23	C	10	<0.021	<0.041	<0.041	<0.082	ND	<4.1	<9.3	<47	ND	<60
S-2	9.29.23	C	10	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<9.5	<47	ND	<60
S-3	9.29.23	C	10	<0.023	<0.046	<0.046	<0.091	ND	<4.6	<9.5	<48	ND	<60
S-4	9.29.23	C	10	<0.020	<0.041	<0.041	<0.081	ND	<4.1	<9.5	<47	ND	<59
S-5	9.29.23	C	10	<0.020	<0.039	<0.039	<0.078	ND	<3.9	<9.8	<49	ND	<60
S-6	9.29.23	C	10	<0.023	<0.046	<0.046	<0.092	ND	<4.6	<9.1	<46	ND	<60
S-7	9.29.23	C	10	<0.017	<0.034	<0.034	<0.068	ND	<3.4	<10	<50	ND	<60
S-8	9.29.23	C	10	<0.021	<0.042	<0.042	<0.083	ND	<4.2	<9.4	<47	ND	<60
S-9	9.29.23	C	0 to 10	<0.019	<0.037	<0.037	<0.074	ND	<3.7	48	<48	48	<60
S-10	9.29.23	C	0 to 10	<0.023	<0.046	<0.046	<0.092	ND	<4.6	50	<46	50	<60
S-11	9.29.23	C	0 to 10	<0.014	<0.027	<0.027	<0.054	ND	<2.7	17	<48	17	<60
S-12	9.29.23	C	0 to 10	<0.016	<0.032	<0.032	<0.063	ND	<3.2	34	<48	34	<60
S-13	9.29.23	C	0 to 10	<0.018	<0.036	<0.036	<0.072	ND	<3.6	<9.6	<48	ND	<60
S-14	9.29.23	C	0 to 10	<0.019	<0.038	<0.038	<0.076	ND	<3.8	76	<49	76	<60
S-15a	10.04.23	C	0 to 10	<0.018	<0.037	<0.037	<0.074	ND	<3.7	<10	<50	ND	<60
S-16	10.04.23	C	10	<0.021	<0.042	<0.042	<0.084	ND	<4.2	<9.9	<49	ND	<60
S-17	10.04.23	C	10	<0.018	<0.036	<0.036	<0.071	ND	<3.6	10	<47	10	<60



TABLE 1
Lateral 2C-125 (09/26/23)
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	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 (Tier I)				10	NE	NE	NE	50	NE	NE	NE	100	600
S-18	10.04.23	C	0 to 10	<0.017	<0.035	<0.035	<0.070	ND	<3.5	10	<46	10	<60
S-19	10.04.23	C	0 to 10	<0.018	<0.036	<0.036	<0.072	ND	<3.6	10	<48	10	<60
S-20	10.05.23	C	0 to 10	<0.016	<0.033	<0.033	<0.066	ND	<3.3	<9.4	<47	ND	<60

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

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

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

NA = Not Analyzed

NE = Not established

mg/kg = milligrams per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPH = Total Petroleum Hydrocarbons

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics



APPENDIX G

Laboratory Data Sheets & Chain of Custody Documentation



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

October 04, 2023

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: Lateral 2C 125

OrderNo.: 2309H63

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 15 sample(s) on 9/30/2023 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,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2309H63

Date Reported: 10/4/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-1

Project: Lateral 2C 125

Collection Date: 9/29/2023 11:00:00 AM

Lab ID: 2309H63-001

Matrix: MEOH (SOIL)

Received Date: 9/30/2023 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	9/30/2023 3:41:59 PM	77868
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	10/2/2023 10:30:02 AM	77874
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/2/2023 10:30:02 AM	77874
Surr: DNOP	98.6	69-147		%Rec	1	10/2/2023 10:30:02 AM	77874
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	9/30/2023 5:30:00 PM	R100114
Surr: BFB	99.9	15-244		%Rec	1	9/30/2023 5:30:00 PM	R100114
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.021		mg/Kg	1	9/30/2023 5:30:00 PM	B100114
Toluene	ND	0.041		mg/Kg	1	9/30/2023 5:30:00 PM	B100114
Ethylbenzene	ND	0.041		mg/Kg	1	9/30/2023 5:30:00 PM	B100114
Xylenes, Total	ND	0.082		mg/Kg	1	9/30/2023 5:30:00 PM	B100114
Surr: 4-Bromofluorobenzene	91.0	39.1-146		%Rec	1	9/30/2023 5:30:00 PM	B100114

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2309H63

Date Reported: 10/4/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-2

Project: Lateral 2C 125

Collection Date: 9/29/2023 11:05:00 AM

Lab ID: 2309H63-002

Matrix: MEOH (SOIL)

Received Date: 9/30/2023 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	9/30/2023 3:54:24 PM	77868
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	10/2/2023 10:40:37 AM	77874
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/2/2023 10:40:37 AM	77874
Surr: DNOP	121	69-147		%Rec	1	10/2/2023 10:40:37 AM	77874
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/30/2023 5:51:00 PM	R100114
Surr: BFB	103	15-244		%Rec	1	9/30/2023 5:51:00 PM	R100114
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	9/30/2023 5:51:00 PM	B100114
Toluene	ND	0.050		mg/Kg	1	9/30/2023 5:51:00 PM	B100114
Ethylbenzene	ND	0.050		mg/Kg	1	9/30/2023 5:51:00 PM	B100114
Xylenes, Total	ND	0.10		mg/Kg	1	9/30/2023 5:51:00 PM	B100114
Surr: 4-Bromofluorobenzene	88.7	39.1-146		%Rec	1	9/30/2023 5:51:00 PM	B100114

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2309H63

Date Reported: 10/4/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-3

Project: Lateral 2C 125

Collection Date: 9/29/2023 11:10:00 AM

Lab ID: 2309H63-003

Matrix: MEOH (SOIL)

