

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

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party: <b>Enterprise Field Services, LLC</b>	OGRID: <b>241602</b>
Contact Name: <b>Thomas Long</b>	Contact Telephone: <b>505-599-2286</b>
Contact email: <b>tjlong@eprod.com</b>	<b>Incident # (assigned by OCD): nAPP2125035140</b>
Contact mailing address: <b>614 Reilly Ave, Farmington, NM 87401</b>	

### Location of Release Source

Latitude **36.772771** Longitude **-107.968720** (NAD 83 in decimal degrees to 5 decimal places)

Site Name <b>Lateral 3B-3</b>	Site Type <b>Natural Gas Gathering Pipeline</b>
Date Release Discovered: <b>09/01/2021</b>	Serial Number (if applicable): <b>N/A</b>

Unit Letter	Section	Township	Range	County
<b>D</b>	<b>35</b>	<b>30N</b>	<b>11W</b>	<b>San Juan</b>

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): <b>3-5 BBLS</b>	Volume Recovered (bbls): <b>None</b>
<input checked="" type="checkbox"/> Natural Gas	Volume Released (Mcf): <b>19.6 MCF</b>	Volume Recovered (Mcf): <b>None</b>
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

**Cause of Release:** On September 1, 2021, Enterprise had a release of natural gas and natural gas liquids from the Lateral 3B-3 pipeline. The pipeline was isolated, depressurized, locked and tagged out. No liquids were observed on the ground surface. The release was underground. Liquids were present in the subsurface. No washes/waterway were affected. No residences were affected. No emergency services responded. Remediation was completed on September 15, 2021. The final excavation dimensions measured approximately 20 feet long by 18.5 feet wide by eight feet deep. Approximately 360 cubic yards of hydrocarbon impacted soil was excavated and transported to a New Mexico Oil Conservation Division (NMOCD) approved land farm. A third party closure report is included with this "Final." C-141.

Incident ID	
District RP	
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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: 12-9-2021

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: 01/06/2022

Printed Name: Nelson Velez Title: Environmental Specialist - Adv

Closure Report Approved,  
Release Resolved.



**CLOSURE REPORT**

Property:

**Lateral 3B-3 (9/1/21)  
Unit Letter D, S35 T30N R11W  
San Juan County, New Mexico**

**NM EMNRD OCD Incident ID No. NAPP2125035140**

November 30, 2021  
Ensolum Project No. 05A1226155

Prepared for:

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

Prepared by:

Handwritten signature of Chad D'Aponti in blue ink.

Chad D'Aponti  
Project Scientist

Handwritten signature of Rane Dechilly in blue ink.

Rane Dechilly  
Project Manager

Handwritten signature of Kyle Summers in blue ink.

Kyle Summers, CPG  
Sr. Project Manager

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## CLOSURE REPORT

**Lateral 3B-3 (9/1/21)  
Unit Letter D, S35 T30N R11W  
San Juan County, New Mexico**

**Ensolum Project No. 05A1226155**

### 1.0 INTRODUCTION

#### 1.1 Site Description & Background

<b>Operator:</b>	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
<b>Site Name:</b>	Lateral 3B-3 (9/1/21) (Site)
<b>NM EMNRD OCD Incident ID No.</b>	NAPP2125035140
<b>Location:</b>	36.772771° North, 107.968720° West Unit Letter D, Section 35, Township 30 North, Range 11 West San Juan County, New Mexico
<b>Property:</b>	Bureau of Land Management (BLM)
<b>Regulatory:</b>	New Mexico (NM) Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On August 31, 2021, a third party notified Enterprise of a possible leak on the Lateral 3B-3 pipeline. Enterprise verified a leak, and subsequently isolated and locked the pipeline out of service. On September 1, 2021, Enterprise determined the release was “reportable” due to the estimated volume of impacted soil. The NM EMNRD OCD was subsequently notified. On September 3, 2021, Enterprise initiated activities to repair the pipeline and remediate petroleum hydrocarbon impact.

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. To address activities related to oil and gas releases, the NM EMNRD OCD references NM 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. Ensolum, LLC (Ensolum) utilized information provided by Enterprise, the general site characteristics, and information available from the NM Office of the State Engineer (OSE) and the NM EMNRD OCD imaging database to determine the appropriate closure criteria for the Site. Supporting figures and documentation associated with the following Siting bullets are provided in **Appendix B**.

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Lateral 3B-3 (9/1/21)  
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- The 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). Eight PODs (SJ-04046 POD1 through SJ-04046 POD8) were identified within one mile of the Site. The plugging plan documents for the monitoring well network (SJ 04046 POD1-POD8) that was located at the Conoco Phillips Company Martin 34 No. 2 well site, approximately 0.8 miles southwest of the Site and at a lower elevation (5,764 feet) than the Site (5,919 feet), indicate an average depth to water of 40 feet bgs. The WRRS database indicates that one POD (SJ-03841 POD10) is located in the adjacent Public Land Survey System (PLSS) section. However, based on the OSE well record and log it appears that SJ-03841 POD10 is actually located near Navajo Dam. The OSE was notified of the discrepancy (**Figure A, Appendix B**).
- Numerous cathodic protection wells (CPWs) were identified in the NM EMNRD OCD imaging database within one mile of the Site and in adjacent PLSS sections. The approximate locations of the four closest CPWs are depicted on **Figure B (Appendix B)**. One CPW is associated with the Payne #1 oil/gas production well and is approximately 0.55 miles north of the Site and at a higher elevation (5,928 feet, according to the well record) than the Site (5,919 Feet), with a reported depth to water of 60 feet bgs. The second CPW is associated with the Murphy D #4 oil/gas production well and is approximately 0.6 miles northwest of the Site and at a higher elevation (5,976 feet, according to the well record) than the Site, with a reported depth to water of 160 feet bgs. The third CPW is associated with the Davis A Federal 1N oil/gas production well and is approximately 1.0 miles northeast of the Site and at a lower elevation (5,912 feet) than the Site, with a reported depth to water of 180 feet bgs. The fourth CPW is associated with the Murphy D #4A oil/gas production well and is approximately 1.0 miles northwest of the site and at a lower elevation (5,888 feet, according to the well record) than the Site, with a reported “water seep” at 195 feet bgs.
- The Site is not located within 300 feet of a NM EMNRD OCD-defined continuously flowing watercourse or significant watercourse. The Site is located approximately 430 feet south of an ephemeral wash (**Figure C, Appendix B**).
- 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 fresh water 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 fresh water 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 located 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 located within an area overlying a subsurface mine (**Figure G, Appendix B**).
- The Site is not located within an unstable area.

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- Based on information provided by the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) geospatial database the location of the Site is not located within a 100-year floodplain (**Figure H, Appendix B**).

Based on the identified siting criteria, Enterprise estimates the depth to water at the Site to be greater than 50 feet bgs, resulting in a Tier II ranking. However, the soil requirements of NMAC 19.15.29.13(D)(1) indicate that a minimum of the upper four feet must contain "uncontaminated" soil and that the soils meet Tier I closure criteria listed in Table 1 of NMAC 19.15.29.12. None of the samples collected below four feet bgs exceeded the Tier I closure criteria, so Tier II closure criteria were not included in the report. The Tier I closure criteria include:

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

<sup>1</sup> – Constituent concentrations are in milligrams per kilograms (mg/kg).

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

<sup>3</sup> – Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX).

### 3.0 SOIL REMEDIATION ACTIVITIES

On September 3, 2021, Enterprise initiated activities to remediate petroleum hydrocarbon impact resulting from the release. During the remediation and corrective action activities, OFT Construction Inc (OFT), provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final excavation measured approximately 20 feet long and 18.5 feet wide at the maximum extents. The maximum depth of the excavation measured approximately eight feet bgs. The lithology encountered during the completion of remediation activities consisted primarily of unconsolidated silty sand underlain by weathered sandstone.

Approximately 360 yd<sup>3</sup> of petroleum hydrocarbon affected soils/sandstone, 45 bbls of hydro-excavation soil cuttings and water, and excess overburden removed from the adjacent sloped area were transported to the Envirotech, Inc., (Envirotech) landfarm near Hilltop, NM for disposal/remediation. The executed C-138 solid waste acceptance form is provided in **Appendix C**. The excavation was backfilled with imported fill, and the area was 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<sup>®</sup> 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 six composite soil samples (S-1 through S-6) from the excavation for laboratory analysis. The composite samples were comprised of five (5) aliquots

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each and represent an estimated 200 square foot (ft<sup>2</sup>) sample area per guidelines outlined in Section D of 19.15.29.12 NMAC. Hand tools were utilized to obtain fresh aliquots from each area of the excavation. The regulatory correspondence is provided in **Appendix E**.

### **First Sampling Event**

On September 10, 2021, the first sampling event 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 sample S-1 (8') was collected from the floor of the excavation near the release point and composite soil sample S-2 (0'-8') was collected from the wall of the excavation.

### **Second Sampling Event**

On September 15, 2021, a second sampling event was performed. The NM EMNRD OCD was notified of the sampling event although no representative was present during sampling activities. Composite soil sample S-4 (8') was collected from the floor of the excavation. Composite soil samples S-3 (0'-8'), S-5 (0'-8'), and S-6 (0'-8') were collected from the walls 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 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-6) to the NM EMNRD OCD Tier I closure criteria.