Received Date: 9/30/2023 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	9/30/2023 4:06:49 PM	77868
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	10/2/2023 10:51:12 AM	77874
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/2/2023 10:51:12 AM	77874
Surr: DNOP	105	69-147		%Rec	1	10/2/2023 10:51:12 AM	77874
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/30/2023 6:13:00 PM	R100114
Surr: BFB	102	15-244		%Rec	1	9/30/2023 6:13:00 PM	R100114
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	9/30/2023 6:13:00 PM	B100114
Toluene	ND	0.046		mg/Kg	1	9/30/2023 6:13:00 PM	B100114
Ethylbenzene	ND	0.046		mg/Kg	1	9/30/2023 6:13:00 PM	B100114
Xylenes, Total	ND	0.091		mg/Kg	1	9/30/2023 6:13:00 PM	B100114
Surr: 4-Bromofluorobenzene	91.6	39.1-146		%Rec	1	9/30/2023 6:13:00 PM	B100114

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2309H63

Date Reported: 10/4/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-4

Project: Lateral 2C 125

Collection Date: 9/29/2023 11:15:00 AM

Lab ID: 2309H63-004

Matrix: MEOH (SOIL)

Received Date: 9/30/2023 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	59		mg/Kg	20	9/30/2023 4:44:02 PM	77869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	10/2/2023 11:01:47 AM	77874
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/2/2023 11:01:47 AM	77874
Surr: DNOP	105	69-147		%Rec	1	10/2/2023 11:01:47 AM	77874
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	9/30/2023 6:35:00 PM	R100114
Surr: BFB	103	15-244		%Rec	1	9/30/2023 6:35:00 PM	R100114
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.020		mg/Kg	1	9/30/2023 6:35:00 PM	B100114
Toluene	ND	0.041		mg/Kg	1	9/30/2023 6:35:00 PM	B100114
Ethylbenzene	ND	0.041		mg/Kg	1	9/30/2023 6:35:00 PM	B100114
Xylenes, Total	ND	0.081		mg/Kg	1	9/30/2023 6:35:00 PM	B100114
Surr: 4-Bromofluorobenzene	90.6	39.1-146		%Rec	1	9/30/2023 6:35:00 PM	B100114

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2309H63

Date Reported: 10/4/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-5

Project: Lateral 2C 125

Collection Date: 9/29/2023 11:20:00 AM

Lab ID: 2309H63-005

Matrix: MEOH (SOIL)

Received Date: 9/30/2023 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	9/30/2023 4:56:27 PM	77869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/2/2023 11:12:26 AM	77874
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/2/2023 11:12:26 AM	77874
Surr: DNOP	100	69-147		%Rec	1	10/2/2023 11:12:26 AM	77874
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	9/30/2023 6:57:00 PM	R100114
Surr: BFB	102	15-244		%Rec	1	9/30/2023 6:57:00 PM	R100114
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.020		mg/Kg	1	9/30/2023 6:57:00 PM	B100114
Toluene	ND	0.039		mg/Kg	1	9/30/2023 6:57:00 PM	B100114
Ethylbenzene	ND	0.039		mg/Kg	1	9/30/2023 6:57:00 PM	B100114
Xylenes, Total	ND	0.078		mg/Kg	1	9/30/2023 6:57:00 PM	B100114
Surr: 4-Bromofluorobenzene	91.2	39.1-146		%Rec	1	9/30/2023 6:57:00 PM	B100114

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2309H63

Date Reported: 10/4/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-6

Project: Lateral 2C 125

Collection Date: 9/29/2023 11:25:00 AM

Lab ID: 2309H63-006

Matrix: MEOH (SOIL)

Received Date: 9/30/2023 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	9/30/2023 6:23:18 PM	77869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	10/2/2023 11:23:06 AM	77874
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	10/2/2023 11:23:06 AM	77874
Surr: DNOP	78.4	69-147		%Rec	1	10/2/2023 11:23:06 AM	77874
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/30/2023 7:19:00 PM	R100114
Surr: BFB	103	15-244		%Rec	1	9/30/2023 7:19:00 PM	R100114
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	9/30/2023 7:19:00 PM	B100114
Toluene	ND	0.046		mg/Kg	1	9/30/2023 7:19:00 PM	B100114
Ethylbenzene	ND	0.046		mg/Kg	1	9/30/2023 7:19:00 PM	B100114
Xylenes, Total	ND	0.092		mg/Kg	1	9/30/2023 7:19:00 PM	B100114
Surr: 4-Bromofluorobenzene	90.5	39.1-146		%Rec	1	9/30/2023 7:19:00 PM	B100114

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2309H63

Date Reported: 10/4/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-7

Project: Lateral 2C 125

Collection Date: 9/29/2023 11:30:00 AM

Lab ID: 2309H63-007

Matrix: MEOH (SOIL)

Received Date: 9/30/2023 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	9/30/2023 6:35:43 PM	77869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/2/2023 11:44:24 AM	77874
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/2/2023 11:44:24 AM	77874
Surr: DNOP	102	69-147		%Rec	1	10/2/2023 11:44:24 AM	77874
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	9/30/2023 7:40:00 PM	R100114
Surr: BFB	100	15-244		%Rec	1	9/30/2023 7:40:00 PM	R100114
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.017		mg/Kg	1	9/30/2023 7:40:00 PM	B100114
Toluene	ND	0.034		mg/Kg	1	9/30/2023 7:40:00 PM	B100114
Ethylbenzene	ND	0.034		mg/Kg	1	9/30/2023 7:40:00 PM	B100114
Xylenes, Total	ND	0.068		mg/Kg	1	9/30/2023 7:40:00 PM	B100114
Surr: 4-Bromofluorobenzene	89.6	39.1-146		%Rec	1	9/30/2023 7:40:00 PM	B100114