- The laboratory analytical results for composite soil samples S-1 and S-4 indicate benzene concentrations of 0.062 mg/kg and 0.097 mg/kg, respectively, which are less than the Tier I NM EMNRD OCD closure criteria of 10 mg/kg. The laboratory analytical results for all other composite soil samples indicate benzene is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the Tier I NM EMNRD OCD closure criteria of 10 mg/kg.
- The laboratory analytical results for composite soil samples S-1 and S-4 indicate total BTEX concentrations of 0.83 mg/kg and 0.64 mg/kg, respectively, which are less than the Tier I NM EMNRD OCD closure criteria of 50 mg/kg. The laboratory analytical results for all other composite soil samples indicate total BTEX is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the Tier I NM EMNRD OCD closure criteria of 50 mg/kg.
- The laboratory analytical results for composite soil sample S-1 indicate a total combined TPH GRO/DRO/MRO concentration of 5.0 mg/kg, which is less than the Tier I NM EMNRD OCD closure criteria of 100 mg/kg. The laboratory analytical results for all other composite soil samples indicate



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total combined TPH GRO/DRO/MRO is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the Tier I NM EMNRD OCD closure criteria of 100 mg/kg.

- The laboratory analytical results for the composite soil samples indicate chloride concentrations is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the Tier I NM EMNRD OCD closure criteria of 600 mg/kg.

The laboratory analytical results are summarized in **Table 1 (Appendix F)**.

## 7.0 RECLAMATION AND REVEGETATION

The excavation was backfilled with imported fill, and the area was then contoured to surrounding grade. The pipeline was daylighted again with the hydro-excavator to facilitate planned pipe replacement. Enterprise will re-seed the Site with a BLM-approved seed mixture after the pipeline is permanently repaired.

## 8.0 FINDINGS AND RECOMMENDATION

- Six composite soil samples were collected from the Site. Based on laboratory analytical results, no benzene, BTEX, chloride, or combined TPH GRO/DRO/MRO exceedances were identified in the soils remaining at the Site.
- Approximately 360 yd<sup>3</sup> of petroleum hydrocarbon affected soils/sandstone, 45 bbls of hydro-excavation soil cuttings and water, and excess overburden removed from the adjacent sloped area were transported to the Envirotech landfarm for disposal/remediation. The excavation was backfilled with imported fill and then contoured to the surrounding grade.

**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.

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Enterprise Field Services, LLC  
Lateral 3B-3 (9/1/21)  
November 30, 2021



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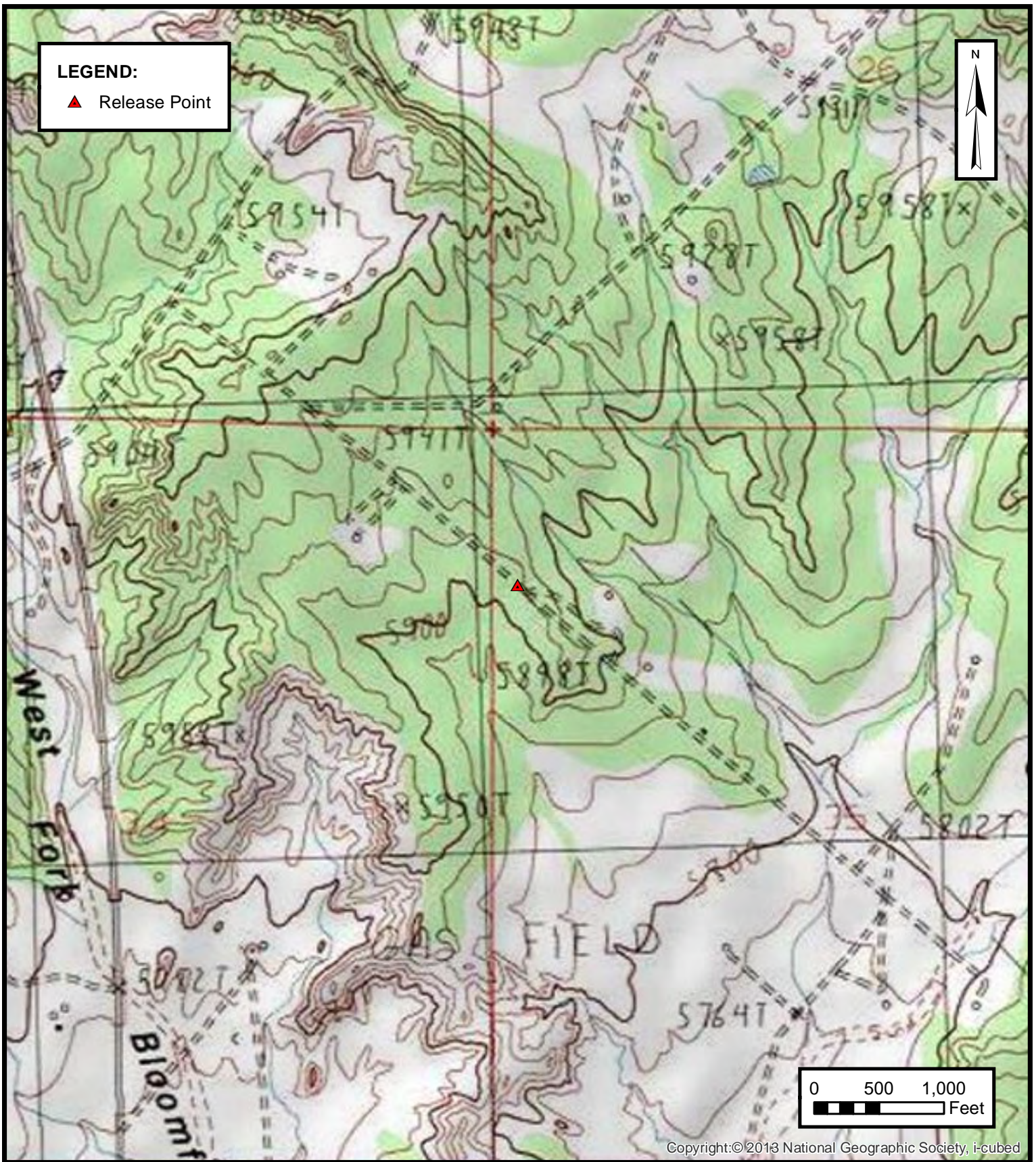
### 9.3 Reliance

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



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**ENSOLUM**  
Environmental & Hydrogeologic Consultants

**TOPOGRAPHIC MAP**  
 ENTERPRISE FIELD SERVICES, LLC  
 LATERAL 3B-3 (9/1/21)  
 Unit Letter D, S35 T30N R11W, San Juan County, New Mexico  
 36.772771° N, 107.968720° W  
 PROJECT NUMBER: 05A1226155

**FIGURE**  
**1**







**ENSOLUM**  
Environmental & Hydrogeologic Consultants

**SITE VICINITY MAP**  
ENTERPRISE FIELD SERVICES, LLC  
LATERAL 3B-3 (9/1/21)  
Unit Letter D, S35 T30N R11W, San Juan County, New Mexico  
36.772771° N, 107.968720° W  
PROJECT NUMBER: 05A1226155

**FIGURE**  
**2**

**LEGEND:**

-  Release Point
-  Composite Soil Sample Location
-  Extent of Excavation
-  Approximate Pipeline Location

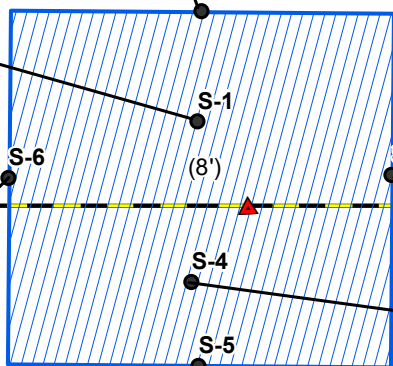


**S-1**  
 9/10/2021  
 F (8')  
 Benzene...0.062  
 Toluene...0.20  
 Ethylbenzene...0.054  
 Xylenes...0.51  
 Total BTEX...0.83  
 TPH GRO...5.0  
 TPH DRO...<9.6  
 TPH MRO...<48  
 Total Combined TPH  
 GRO/DRO/MRO...5.0  
 Chloride...<60

**S-2**  
 9/10/2021  
 W (0-8')  
 Benzene...<0.019  
 Toluene...<0.038  
 Ethylbenzene...<0.038  
 Xylenes...<0.076  
 Total BTEX...ND  
 TPH GRO...<3.8  
 TPH DRO...<10  
 TPH MRO...<50  
 Total Combined TPH  
 GRO/DRO/MRO...ND  
 Chloride...<60

**S-3**  
 9/15/2021  
 W (0-8')  
 Benzene...<0.020  
 Toluene...<0.040  
 Ethylbenzene...<0.040  
 Xylenes...<0.080  
 Total BTEX...ND  
 TPH GRO...<4.0  
 TPH DRO...<9.7  
 TPH MRO...<48  
 Total Combined TPH  
 GRO/DRO/MRO...ND  
 Chloride...<60

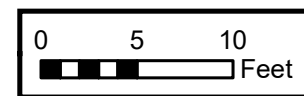
**S-6**  
 9/15/2021  
 W (0-8')  
 Benzene...<0.019  
 Toluene...<0.037  
 Ethylbenzene...<0.037  
 Xylenes...<0.075  
 Total BTEX...ND  
 TPH GRO...<3.7  
 TPH DRO...<10  
 TPH MRO...<50  
 Total Combined TPH  
 GRO/DRO/MRO...ND  
 Chloride...<60



**S-5**  
 9/15/2021  
 W (0-8')  
 Benzene...<0.018  
 Toluene...<0.036  
 Ethylbenzene...<0.036  
 Xylenes...<0.072  
 Total BTEX...ND  
 TPH GRO...<3.6  
 TPH DRO...<10  
 TPH MRO...<50  
 Total Combined TPH  
 GRO/DRO/MRO...ND  
 Chloride...<60

**S-4**  
 9/15/2021  
 F (8')  
 Benzene...0.097  
 Toluene...0.18  
 Ethylbenzene...0.056  
 Xylenes...0.31  
 Total BTEX...0.64  
 TPH GRO...<3.6  
 TPH DRO...<9.2  
 TPH MRO...<46  
 Total Combined TPH  
 GRO/DRO/MRO...ND  
 Chloride...<60

**NOTES:**  
 All Concentrations Are Listed in mg/Kg.  
 All Depths Are Listed in Feet BGS.  
 W - Wall Sample  
 F - Floor Sample



**SITE MAP WITH SOIL ANALYTICAL RESULTS**

ENTERPRISE FIELD SERVICES, LLC  
 LATERAL 3B-3 (9/1/21)  
 Unit Letter D, S35 T30N R11W, San Juan County, New Mexico  
 36.772771° N, 107.968720° W

PROJECT NUMBER: 05A1226155



Environmental & Hydrogeologic Consultants

**FIGURE**

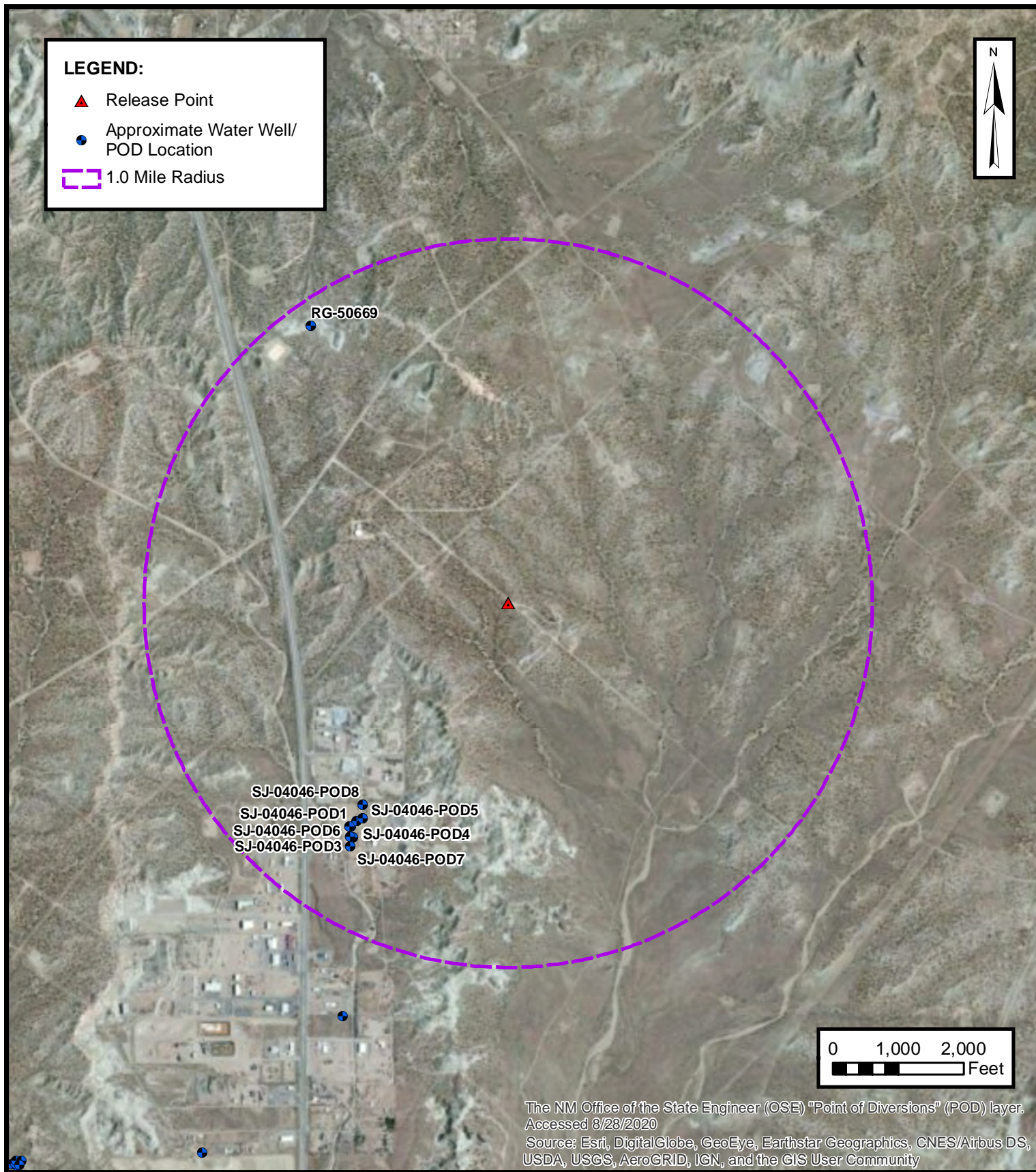
**3**



## APPENDIX B

### Siting Figures and Documentation

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**1.0 MILE RADIUS WATER WELL/ POD LOCATION MAP**

ENTERPRISE FIELD SERVICES, LLC  
 LATERAL 3B-3 (9/1/21)  
 Unit Letter D, S35 T30N R11W, San Juan County, New Mexico  
 36.772771° N, 107.968720° W