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2309H63

Date Reported: 10/4/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-8

Project: Lateral 2C 125

Collection Date: 9/29/2023 11:35:00 AM

Lab ID: 2309H63-008

Matrix: MEOH (SOIL)

Received Date: 9/30/2023 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	9/30/2023 6:48:08 PM	77869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	10/2/2023 11:55:04 AM	77874
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/2/2023 11:55:04 AM	77874
Surr: DNOP	99.7	69-147		%Rec	1	10/2/2023 11:55:04 AM	77874
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	9/30/2023 8:02:00 PM	R100114
Surr: BFB	97.4	15-244		%Rec	1	9/30/2023 8:02:00 PM	R100114
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.021		mg/Kg	1	9/30/2023 8:02:00 PM	B100114
Toluene	ND	0.042		mg/Kg	1	9/30/2023 8:02:00 PM	B100114
Ethylbenzene	ND	0.042		mg/Kg	1	9/30/2023 8:02:00 PM	B100114
Xylenes, Total	ND	0.083		mg/Kg	1	9/30/2023 8:02:00 PM	B100114
Surr: 4-Bromofluorobenzene	86.5	39.1-146		%Rec	1	9/30/2023 8:02:00 PM	B100114

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2309H63

Date Reported: 10/4/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-9

Project: Lateral 2C 125

Collection Date: 9/29/2023 11:40:00 AM

Lab ID: 2309H63-009

Matrix: MEOH (SOIL)

Received Date: 9/30/2023 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	9/30/2023 7:00:33 PM	77869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	48	9.6		mg/Kg	1	10/2/2023 12:05:46 PM	77874
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/2/2023 12:05:46 PM	77874
Surr: DNOP	101	69-147		%Rec	1	10/2/2023 12:05:46 PM	77874
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	9/30/2023 8:24:00 PM	R100114
Surr: BFB	102	15-244		%Rec	1	9/30/2023 8:24:00 PM	R100114
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.019		mg/Kg	1	9/30/2023 8:24:00 PM	B100114
Toluene	ND	0.037		mg/Kg	1	9/30/2023 8:24:00 PM	B100114
Ethylbenzene	ND	0.037		mg/Kg	1	9/30/2023 8:24:00 PM	B100114
Xylenes, Total	ND	0.074		mg/Kg	1	9/30/2023 8:24:00 PM	B100114
Surr: 4-Bromofluorobenzene	87.5	39.1-146		%Rec	1	9/30/2023 8:24:00 PM	B100114

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2309H63

Date Reported: 10/4/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-10

Project: Lateral 2C 125

Collection Date: 9/29/2023 11:45:00 AM

Lab ID: 2309H63-010

Matrix: MEOH (SOIL)

Received Date: 9/30/2023 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	9/30/2023 7:12:57 PM	77869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	50	9.2		mg/Kg	1	10/2/2023 12:16:29 PM	77874
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	10/2/2023 12:16:29 PM	77874
Surr: DNOP	99.8	69-147		%Rec	1	10/2/2023 12:16:29 PM	77874
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/30/2023 8:45:00 PM	R100114
Surr: BFB	106	15-244		%Rec	1	9/30/2023 8:45:00 PM	R100114
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	9/30/2023 8:45:00 PM	B100114
Toluene	ND	0.046		mg/Kg	1	9/30/2023 8:45:00 PM	B100114
Ethylbenzene	ND	0.046		mg/Kg	1	9/30/2023 8:45:00 PM	B100114
Xylenes, Total	ND	0.092		mg/Kg	1	9/30/2023 8:45:00 PM	B100114
Surr: 4-Bromofluorobenzene	87.1	39.1-146		%Rec	1	9/30/2023 8:45:00 PM	B100114

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2309H63

Date Reported: 10/4/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-11

Project: Lateral 2C 125

Collection Date: 9/29/2023 11:50:00 AM

Lab ID: 2309H63-011

Matrix: MEOH (SOIL)

Received Date: 9/30/2023 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	9/30/2023 7:25:21 PM	77869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	17	9.6		mg/Kg	1	10/2/2023 12:27:11 PM	77874
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/2/2023 12:27:11 PM	77874
Surr: DNOP	101	69-147		%Rec	1	10/2/2023 12:27:11 PM	77874
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	2.7		mg/Kg	1	9/30/2023 9:29:00 PM	R100114
Surr: BFB	98.8	15-244		%Rec	1	9/30/2023 9:29:00 PM	R100114
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.014		mg/Kg	1	9/30/2023 9:29:00 PM	B100114
Toluene	ND	0.027		mg/Kg	1	9/30/2023 9:29:00 PM	B100114
Ethylbenzene	ND	0.027		mg/Kg	1	9/30/2023 9:29:00 PM	B100114
Xylenes, Total	ND	0.054		mg/Kg	1	9/30/2023 9:29:00 PM	B100114
Surr: 4-Bromofluorobenzene	88.1	39.1-146		%Rec	1	9/30/2023 9:29:00 PM	B100114

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2309H63

Date Reported: 10/4/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-12

Project: Lateral 2C 125

Collection Date: 9/29/2023 11:55:00 AM

Lab ID: 2309H63-012

Matrix: MEOH (SOIL)

Received Date: 9/30/2023 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	9/30/2023 8:02:35 PM	77869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	34	9.6		mg/Kg	1	10/2/2023 12:37:54 PM	77874
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/2/2023 12:37:54 PM	77874
Surr: DNOP	101	69-147		%Rec	1	10/2/2023 12:37:54 PM	77874
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	9/30/2023 9:50:00 PM	R100114
Surr: BFB	101	15-244		%Rec	1	9/30/2023 9:50:00 PM	R100114
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.016		mg/Kg	1	9/30/2023 9:50:00 PM	B100114
Toluene	ND	0.032		mg/Kg	1	9/30/2023 9:50:00 PM	B100114
Ethylbenzene	ND	0.032		mg/Kg	1	9/30/2023 9:50:00 PM	B100114
Xylenes, Total	ND	0.063		mg/Kg	1	9/30/2023 9:50:00 PM	B100114
Surr: 4-Bromofluorobenzene	88.0	39.1-146		%Rec	1	9/30/2023 9:50:00 PM	B100114