PROJECT NUMBER: 05A1226155

**FIGURE**

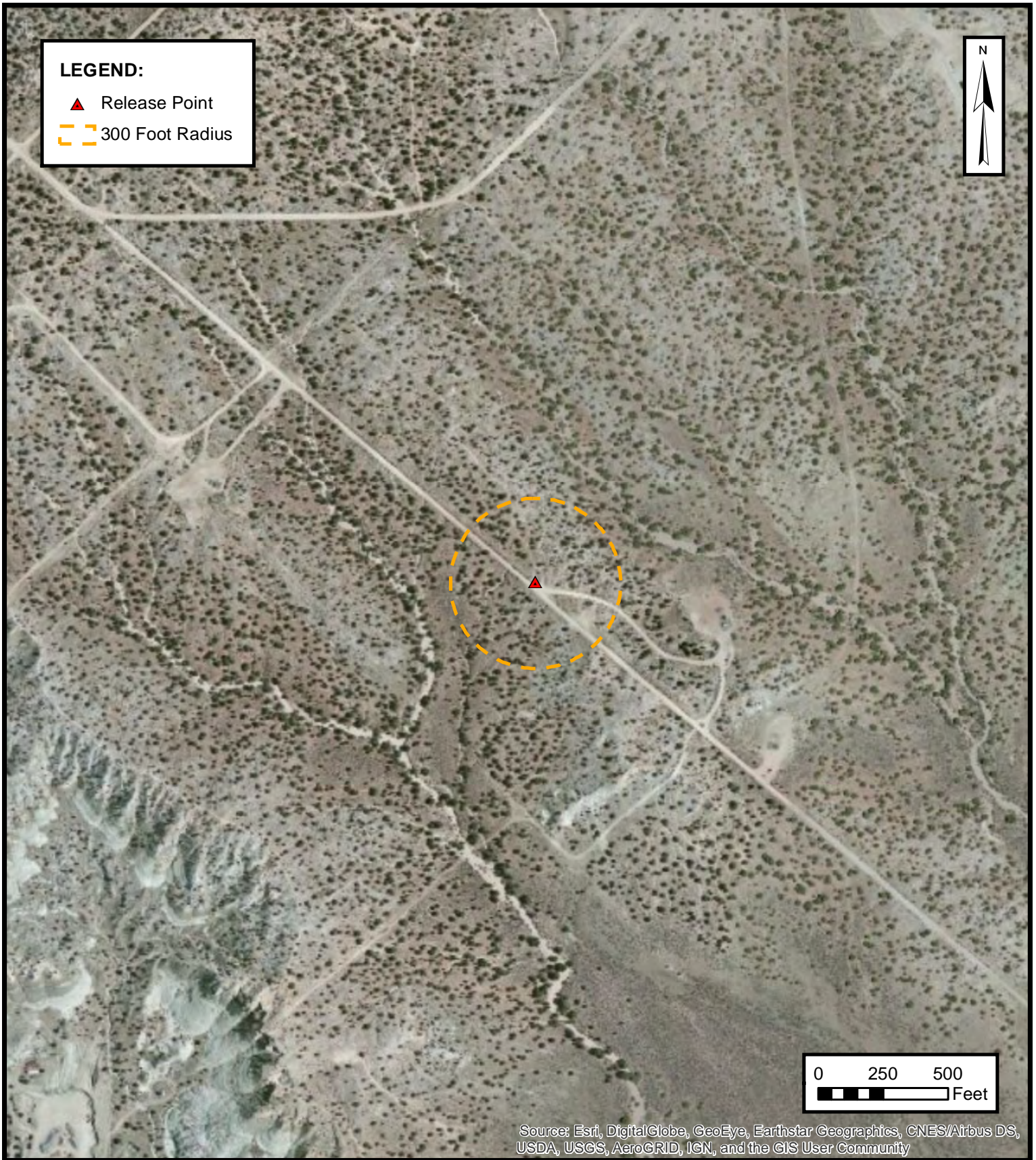
**A**





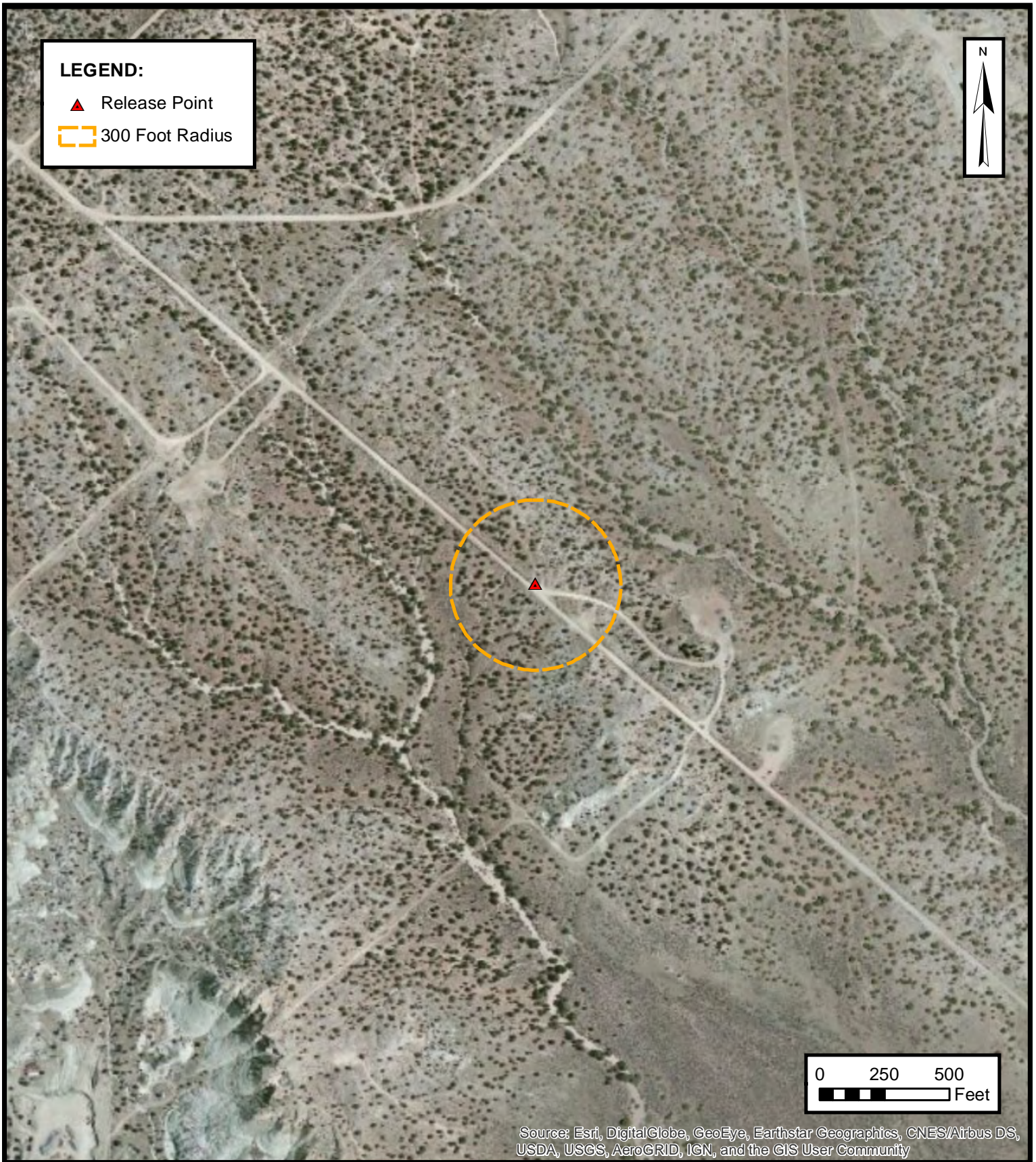
**CATHODIC PROTECTION WELL RECORDED  
DEPTH TO WATER**  
 ENTERPRISE FIELD SERVICES, LLC  
 LATERAL 3B-3 (9/1/21)  
 Unit Letter D, S35 T30N R11W, San Juan County, New Mexico  
 36.772771° N, 107.968720° W  
 PROJECT NUMBER: 05A1226155

**FIGURE  
B**



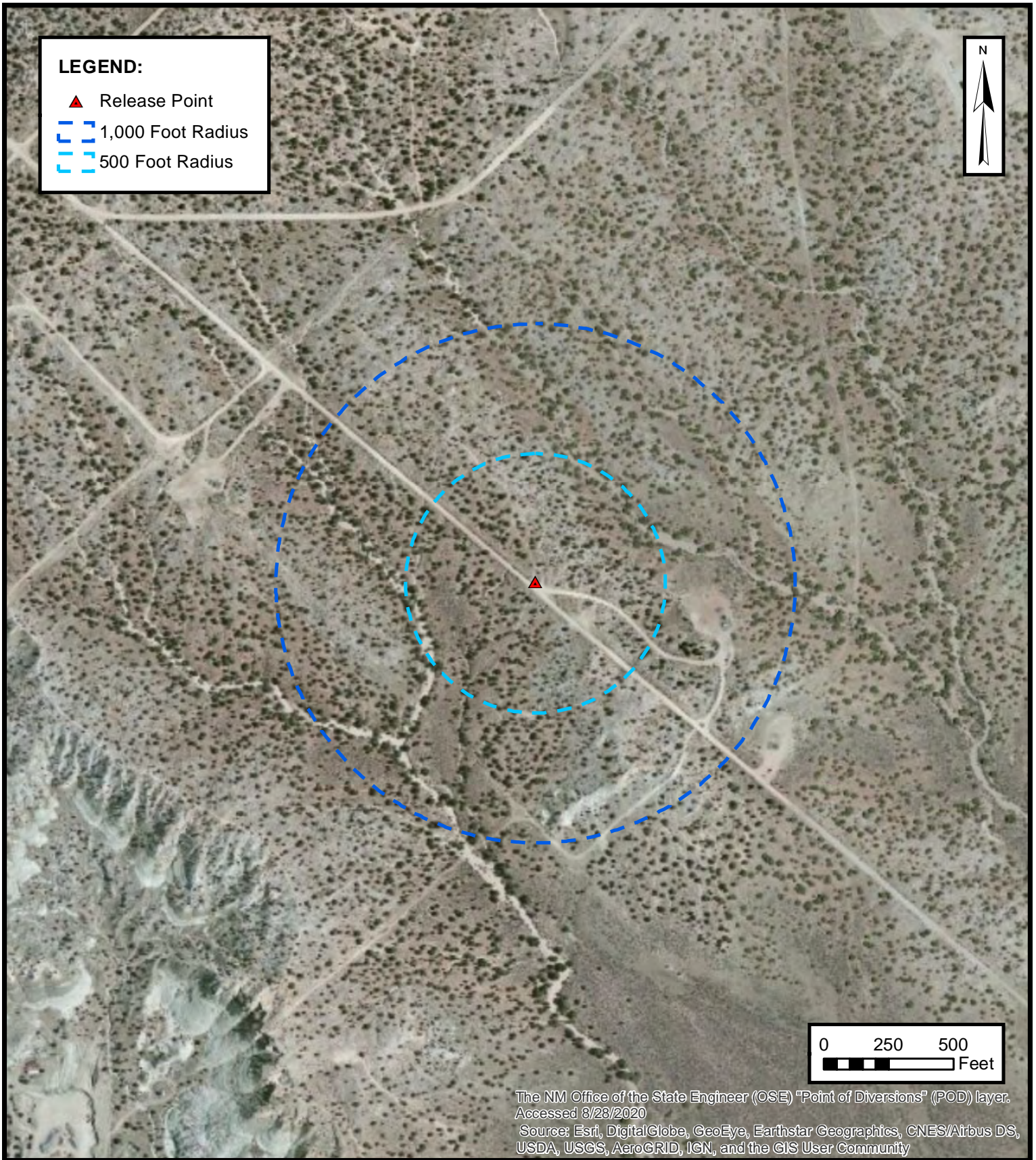
**300 FOOT RADIUS  
WATERCOURSE AND DRAINAGE IDENTIFICATION**  
 ENTERPRISE FIELD SERVICES, LLC  
 LATERAL 3B-3 (9/1/21)  
 Unit Letter D, S35 T30N R11W, San Juan County, New Mexico  
 36.772771° N, 107.968720° W  
 PROJECT NUMBER: 05A1226155

**FIGURE  
C**



**300 FOOT RADIUS  
OCCUPIED STRUCTURE IDENTIFICATION**  
ENTERPRISE FIELD SERVICES, LLC  
LATERAL 3B-3 (9/1/21)  
Unit Letter D, S35 T30N R11W, San Juan County, New Mexico  
36.772771° N, 107.968720° W  
PROJECT NUMBER: 05A1226155