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2309H63

Date Reported: 10/4/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-13

Project: Lateral 2C 125

Collection Date: 9/29/2023 12:00:00 PM

Lab ID: 2309H63-013

Matrix: MEOH (SOIL)

Received Date: 9/30/2023 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	9/30/2023 8:14:59 PM	77869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	10/2/2023 12:48:38 PM	77874
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/2/2023 12:48:38 PM	77874
Surr: DNOP	121	69-147		%Rec	1	10/2/2023 12:48:38 PM	77874
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	9/30/2023 10:12:00 PM	R100114
Surr: BFB	100	15-244		%Rec	1	9/30/2023 10:12:00 PM	R100114
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.018		mg/Kg	1	9/30/2023 10:12:00 PM	B100114
Toluene	ND	0.036		mg/Kg	1	9/30/2023 10:12:00 PM	B100114
Ethylbenzene	ND	0.036		mg/Kg	1	9/30/2023 10:12:00 PM	B100114
Xylenes, Total	ND	0.072		mg/Kg	1	9/30/2023 10:12:00 PM	B100114
Surr: 4-Bromofluorobenzene	89.9	39.1-146		%Rec	1	9/30/2023 10:12:00 PM	B100114

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2309H63

Date Reported: 10/4/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-14

Project: Lateral 2C 125

Collection Date: 9/29/2023 12:05:00 PM

Lab ID: 2309H63-014

Matrix: MEOH (SOIL)

Received Date: 9/30/2023 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	9/30/2023 8:27:24 PM	77869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	76	9.8		mg/Kg	1	10/2/2023 12:59:22 PM	77874
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/2/2023 12:59:22 PM	77874
Surr: DNOP	111	69-147		%Rec	1	10/2/2023 12:59:22 PM	77874
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	9/30/2023 10:34:00 PM	R100114
Surr: BFB	101	15-244		%Rec	1	9/30/2023 10:34:00 PM	R100114
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.019		mg/Kg	1	9/30/2023 10:34:00 PM	B100114
Toluene	ND	0.038		mg/Kg	1	9/30/2023 10:34:00 PM	B100114
Ethylbenzene	ND	0.038		mg/Kg	1	9/30/2023 10:34:00 PM	B100114
Xylenes, Total	ND	0.076		mg/Kg	1	9/30/2023 10:34:00 PM	B100114
Surr: 4-Bromofluorobenzene	88.4	39.1-146		%Rec	1	9/30/2023 10:34:00 PM	B100114

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2309H63

Date Reported: 10/4/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-15

Project: Lateral 2C 125

Collection Date: 9/29/2023 12:10:00 PM

Lab ID: 2309H63-015

Matrix: MEOH (SOIL)

Received Date: 9/30/2023 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	59		mg/Kg	20	9/30/2023 8:39:48 PM	77869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	93	9.2		mg/Kg	1	10/2/2023 1:10:07 PM	77874
Motor Oil Range Organics (MRO)	63	46		mg/Kg	1	10/2/2023 1:10:07 PM	77874
Surr: DNOP	112	69-147		%Rec	1	10/2/2023 1:10:07 PM	77874
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	9/30/2023 10:56:00 PM	R100114
Surr: BFB	97.8	15-244		%Rec	1	9/30/2023 10:56:00 PM	R100114
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.016		mg/Kg	1	9/30/2023 10:56:00 PM	B100114
Toluene	ND	0.033		mg/Kg	1	9/30/2023 10:56:00 PM	B100114
Ethylbenzene	ND	0.033		mg/Kg	1	9/30/2023 10:56:00 PM	B100114
Xylenes, Total	ND	0.065		mg/Kg	1	9/30/2023 10:56:00 PM	B100114
Surr: 4-Bromofluorobenzene	88.3	39.1-146		%Rec	1	9/30/2023 10:56:00 PM	B100114

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 Quantitative 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#: 2309H63
04-Oct-23

Client: ENSOLUM
Project: Lateral 2C 125

Sample ID: MB-77868	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 77868	RunNo: 100121
Prep Date: 9/29/2023	Analysis Date: 9/30/2023	SeqNo: 3664006 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-77868	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 77868	RunNo: 100121
Prep Date: 9/29/2023	Analysis Date: 9/30/2023	SeqNo: 3664007 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 92.0 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 Quantitative 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#: 2309H63

04-Oct-23

Client: ENSOLUM
Project: Lateral 2C 125

Sample ID: 2309H63-015AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: S-15	Batch ID: 77874	RunNo: 100132								
Prep Date: 10/2/2023	Analysis Date: 10/2/2023	SeqNo: 3664626 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	110	9.3	46.43	93.03	34.9	54.2	135			S
Surr: DNOP	5.2		4.643		111	69	147			

Sample ID: 2309H63-015AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: S-15	Batch ID: 77874	RunNo: 100132								
Prep Date: 10/2/2023	Analysis Date: 10/2/2023	SeqNo: 3664627 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	99	10	49.80	93.03	11.9	54.2	135	9.84	29.2	S
Surr: DNOP	5.5		4.980		110	69	147	0	0	

Sample ID: LCS-77874	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 77874	RunNo: 100132								
Prep Date: 10/2/2023	Analysis Date: 10/2/2023	SeqNo: 3664629 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	10	50.00	0	110	61.9	130			
Surr: DNOP	5.5		5.000		110	69	147			