**FIGURE  
D**

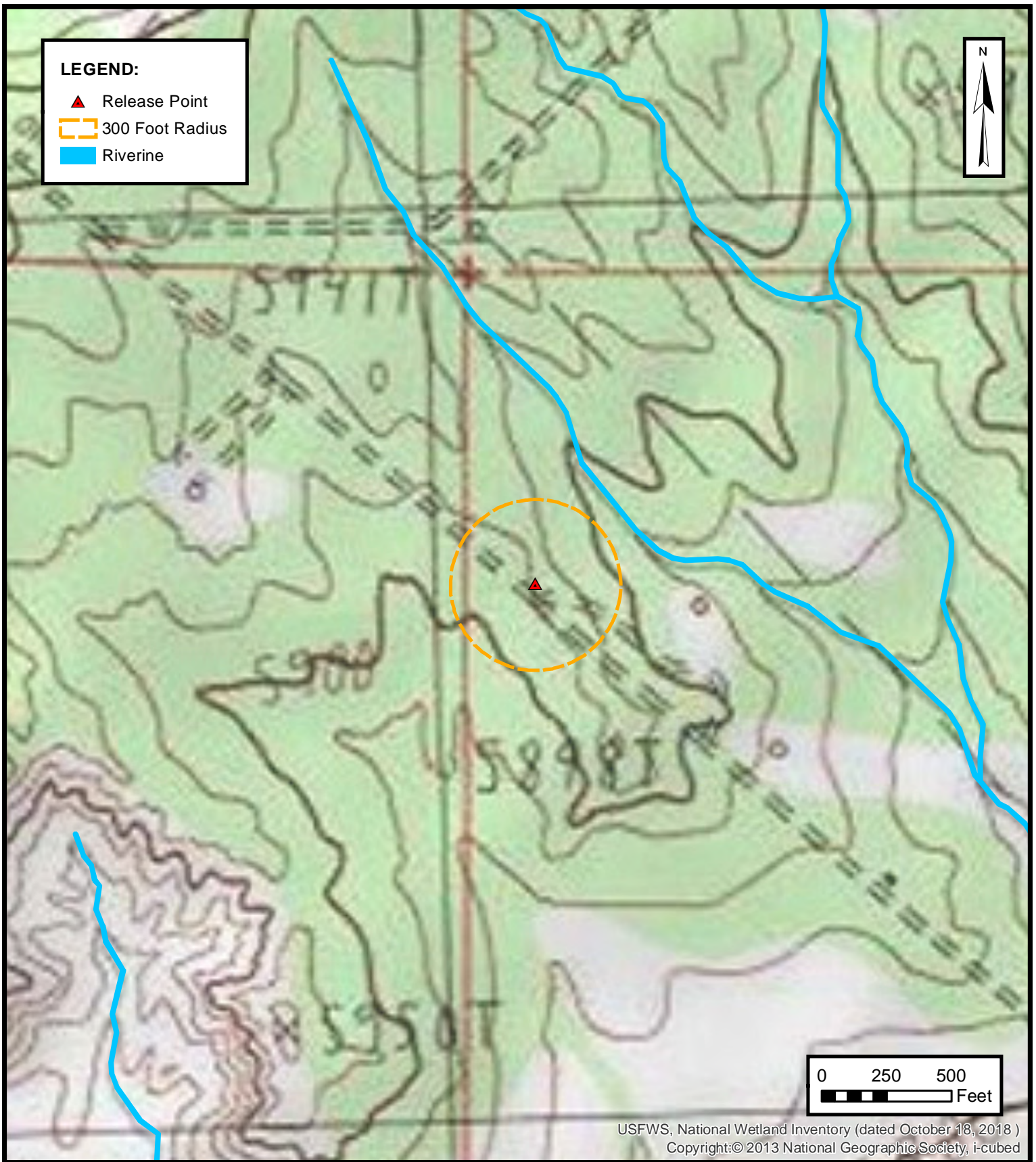


**WATER WELL AND NATURAL SPRING LOCATION**

ENTERPRISE FIELD SERVICES, LLC  
 LATERAL 3B-3 (9/1/21)  
 Unit Letter D, S35 T30N R11W, San Juan County, New Mexico  
 36.772771° N, 107.968720° W

PROJECT NUMBER: 05A1226155

**FIGURE**  
**E**

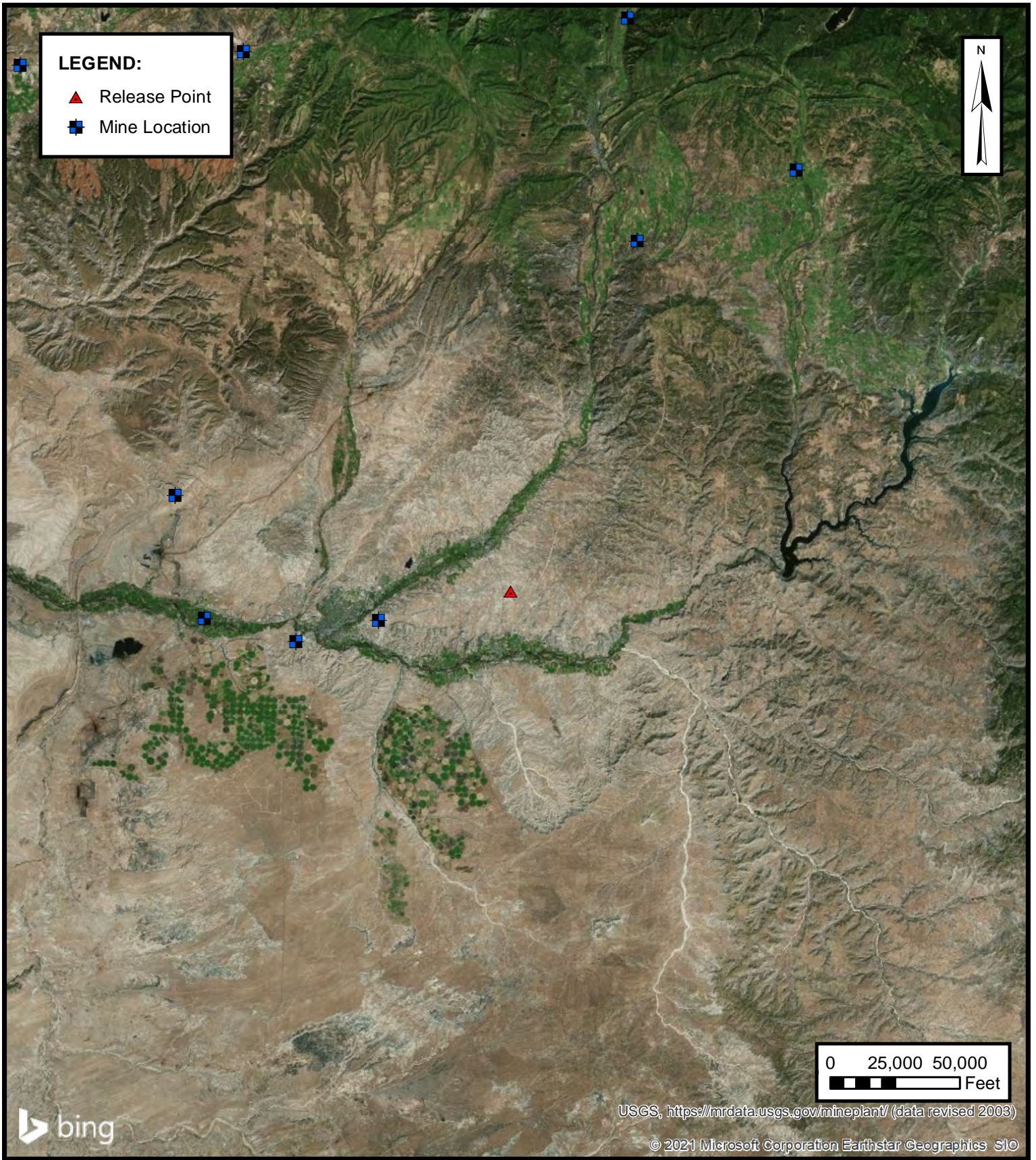


**WETLANDS**

ENTERPRISE FIELD SERVICES, LLC  
LATERAL 3B-3 (9/1/21)  
Unit Letter D, S35 T30N R11W, San Juan County, New Mexico  
36.772771° N, 107.968720° W

PROJECT NUMBER: 05A1226155

**FIGURE**  
**F**



**ENSOLUM**  
Environmental & Hydrogeologic Consultants

**MINES, MILLS AND QUARRIES**

ENTERPRISE FIELD SERVICES, LLC  
LATERAL 3B-3 (9/1/21)  
Unit Letter D, S35 T30N R11W, San Juan County, New Mexico  
36.772771° N, 107.968720° W

PROJECT NUMBER: 05A1226155

**FIGURE**

**G**



**ENSOLUM**  
 Environmental & Hydrogeologic Consultants

**100-YEAR FLOOD PLAIN MAP**

ENTERPRISE FIELD SERVICES, LLC  
 LATERAL 3B-3 (9/1/21)  
 Unit Letter D, S35 T30N R11W, San Juan County, New Mexico  
 36.772771° N, 107.968720° W

PROJECT NUMBER: 05A1226155

**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
<a href="#">SJ 03841 POD10</a>	SJ	SJ		3	34	30N	11W			261236	4075354	42	30	12

Average Depth to Water: **30 feet**  
 Minimum Depth: **30 feet**  
 Maximum Depth: **30 feet**

**Record Count:** 1

**PLSS Search:**

**Section(s):** 35, 25, 26, 27, 34, 36     **Township:** 30N     **Range:** 11W

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.





# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

---

No records found.

**PLSS Search:**

**Section(s):** 1, 2, 3

**Township:** 29N

**Range:** 11W

---

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.

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9/8/21 10:02 AM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER

### OCD CATHODIC PROTECTION DEEPWELL GROUND BED REPORT DATA SHEET: NORTHWESTERN NEW MEXICO

SUBMIT 2 COPIES TO O.C.D. AZTEC OFFICE

OPERATC Burlington  
FARMINGTON, NM 87401  
PHONE: 599-3400

#### LOCATION INFORMATION

API NUMBER: **3004535290**

WELL NAME OR PIPELINE SERVED: **DAVIS A FEDERAL 1N** LEGAL LOCATION: **25 30N 11W** INSTALLATION DATE: **12/17/2012**

PPCO. RECTIFIER NO.: **10609W** ADDITIONAL WELLS:

TYPE OF LEASE:  LEASE NUMBER: **SF-080869**

#### GROUND BED INFORMATION

TOTAL DEPTH: **300'** CASING DIAMETER: **8"** TYPE OF CASING: **PVC** CASING DEPTH: **20'** CASING CEMENTED

TOP ANODE DEPTH: **167'** BOTTOM ANODE DEPTH: **275'**

ANODE DEPTHS: **167, 179, 191, 203, 215, 215, 227, 239, 251, 263, 275,**

AMOUNT OF COKE: **50 BAGS**

#### WATER INFORMATION

WATER DEPTH (1): **180' - 300'** WATER DEPTH (2):

GAS DEPTH:  CEMENT PLUGS:

RCVD JAN 23 '13  
OIL CONS. DIV.  
DIST. 3

#### OTHER INFORMATION

TOP OF VENT PERFORATIONS: **160'** VENT PIPE DEPTH: **300'**

REMARKS:   
**COKE DEPTH:150'**

IF ANY OF THE ABOVE INFORMATION IS UNAVAILABLE, PLEASE INDICATE SO. COPIES OF ALL LOGS, INCLUDING DRILLERS LOGS, WATER ANALYSIS, AND WELL BORE SCHEMATICS SHOULD BE SUBMITTED WHEN AVAILABLE. UNPLUGGED UNABANDONED WELLS ARE TO BE INCLUDED.

\* LAND TYPE MAY BE SHOWN: F-FEDERAL; I-INDIAN; S-STATE; P-FEE  
IF FEDERAL OR INDIAN, ADD LEASE NUMBER.

ca

Wednesday, Nov

Page 1 of 1

COMPANY: CONOCO PHILLIPS  
 COMPANY REP.: JOHN TAFOYA  
 LOCATION: DAVIS A FEDERAL 1/N  
 JOB NO.: 340140387  
 FOREMAN: RON LUNA  
 DRILLER: DARREL FERRIER

DATE: 12/17/2012  
 DIA. HOLE: 7 7/8  
 DEPTH: 300'  
 COKE TYPE: SW  
 # OF COKE: 50 BAGS  
 # OF BENTONITE: 0

CASING: SCH40 PVC  
 DIAMETER: 7 7/8  
 CASING DEPTH: 20'  
 # OF ANODES: 10  
 ANODE TYPE: 2284Z  
 ANODE LEAD: HWMPE #8



RECTIFIER MFG: \_\_\_\_\_  
 MODEL: \_\_\_\_\_  
 SERIAL #: \_\_\_\_\_  
 V-DC: \_\_\_\_\_ A-DC: \_\_\_\_\_

WELL LOG										ANODE PLACEMENT			
DEPTH FT.	DRILLERS LOG - SOIL TYPE	VOLTS	AMPS	COMMENTS / ANODE #	DEPTH FT.	DRILLERS LOG - SOIL TYPE	VOLTS	AMPS	COMMENTS / ANODE #	ANODE NO.	ANODE DEPTH	AMPS W/O COKE	AMPS W/ COKE
0	CLAY	13.40		CASING	250	SHALE		3.20	#3-251	1	275	4.40	7.50
5	CLAY			CASING	255	SHALE		3.20		2	263	3.10	6.90
10	CLAY			CASING	260	SHALE		4.00		3	251	7.50	11.60
15	CLAY			CASING	265	GRAY SANDY SHALE		5.30	#2-263	4	239	7.00	12.00
20	CLAY			CASING	270	GRAY SANDY SHALE		7.10		5	227	5.40	8.90
25	GRAY SANDSTONE				275	GRAY SANDY SHALE		6.60	#1-275	6	215	5.20	10.30
30	GRAY SANDSTONE				280	GRAY SANDY SHALE				7	203	3.90	8.50
35	GRAY SANDSTONE				285	GRAY SANDY SHALE				8	191	4.10	8.70
40	GRAY SANDSTONE				290	GRAY SANDY SHALE				9	179	4.20	8.40
45	GRAY SANDSTONE				295	GRAY SANDY SHALE				10	167	4.40	7.00
50	GRAY SANDSTONE				300	GRAY SANDY SHALE				11			
55	GRAY SANDSTONE				305					12			
60	GRAY SANDSTONE				310					13			
65	GRAY SANDSTONE				315					14			
70	GRAY SANDSTONE				320					15			
75	GRAY SANDSTONE				325					16			
80	GRAY SANDSTONE		2.70		330					17			
85	GRAY SANDSTONE W/SOME SHALE		3.50		335					18			
90	GRAY SANDSTONE W/SOME SHALE		2.90		340					19			
95	GRAY SANDSTONE W/SOME SHALE		3.10		345					20			
100	GRAY SANDSTONE W/SOME SHALE		3.60		350					21			
105	GRAY SANDSTONE		2.90		355					22			
110	GRAY SANDSTONE		5.50		360					23			
115	GRAY SANDSTONE		5.30		365					24			
120	GRAY SANDSTONE		5.00		370					25			
125	GRAY SANDSTONE		4.70		375								
130	GRAY SANDSTONE		4.90		380								
135	GRAY SANDSTONE		5.00		385								
140	GRAY SANDSTONE		4.90		390								
145	GRAY SANDSTONE		6.10		395								
150	GRAY SANDSTONE		4.90		400								
155	GRAY SANDSTONE		4.60		405								
160	GRAY SANDSTONE		4.10		410								
165	GRAY SANDSTONE		4.20	#10-167	415								
170	GRAY SANDSTONE		4.10		420								
175	GRAY SANDSTONE		4.10		425								
180	GRAY SANDSTONE		4.10	#9-179	430								
185	GRAY SANDSTONE		4.00		435								
190	GRAY SANDSTONE		4.10	#8-191	440								
195	WATER/SAND		4.20		445								
200	WATER/SAND		4.20		450								
205	WATER/SAND		5.50	#7-203	455								
210	WATER/SAND		6.40		460								
215	WATER/SAND		5.50	#6-215	465								
220	WATER/SAND		5.90		470								
225	SHALE		6.70	#5-227	475								
230	SHALE		6.90		480								
235	SHALE		7.20		485								
240	SHALE		6.80	#4-239	490								
245	SHALE		6.40		495								

TD: 292'  
 VENT PIPE DEPTH: 303'

GROUNDBED RESISTANCE	
TOTAL VOLTS:	13.40
TOTAL AMPS:	36.60
	0.37 OHMS

SITE ELEVATION: 5906'  
 WATER CONDUCTIVITY:  
 COKE LEVEL: 150'  
 EXTRA CASING USED:  
 ADDITIONAL COMMENTS: INJECT WATER 180' - 300'

30-045-09K19

3897

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS  
NORTHWESTERN NEW MEXICO  
(Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL INC. Location: Unit L Sec. 26 Twp 30 Rng 11

Name of Well/Wells or Pipeline Serviced PAYNE #1  
cps 1947w

Elevation 5928' Completion Date 5/16/88 Total Depth 400' Land Type\* N/A

Casing, Sizes, Types & Depths 20' OF 8" PVC CASING

If Casing is cemented, show amounts & types used N/A

If Cement or Bentonite Plugs have been placed, show depths & amounts used  
N/A

Depths & thickness of water zones with description of water when possible:  
Fresh, Clear, Salty, Sulphur, Etc. 60'

Depths gas encountered: 350'

Type & amount of coke breeze used: N/A

Depths anodes placed: 365', 350', 305', 275', 265', 255', 225', 205', 195', 180'

Depths vent pipes placed: 395'

Vent pipe perforations: 360'

Remarks: gb #1 HOLE MAKING GAS AND WATER OUT OF VENT PIPE. INSTALLED 1" VALVE ON VENT PIPE.

**RECEIVED**  
MAY 8 1988  
OIL CON. DIV.  
DIST. 9

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

\*Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee.  
If Federal or Indian, add Lease Number.