Sample ID: MB-77874	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 77874	RunNo: 100132								
Prep Date: 10/2/2023	Analysis Date: 10/2/2023	SeqNo: 3664631 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		104	69	147			

Sample ID: LCS-77851	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 77851	RunNo: 100132								
Prep Date: 9/29/2023	Analysis Date: 10/2/2023	SeqNo: 3665777 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.2		5.000		104	69	147			

Sample ID: LCS-77867	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 77867	RunNo: 100132								
Prep Date: 9/29/2023	Analysis Date: 10/2/2023	SeqNo: 3665778 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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 Quantitative 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#: 2309H63

04-Oct-23

Client: ENSOLUM
Project: Lateral 2C 125

Sample ID: LCS-77867	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 77867		RunNo: 100132							
Prep Date: 9/29/2023	Analysis Date: 10/2/2023		SeqNo: 3665778		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.1		5.000		102	69	147			

Sample ID: MB-77851	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 77851		RunNo: 100132							
Prep Date: 9/29/2023	Analysis Date: 10/2/2023		SeqNo: 3665780		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		105	69	147			

Sample ID: MB-77867	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 77867		RunNo: 100132							
Prep Date: 9/29/2023	Analysis Date: 10/2/2023		SeqNo: 3665781		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		101	69	147			

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 Quantitative 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#: **2309H63****04-Oct-23**

Client: ENSOLUM
Project: Lateral 2C 125

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: R100114			RunNo: 100114						
Prep Date:	Analysis Date: 9/30/2023			SeqNo: 3663745		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	1000		1000		103	15	244			

Sample ID: 2.5ug gro lcs	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: R100114			RunNo: 100114						
Prep Date:	Analysis Date: 9/30/2023			SeqNo: 3663765		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	103	70	130			
Surr: BFB	2300		1000		232	15	244			

Sample ID: 2309h63-001ams	SampType: MS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: S-1	Batch ID: R100114			RunNo: 100114						
Prep Date:	Analysis Date: 10/1/2023			SeqNo: 3663766		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.1	20.59	0	101	70	130			
Surr: BFB	1800		823.7		222	15	244			

Sample ID: 2309h63-001amsd	SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: S-1	Batch ID: R100114			RunNo: 100114						
Prep Date:	Analysis Date: 10/1/2023			SeqNo: 3663767		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.1	20.59	0	96.6	70	130	4.37	20	
Surr: BFB	1800		823.7		218	15	244	0	0	

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 Quantitative 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#: 2309H63

04-Oct-23

Client: ENSOLUM
Project: Lateral 2C 125

Sample ID: 100ng btex lcs	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: B100114			RunNo: 100114						
Prep Date:	Analysis Date: 9/30/2023			SeqNo: 3663772		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	90.2	70	130			
Toluene	0.91	0.050	1.000	0	91.5	70	130			
Ethylbenzene	0.94	0.050	1.000	0	93.8	70	130			
Xylenes, Total	2.8	0.10	3.000	0	94.2	70	130			
Surr: 4-Bromofluorobenzene	0.93		1.000		93.2	39.1	146			

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: B100114			RunNo: 100114						
Prep Date:	Analysis Date: 9/30/2023			SeqNo: 3663773		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	0.90		1.000		90.4	39.1	146			

Sample ID: 2309h63-002ams	SampType: MS			TestCode: EPA Method 8021B: Volatiles						
Client ID: S-2	Batch ID: B100114			RunNo: 100114						
Prep Date:	Analysis Date: 10/1/2023			SeqNo: 3663793		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	0.9960	0	88.4	70	130			
Toluene	0.89	0.050	0.9960	0	89.6	70	130			
Ethylbenzene	0.91	0.050	0.9960	0	91.7	70	130			
Xylenes, Total	2.8	0.10	2.988	0	92.4	70	130			
Surr: 4-Bromofluorobenzene	0.90		0.9960		89.9	39.1	146			

Sample ID: 2309h63-002amsd	SampType: MSD			TestCode: EPA Method 8021B: Volatiles						
Client ID: S-2	Batch ID: B100114			RunNo: 100114						
Prep Date:	Analysis Date: 10/1/2023			SeqNo: 3663794		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	0.9960	0	85.5	70	130	3.33	20	
Toluene	0.86	0.050	0.9960	0	86.8	70	130	3.18	20	
Ethylbenzene	0.89	0.050	0.9960	0	89.2	70	130	2.80	20	
Xylenes, Total	2.7	0.10	2.988	0	89.5	70	130	3.16	20	
Surr: 4-Bromofluorobenzene	0.87		0.9960		87.0	39.1	146	0	0	

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 Quantitative Limit	RL Reporting Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.	



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: 2309H63

RcptNo: 1

Received By: Tracy Casarrubias 9/30/2023 8:10:00 AM

Completed By: Tracy Casarrubias 9/30/2023 9:14:58 AM

Reviewed By: RA 9/30/23

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 $>0^{\circ}\text{C}$ 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: TMC 9/30/23

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: Phone number and Email/Fax are missing on COC - TMC 9/30/23

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes	Yogi		
2	2.3	Good	Yes	Yogi		



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

October 16, 2023

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: Lateral 2C 125

OrderNo.: 2310232

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 10/5/2023 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2310232

Date Reported: 10/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-15a

Project: Lateral 2C 125

Collection Date: 10/4/2023 10:00:00 AM

Lab ID: 2310232-001

Matrix: MEOH (SOIL)

Received Date: 10/5/2023 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	10/5/2023 10:19:56 AM	77973
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/5/2023 12:32:10 PM	77971
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/5/2023 12:32:10 PM	77971
Surr: DNOP	94.2	69-147		%Rec	1	10/5/2023 12:32:10 PM	77971
EPA METHOD 8015D: GASOLINE RANGE							Analyst: KMN
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	10/5/2023 12:24:00 PM	GS10024
Surr: BFB	105	15-244		%Rec	1	10/5/2023 12:24:00 PM	GS10024
EPA METHOD 8021B: VOLATILES							Analyst: KMN
Benzene	ND	0.018		mg/Kg	1	10/5/2023 12:24:00 PM	BS10024
Toluene	ND	0.037		mg/Kg	1	10/5/2023 12:24:00 PM	BS10024
Ethylbenzene	ND	0.037		mg/Kg	1	10/5/2023 12:24:00 PM	BS10024
Xylenes, Total	ND	0.074		mg/Kg	1	10/5/2023 12:24:00 PM	BS10024
Surr: 4-Bromofluorobenzene	91.7	39.1-146		%Rec	1	10/5/2023 12:24:00 PM	BS10024

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2310232

Date Reported: 10/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-16

Project: Lateral 2C 125

Collection Date: 10/4/2023 10:05:00 AM

Lab ID: 2310232-002

Matrix: MEOH (SOIL)

Received Date: 10/5/2023 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	10/5/2023 10:32:21 AM	77973
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/5/2023 12:42:52 PM	77971
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/5/2023 12:42:52 PM	77971
Surr: DNOP	92.4	69-147		%Rec	1	10/5/2023 12:42:52 PM	77971
EPA METHOD 8015D: GASOLINE RANGE							Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	10/5/2023 12:45:00 PM	GS10024
Surr: BFB	103	15-244		%Rec	1	10/5/2023 12:45:00 PM	GS10024
EPA METHOD 8021B: VOLATILES							Analyst: KMN
Benzene	ND	0.021		mg/Kg	1	10/5/2023 12:45:00 PM	BS10024
Toluene	ND	0.042		mg/Kg	1	10/5/2023 12:45:00 PM	BS10024
Ethylbenzene	ND	0.042		mg/Kg	1	10/5/2023 12:45:00 PM	BS10024
Xylenes, Total	ND	0.084		mg/Kg	1	10/5/2023 12:45:00 PM	BS10024
Surr: 4-Bromofluorobenzene	88.7	39.1-146		%Rec	1	10/5/2023 12:45:00 PM	BS10024

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2310232

Date Reported: 10/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-17

Project: Lateral 2C 125

Collection Date: 10/4/2023 10:10:00 AM

Lab ID: 2310232-003

Matrix: MEOH (SOIL)

Received Date: 10/5/2023 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	10/5/2023 10:44:45 AM	77973
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	10	9.3		mg/Kg	1	10/5/2023 12:53:39 PM	77971
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/5/2023 12:53:39 PM	77971
Surr: DNOP	95.1	69-147		%Rec	1	10/5/2023 12:53:39 PM	77971
EPA METHOD 8015D: GASOLINE RANGE							Analyst: KMN
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	10/5/2023 1:07:00 PM	GS10024
Surr: BFB	102	15-244		%Rec	1	10/5/2023 1:07:00 PM	GS10024
EPA METHOD 8021B: VOLATILES							Analyst: KMN
Benzene	ND	0.018		mg/Kg	1	10/5/2023 1:07:00 PM	BS10024
Toluene	ND	0.036		mg/Kg	1	10/5/2023 1:07:00 PM	BS10024
Ethylbenzene	ND	0.036		mg/Kg	1	10/5/2023 1:07:00 PM	BS10024
Xylenes, Total	ND	0.071		mg/Kg	1	10/5/2023 1:07:00 PM	BS10024
Surr: 4-Bromofluorobenzene	89.7	39.1-146		%Rec	1	10/5/2023 1:07:00 PM	BS10024

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2310232

Date Reported: 10/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-18

Project: Lateral 2C 125

Collection Date: 10/4/2023 10:15:00 AM

Lab ID: 2310232-004

Matrix: MEOH (SOIL)

Received Date: 10/5/2023 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	10/5/2023 10:57:09 AM	77973
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	10	9.3		mg/Kg	1	10/5/2023 1:04:24 PM	77971
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	10/5/2023 1:04:24 PM	77971
Surr: DNOP	98.7	69-147		%Rec	1	10/5/2023 1:04:24 PM	77971
EPA METHOD 8015D: GASOLINE RANGE							Analyst: KMN
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	10/5/2023 1:29:00 PM	GS10024
Surr: BFB	101	15-244		%Rec	1	10/5/2023 1:29:00 PM	GS10024
EPA METHOD 8021B: VOLATILES							Analyst: KMN
Benzene	ND	0.017		mg/Kg	1	10/5/2023 1:29:00 PM	BS10024
Toluene	ND	0.035		mg/Kg	1	10/5/2023 1:29:00 PM	BS10024
Ethylbenzene	ND	0.035		mg/Kg	1	10/5/2023 1:29:00 PM	BS10024
Xylenes, Total	ND	0.070		mg/Kg	1	10/5/2023 1:29:00 PM	BS10024
Surr: 4-Bromofluorobenzene	90.5	39.1-146		%Rec	1	10/5/2023 1:29:00 PM	BS10024

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2310232

Date Reported: 10/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-19

Project: Lateral 2C 125

Collection Date: 10/4/2023 10:20:00 AM

Lab ID: 2310232-005

Matrix: MEOH (SOIL)

Received Date: 10/5/2023 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	10/5/2023 11:09:34 AM	77973
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	10	9.5		mg/Kg	1	10/5/2023 1:15:11 PM	77971
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/5/2023 1:15:11 PM	77971
Surr: DNOP	99.6	69-147		%Rec	1	10/5/2023 1:15:11 PM	77971
EPA METHOD 8015D: GASOLINE RANGE							Analyst: KMN
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	10/5/2023 1:50:00 PM	GS10024
Surr: BFB	103	15-244		%Rec	1	10/5/2023 1:50:00 PM	GS10024
EPA METHOD 8021B: VOLATILES							Analyst: KMN
Benzene	ND	0.018		mg/Kg	1	10/5/2023 1:50:00 PM	BS10024
Toluene	ND	0.036		mg/Kg	1	10/5/2023 1:50:00 PM	BS10024
Ethylbenzene	ND	0.036		mg/Kg	1	10/5/2023 1:50:00 PM	BS10024
Xylenes, Total	ND	0.072		mg/Kg	1	10/5/2023 1:50:00 PM	BS10024
Surr: 4-Bromofluorobenzene	91.8	39.1-146		%Rec	1	10/5/2023 1:50:00 PM	BS10024