CATHODIC PROTECTION CONSTRUCTION REPORT

DAILY LOG

Drilling Log (Attach Here)

RFE  
G 031

COMP  
6-20-11

Completion Date: 5/16/11

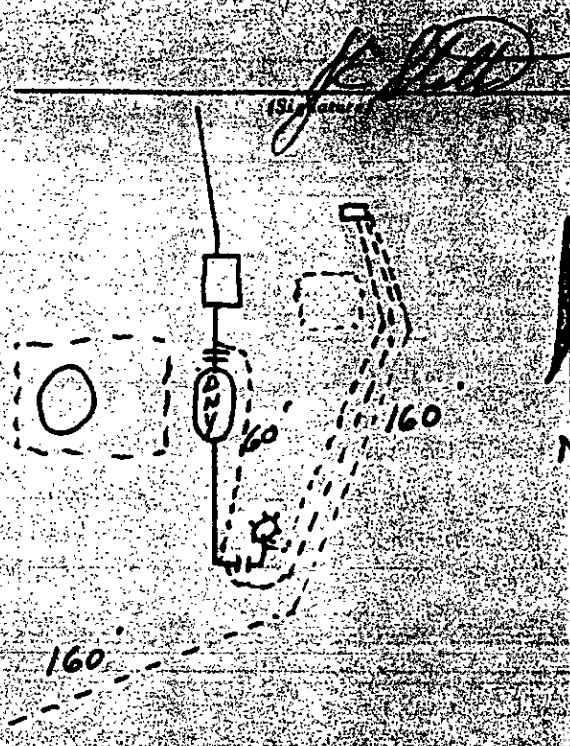
CP#	Well Name, Line or Phase	Work Order #	Station	Bar Chart Order
1947W	PAYNE "1"	48583A	600' W = 95V	<input type="checkbox"/> <input type="checkbox"/>
Location: L-26-30-11		Anode Size: 2" X 6"	Anode Type: DURATION	Size Dia: 6 3/4"
Depth Drilled: 400'	Depth Logged: 395'	Drilling Rig Type:	Total Lbs. Cable Used:	Line Connections Made:
Anode Depth				
#1 365'	#2 350'	#3 305'	#4 275'	#5 265'
#6 255'	#7 220'	#8 205'	#9 190'	#10 180'
Anode Output (Amps)				
#1 5.9	#2 6.6	#3 6.0	#4 5.6	#5 7.3
#6 7.2	#7 7.0	#8 6.9	#9 8.2	#10 7.2
Anode Depth				
#11	#12	#13	#14	#15
#16	#17	#18	#19	#20
Anode Output (Amps)				
#11	#12	#13	#14	#15
#16	#17	#18	#19	#20
Total Circuit Resistance:			No. of C.P. Cable Used:	
Volts 11.79V	Amps 24.8A	Ohms .34		

Remarks: WATER AT 60', TOOK WATER SAMPLE. HIT GAS AGAIN AT 250'.  
 INSTALLED 395' OF 1" P.V.C. VENT PIPE, PERFORATED 360'.  
 HOLE WAS MAKING GAS & WATER OUT VENT PIPE, WHEN IT WAS COMPLETED. SET 20' OF 8" P.V.C. CASINGS, LEFT COKE BREEZE DOWN 20', IN HOLE, & INSTALLED 1" VALVE ON VENT PIPE

G.B. - \$4074.00

Rectifier Size: 40 V 16 A	669.00
Add'l Depth	
Depth Credit: -105	-367.50
Extra Cable: 360	86.40
Ditch & I Cable: 320 380	224.00 266.00
25' Meter Pole: -	
20' Meter Pole: 1	297.00
10' Stub Pole: -	
Junction Box: 1	225.00
20' of 8" P.V.C. CASINGS	100.00
1 Hr. setting Time	138.00
	5487.90
TAX	274.40
	\$ 5762.30

All Construction Completed



5028

1608 Sp. Field Ln

PO Box

Meridian, MS 39301

(601) 325-1840

(601) 325-1840

Company: Meridian Oil

Well No. DRYE #1 Location L-20-30-11

Volts Applied 11.79

5		230	2.4		455		680
10		235	3.0		460		685
15		240	2.8		465		690
20		245	2.7		470		695
25		250	2.6		475		700
30		255	4.0 - (6)		480		705
35		260	4.6		485		710
40		265	4.2 - (5)		490		715
45		270	3.5		495		720
50		275	3.6 - (4)		500		725
55		280	3.2		505		730
60	2.6	285	2.9		510		735
65	2.4	290	2.7		515		740
70	2.2	295	2.7		520		745
75	2.0	300	2.9		525		750
80	1.9	305	4.1 - (3)		530		755
85	1.7	310	3.4		535		760
90	1.4	315	3.1		540		765
95	1.4	320	2.7		545		770
100	1.4	325	2.4		550		775
105	2.0	330	2.2		555		780
110	2.1	335	2.5		560		785
115	1.9	340	2.4		565		790
120	1.8	345	2.2		570		795
125	1.7	350	4.0 - (2)		575		800
130	2.0	355	2.9		580		805
135	2.4	360	3.2		585		810
140	2.9	365	3.2 - (1)		590		815
145	3.0	370	3.5		595		820
150	3.1	375	3.4		600		825
155	3.4	380	3.4		605		830
160	2.5	385	2.8		610		835
165	3.5	390	2.8		615		840
170	3.4	395		T.D	620		845
175	3.2	400		Drilled To	625		850
180	3.8 - (10)	405			630		855
185	3.6	410			635		860
190	3.8	415			640		865
195	4.0 - (9)	420			645		870
200	4.1	425			650		875
205	4.0 - (8)	430			655		880
210	2.5	435			660		885
215	3.7	440			665		890
220	4.0 - (7)	445			670		895
225	3.6	450			675		900

D. CIASS DRILLING CO. 1947

Drill No. 3

DRILLER'S WELL LOG

S. P. No. Payne No 1 Date 5-15-88  
Client Meridian Oil Co. Prospect \_\_\_\_\_  
County SAN JUAN State New Mexico

If hole is a redrill or if moved from original staked position show distance and direction moved: \_\_\_\_\_

FROM	TO	FORMATION — COLOR — HARDNESS
0	40	SOFT SANDSTONE
40	80	SHALE
80	150	SANDSTONE
150	250	SHALE
250	260	SANDSTONE
260	290	SHALE
290	310	SANDSTONE
310	340	SANDY SHALE
340	360	SANDSTONE
360	400	SHALE

Mud \_\_\_\_\_ Bran \_\_\_\_\_ Lime

Rock Bit Number \_\_\_\_\_ Make \_\_\_\_\_

Remarks: Water @ 60'  
Set 25' OF CASING 1 Hr.

Driller: Ronnie Brown

1724

#4 30-045-26817

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS  
NORTHWESTERN NEW MEXICO  
(Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL INC. Location: Unit I Sec. 27 Twp 30 Rng 11

Name of Well/Wells or Pipeline Serviced MURPHY D #4

cps 1929w

Elevation 5976' Completion Date 4/11/88 Total Depth 340' Land Type\* N/A.

Casing, Sizes, Types & Depths N/A

If Casing is cemented, show amounts & types used N/A

If Cement or Bentonite Plugs have been placed, show depths & amounts used

N/A

Depths & thickness of water zones with description of water when possible:

Fresh, Clear, Salty, Sulphur, Etc. 160'

**RECEIVED**  
MAY 31 1991

Depths gas encountered: N/A

**OIL CON. DIST. 3**

Type & amount of coke breeze used: N/A

Depths anodes placed: 300', 290', 245', 235', 220', 205', 195', 185', 175', 165'

Depths vent pipes placed: 326'

Vent pipe perforations: 286'

Remarks: gb #1

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

\*Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee.  
If Federal or Indian, add Lease Number.



DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS  
NORTHWESTERN NEW MEXICO

Operator Burlington Resources Location: Unit L Sec. 27 Twp 30 Rng 11

Name of Well/Wells or Pipeline Serviced Murphy "D" #4A  
30-045-29450

Elevation 5888 Completion Date 2-25-98 Total Depth 340' Land Type S

Casing Strings, Sizes, Types & Depths 8" PVC X 20'

If Casing Strings are cemented, show amounts & types used 4 Bags Portland Cement

If Cement or Bentonite Plugs have been placed, show depths & amounts used  
none

Depths & thickness of water zones with description of water: Fresh, Clear, Salty, Sulphur, Etc. 195 strip

Depths gas encountered: None

Ground bed depth with type & amount of coke breeze used: 340', 2000 lbs  
lorasco SW coke breeze

Depths anodes placed: 320, 310, 300, 290, 280, 240, 230, 220

Depths vent pipes placed: 340'

Vent pipe perforations: Bottom 150'

RECEIVED  
MAR 9 1999

Remarks: \_\_\_\_\_  
OIL CON. DIV.  
DIST. 3

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee.  
If Federal or Indian, add Lease Number.