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 Quantitative 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#: 2310232
16-Oct-23

Client: ENSOLUM
Project: Lateral 2C 125

Sample ID: MB-77973	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 77973	RunNo: 100251
Prep Date: 10/5/2023	Analysis Date: 10/5/2023	SeqNo: 3671796 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-77973	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 77973	RunNo: 100251
Prep Date: 10/5/2023	Analysis Date: 10/5/2023	SeqNo: 3671797 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 93.4 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 Quantitative 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#: 2310232

16-Oct-23

Client: ENSOLUM
Project: Lateral 2C 125

Sample ID: LCS-77971	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 77971		RunNo: 100239							
Prep Date: 10/5/2023	Analysis Date: 10/5/2023		SeqNo: 3670281		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.4	61.9	130			
Surr: DNOP	4.2		5.000		84.4	69	147			

Sample ID: MB-77971	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 77971		RunNo: 100239							
Prep Date: 10/5/2023	Analysis Date: 10/5/2023		SeqNo: 3670282		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		90.1	69	147			

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 Quantitative 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#: 2310232
16-Oct-23

Client: ENSOLUM
Project: Lateral 2C 125

Sample ID: 2.5ug gro lcs	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: GS100246		RunNo: 100246							
Prep Date:	Analysis Date: 10/5/2023		SeqNo: 3670164		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	100	70	130			
Surr: BFB	2300		1000		228	15	244			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: GS100246		RunNo: 100246							
Prep Date:	Analysis Date: 10/5/2023		SeqNo: 3670165		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	1100		1000		105	15	244			
% GRO Hydrocarbons: <C6	ND	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 Quantitative 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#: 2310232

16-Oct-23

Client: ENSOLUM
Project: Lateral 2C 125

Sample ID: 100ng btex lcs	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: BS100246		RunNo: 100246							
Prep Date:	Analysis Date: 10/5/2023		SeqNo: 3670143		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	1.000	0	84.7	70	130			
Toluene	0.86	0.050	1.000	0	86.0	70	130			
Ethylbenzene	0.88	0.050	1.000	0	88.1	70	130			
Xylenes, Total	2.7	0.10	3.000	0	88.6	70	130			
Surr: 4-Bromofluorobenzene	0.97		1.000		97.1	39.1	146			
m,p-Xylene	1.8	0.050	2.000	0	88.1	70	130			
o-Xylene	0.90	0.050	1.000	0	89.7	70	130			
1,2,4-Trimethylbenzene	0.88	0.050	1.000	0	87.7	70	130			
1,3,5-Trimethylbenzene	0.86	0.050	1.000	0	85.6	70	130			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: BS100246		RunNo: 100246							
Prep Date:	Analysis Date: 10/5/2023		SeqNo: 3670144		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	0.95		1.000		95.2	39.1	146			
m,p-Xylene	ND	0.050								
o-Xylene	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								

Sample ID: 2310232-001ams	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: S-15a	Batch ID: BS100246		RunNo: 100246							
Prep Date:	Analysis Date: 10/5/2023		SeqNo: 3671283		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.62	0.018	0.7353	0	84.3	70	130			
Toluene	0.63	0.037	0.7353	0	85.5	70	130			
Ethylbenzene	0.65	0.037	0.7353	0	88.0	70	130			
Xylenes, Total	1.9	0.074	2.206	0	88.0	70	130			
Surr: 4-Bromofluorobenzene	0.66		0.7353		90.0	39.1	146			
m,p-Xylene	1.3	0.037	1.471	0	87.4	70	130			
o-Xylene	0.65	0.037	0.7353	0	89.1	70	130			
1,2,4-Trimethylbenzene	0.64	0.037	0.7353	0	86.5	70	130			
1,3,5-Trimethylbenzene	0.62	0.037	0.7353	0	84.6	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 Quantitative 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#: 2310232

16-Oct-23

Client: ENSOLUM
Project: Lateral 2C 125

Sample ID: 2310232-001amsd	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: S-15a	Batch ID: BS100246		RunNo: 100246							
Prep Date:	Analysis Date: 10/5/2023		SeqNo: 3671284		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.60	0.018	0.7353	0	82.0	70	130	2.75	20	
Toluene	0.61	0.037	0.7353	0	83.6	70	130	2.26	20	
Ethylbenzene	0.63	0.037	0.7353	0	85.7	70	130	2.64	20	
Xylenes, Total	1.9	0.074	2.206	0	86.1	70	130	2.18	20	
Surr: 4-Bromofluorobenzene	0.64		0.7353		87.6	39.1	146	0	0	
m,p-Xylene	1.3	0.037	1.471	0	85.6	70	130	0	20	
o-Xylene	0.64	0.037	0.7353	0	86.9	70	130	0	20	
1,2,4-Trimethylbenzene	0.62	0.037	0.7353	0	84.4	70	130	0	20	
1,3,5-Trimethylbenzene	0.61	0.037	0.7353	0	82.5	70	130	0	20	

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 Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		



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: 2310232

RcptNo: 1

Received By: Tracy Casarrubias 10/5/2023 6:35:00 AM

Completed By: Tracy Casarrubias 10/5/2023 7:21:15 AM

Reviewed By: SCM 10/5/23

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 $>0^{\circ}\text{C}$ 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: TM 10/5/23

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: Phone number and Email/Fax are missing on COC - TMC 10/5/23

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.3	Good	Yes	Yogi		



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

October 16, 2023

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: Lateral 2C 125

OrderNo.: 2310317

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/6/2023 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2310317

Date Reported: 10/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-20

Project: Lateral 2C 125

Collection Date: 10/5/2023 7:00:00 AM

Lab ID: 2310317-001

Matrix: MEOH (SOIL)

Received Date: 10/6/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	10/6/2023 1:47:53 PM	78001
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	10/6/2023 10:21:21 AM	77998
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/6/2023 10:21:21 AM	77998
Surr: DNOP	100	69-147		%Rec	1	10/6/2023 10:21:21 AM	77998
EPA METHOD 8015D: GASOLINE RANGE							Analyst: KMN
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	10/6/2023 4:48:00 PM	GS10028
Surr: BFB	96.7	15-244		%Rec	1	10/6/2023 4:48:00 PM	GS10028
EPA METHOD 8021B: VOLATILES							Analyst: KMN
Benzene	ND	0.016		mg/Kg	1	10/6/2023 4:48:00 PM	BS10028
Toluene	ND	0.033		mg/Kg	1	10/6/2023 4:48:00 PM	BS10028
Ethylbenzene	ND	0.033		mg/Kg	1	10/6/2023 4:48:00 PM	BS10028
Xylenes, Total	ND	0.066		mg/Kg	1	10/6/2023 4:48:00 PM	BS10028
Surr: 4-Bromofluorobenzene	87.1	39.1-146		%Rec	1	10/6/2023 4:48:00 PM	BS10028

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 Quantitative 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#: 2310317
16-Oct-23

Client: ENSOLUM
Project: Lateral 2C 125

Sample ID: MB-78001	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 78001	RunNo: 100281
Prep Date: 10/6/2023	Analysis Date: 10/6/2023	SeqNo: 3673357 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-78001	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 78001	RunNo: 100281
Prep Date: 10/6/2023	Analysis Date: 10/6/2023	SeqNo: 3673358 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 92.0 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 Quantitative 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#: 2310317

16-Oct-23

Client: ENSOLUM
Project: Lateral 2C 125

Sample ID: LCS-77998	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 77998			RunNo: 100270						
Prep Date: 10/6/2023	Analysis Date: 10/6/2023			SeqNo: 3671583		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.4	61.9	130			
Surr: DNOP	4.4		5.000		87.7	69	147			

Sample ID: MB-77998	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 77998			RunNo: 100270						
Prep Date: 10/6/2023	Analysis Date: 10/6/2023			SeqNo: 3671584		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.8		10.00		88.0	69	147			

Sample ID: 2310317-001AMS	SampType: MS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: S-20	Batch ID: 77998			RunNo: 100270						
Prep Date: 10/6/2023	Analysis Date: 10/6/2023			SeqNo: 3673544		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	9.5	47.44	0	93.2	54.2	135			
Surr: DNOP	4.3		4.744		90.1	69	147			

Sample ID: 2310317-001AMSD	SampType: MSD			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: S-20	Batch ID: 77998			RunNo: 100270						
Prep Date: 10/6/2023	Analysis Date: 10/6/2023			SeqNo: 3673545		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	9.5	47.57	0	97.8	54.2	135	5.07	29.2	
Surr: DNOP	4.5		4.757		93.7	69	147	0	0	

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 Quantitative 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#: 2310317
16-Oct-23

Client: ENSOLUM
Project: Lateral 2C 125

Sample ID: 2.5ug gro lcs	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: GS100284	RunNo: 100284								
Prep Date:	Analysis Date: 10/6/2023	SeqNo: 3672190		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	102	70	130			
Surr: BFB	2200		1000		223	15	244			

Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: GS100284	RunNo: 100284								
Prep Date:	Analysis Date: 10/6/2023	SeqNo: 3672191		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	1000		1000		102	15	244			

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 Quantitative 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#: 2310317

16-Oct-23

Client: ENSOLUM
Project: Lateral 2C 125

Sample ID: 100ng btex lcs	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: BS100284			RunNo: 100284						
Prep Date:	Analysis Date: 10/6/2023			SeqNo: 3672186		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.025	1.000	0	83.9	70	130			
Toluene	0.86	0.050	1.000	0	86.0	70	130			
Ethylbenzene	0.88	0.050	1.000	0	87.8	70	130			
Xylenes, Total	2.6	0.10	3.000	0	87.6	70	130			
Surr: 4-Bromofluorobenzene	0.93		1.000		93.2	39.1	146			

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: BS100284			RunNo: 100284						
Prep Date:	Analysis Date: 10/6/2023			SeqNo: 3672187		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	0.90		1.000		90.1	39.1	146			

Sample ID: 2310317-001ams	SampType: MS			TestCode: EPA Method 8021B: Volatiles						
Client ID: S-20	Batch ID: BS100284			RunNo: 100284						
Prep Date:	Analysis Date: 10/6/2023			SeqNo: 3673438		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.57	0.016	0.6592	0	86.8	70	130			
Toluene	0.57	0.033	0.6592	0	86.9	70	130			
Ethylbenzene	0.58	0.033	0.6592	0	88.6	70	130			
Xylenes, Total	1.7	0.066	1.978	0	87.9	70	130			
Surr: 4-Bromofluorobenzene	0.57		0.6592		85.9	39.1	146			

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 Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		



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: 2310317

RcptNo: 1

Received By: Juan Rojas 10/6/2023 7:35:00 AM

Completed By: Cheyenne Cason 10/6/2023 8:05:08 AM

Reviewed By: SCM 10/6/23

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 $>0^{\circ}\text{C}$ 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: ju 10/6/23

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	0.9	Good	Yes	Morty		

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 289483

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 289483
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	2/21/2024