TIERRA DYNAMIC COMPANY			DEEP WELL GROUNDED LOG DATA SHEET						
COMPANY NAME: Burlington Resources									
WELL NAME: Murphy "D" #4A									
LEGAL LOCATION: Sec 27-30-11			COUNTY: San Juan						
DATE: 2-25-98			TYPE OF COKE: Loxley SW						
DEPTH: 340'			AMT. OF COKE BACKFILL: 2000 lbs						
BIT SIZE: 6 3/4			VENT PIPE: 340'						
DRILLER NAME: Jack Ledbetter			PERF. PIPE: Bottom 150'						
SIZE AND TYPE OF CASING: 8" PVC X 20'			ANODE AMT. & TYPE: Anotec - Duriron						
BOULDER DRILLING:									
DEPTH			DEPTH			COMPLETION INFORMATION:			
FT.	LOG	ANODE	FT.	LOG	ANODE	FT.	LOG	ANODE	WATER DEPTHS: 195 Seep
									ISOLATION PLUGS:
100			265	.6		430			
105			270	.4		435			OUTPUT OUTPUT
110			275	.8		440			ANODE# DEPTH NO COK COKED
115			280	2.6	5	445		1	320 1.4 3.8
120			285	2.7		450		2	310 2.6 7.1
125			290	2.6	4	455		3	300 3.0 8.2
130			295	2.9		460		4	290 3.1 9.1
135			300	3.0	3	465		5	280 3.0 9.3
140			305	3.0		470		6	240 2.9 8.8
145			310	2.7	2	475		7	230 2.8 8.0
150	2.6		315	1.8		480		8	220 2.7 7.8
155	2.2		320	1.4	1	485		9	
160	1.9		325	3.1		490		10	
165	1.5		330	3.0		495		11	
170	1.4		335	T.D.		500		12	
175	1.4		340			505		13	
180	1.5		345			510		14	
185	1.4		350			515		15	
190	1.0		355			520		16	
195	.9		360			525		17	
200	1.8		365			530		18	
205	2.3		370			535		19	
210	2.4		375			540		20	
215	3.1		380			545		21	
220	2.4	8	385			550		22	
225	2.3		390			555		23	
230	2.3	7	395			560		24	
235	2.4		400			565		25	
240	2.3	6	405			570		26	
245	1.7		410			575		27	
250	2.2		415			580		28	
255	1.6		420			585		29	
260	.8		425			590		30	
						595			
LOGGING VOLTS: 11.78			VOLTAGE SOURCE: Auto						
TOTAL AMPS: 17.0			TOTAL G/B RESISTANCE: .69						
REMARKS:									



## 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.  
97057-1125

**REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE**

**1. Generator Name and Address:**  
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401  
**PayKey: RB21200**  
**PM: Aaron Lucero**  
**AFE: Pending**

**2. Originating Site:**  
Lateral 3B-3

**3. Location of Material (Street Address, City, State or ULSTR):**  
UL D Section 35 T30N R11W; 36.772710, -107.968720  
*Sept 2021*

**4. Source and Description of Waste:**  
**Source:** Remediation activities associated with a natural gas pipeline leak.  
**Description:** Hydrocarbon/Condensate impacted soil associated natural gas pipeline release.  
Estimated Volume 50 yd<sup>3</sup>/ bbls Known Volume (to be entered by the operator at the end of the haul) 360/45 yd<sup>3</sup>/ bbls

**5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

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

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

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

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

**GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS**

I, Thomas Long *Thomas Long* 9-1-2021, representative for Enterprise Products Operating authorizes Envirotech, Inc. to complete  
**Generator Signature**  
the required testing/sign the Generator Waste Testing Certification.

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

**5. Transporter: Riley Industrial and ~~OFF~~ *Bailey's, Stan Horn***

**OCD Permitted Surface Waste Management Facility**

Name and Facility Permit #: **Envirotech Inc. Soil Remediation Facility \* Permit #: NM 01-0011**  
Address of Facility: **Hilltop, 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: 9/2/21  
SIGNATURE: \_\_\_\_\_ TELEPHONE NO.: \_\_\_\_\_  
Surface Waste Management Facility Authorized Agent 505-632-0615



## APPENDIX D

### Photographic Documentation

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### SITE PHOTOGRAPHS

Closure Report  
Enterprise Field Services, LLC  
Lateral 3B-3 (9/1/21)  
Ensolum Project No. 05A1226155



#### Photograph 1

Photograph Description: View of the initial excavation activities.



#### Photograph 2

Photograph Description: View of in-process excavation activities.



#### Photograph 3

Photograph Description: View of the final excavation.



### SITE PHOTOGRAPHS

Closure Report  
Enterprise Field Services, LLC  
Lateral 3B-3 (9/1/21)  
Ensolum Project No. 05A1226155



#### Photograph 4

Photograph Description: View of the final excavation.



#### Photograph 5

Photograph Description: View of the site after initial restoration.





## APPENDIX E

### Regulatory Correspondence



**From:** [Long, Thomas](#)  
**To:** [Smith, Cory, EMNRD](#); [rjoyner@blm.gov](mailto:rjoyner@blm.gov)  
**Cc:** [Stone, Brian](#)  
**Subject:** RE: [EXTERNAL] FW: Lateral 3B-3 - UL D Section 35 T30N R11W; 36.772710, -107.968720 - Incident # nAPP2125035140  
**Date:** Thursday, September 16, 2021 1:32:00 PM

---

Cory,

This is the wrong incident. The Lateral 6K-1 was the one with the separate incident.

**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](mailto:tjlong@eprod.com)



---

**From:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>  
**Sent:** Thursday, September 16, 2021 1:30 PM  
**To:** Long, Thomas <[tjlong@eprod.com](mailto:tjlong@eprod.com)>; [rjoyner@blm.gov](mailto:rjoyner@blm.gov)  
**Cc:** Stone, Brian <[bmstone@eprod.com](mailto:bmstone@eprod.com)>  
**Subject:** RE: [EXTERNAL] FW: Lateral 3B-3 - UL D Section 35 T30N R11W; 36.772710, -107.968720 - Incident # nAPP2125035140

[Use caution with links/attachments]

Tom,

Please submit a separate C-141 for the fire incident following the guidelines of 19.15.29 NMAC.

**Cory Smith** • Environmental Specialist  
Environmental Bureau  
EMNRD - Oil Conservation Division  
5200 Oakland Avenue N.E Suite 100 | Albuquerque, NM 87113  
505.419.2687 | [Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>

---

**From:** Long, Thomas <[tjlong@eprod.com](mailto:tjlong@eprod.com)>  
**Sent:** Tuesday, September 14, 2021 7:59 AM  
**To:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; [rjoyner@blm.gov](mailto:rjoyner@blm.gov)  
**Cc:** Stone, Brian <[bmstone@eprod.com](mailto:bmstone@eprod.com)>

**Subject:** [EXTERNAL] FW: Lateral 3B-3 - UL D Section 35 T30N R11W; 36.772710, -107.968720 - Incident # nAPP2125035140

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

Cory/Ryan,

Please find the attached site sketch and lab report of the Lateral 3B-3 excavation. All sample results are below the NMOCD Tier I remediation standard. Enterprise will continue remediating the remaining sides and base of the excavation. This email is also a sample notification that Enterprise will be collecting soil samples for laboratory analysis tomorrow September 15, 2021 at 9:00 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](mailto:tjlong@eprod.com)



---

**From:** Long, Thomas  
**Sent:** Thursday, September 9, 2021 7:15 AM  
**To:** 'Smith, Cory, EMNRD ([Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us))' <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; 'rjoyner@blm.gov' <[rjoyner@blm.gov](mailto:rjoyner@blm.gov)>  
**Cc:** Stone, Brian <[bmstone@eprod.com](mailto:bmstone@eprod.com)>  
**Subject:** Lateral 3B-3 - UL D Section 35 T30N R11W; 36.772710, -107.968720 - Incident # nAPP2125035140

Cory/Ryan,

This email is a notification that Enterprise will be collecting soil samples for laboratory analysis at the Lateral 3B-3 excavation tomorrow September 10, 2021 at 10:00 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](mailto:tjlong@eprod.com)



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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 3B-3 (9/1/21) SOIL ANALYTICAL SUMMARY													
Sample I.D.	Date	Sample Type	Sample Depth	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX <sup>1</sup>	TPH GRO	TPH DRO	TPH MRO	Total Combined TPH (GRO/DRO/MRO) <sup>1</sup>	Chloride
		C- Composite G - Grab	(feet)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria (Tier I)				10	NE	NE	NE	50				100	600
<b>Excavation Composite Soil Samples</b>													
S-1	9.10.21	C	8	0.062	0.20	0.054	0.51	0.83	5.0	<9.6	<48	5.0	<60
S-2	9.10.21	C	0 to 8	<0.019	<0.038	<0.038	<0.076	ND	<3.8	<10	<50	ND	<60
S-3	9.15.21	C	0 to 8	<0.020	<0.040	<0.040	<0.080	ND	<4.0	<9.7	<48	ND	<60
S-4	9.15.21	C	8	0.097	0.18	0.056	0.31	0.64	<3.6	<9.2	<46	ND	<60
S-5	9.15.21	C	0 to 8	<0.018	<0.036	<0.036	<0.072	ND	<3.6	<10	<50	ND	<60
S-6	9.15.21	C	0 to 8	<0.019	<0.037	<0.037	<0.075	ND	<3.7	<10	<50	ND	<60

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

<sup>1</sup> = 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 = milligram 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: [clients.hallenvironmental.com](http://clients.hallenvironmental.com)

September 15, 2021

Kyle Summers

Ensolum

606 S Rio Grande Ste A

Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Lateral 3B 3

OrderNo.: 2109583

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/11/2021 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](http://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 **2109583**

Date Reported: **9/15/2021**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Ensolum

**Client Sample ID:** S-1

**Project:** Lateral 3B 3

**Collection Date:** 9/10/2021 10:00:00 AM

**Lab ID:** 2109583-001

**Matrix:** MEOH (SOIL)

**Received Date:** 9/11/2021 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	9/13/2021 6:18:54 AM	62526
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/11/2021 5:09:22 PM	62523
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/11/2021 5:09:22 PM	62523
Surr: DNOP	98.3	70-130		%Rec	1	9/11/2021 5:09:22 PM	62523
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	5.0	3.8		mg/Kg	1	9/13/2021 10:42:20 AM	G81229
Surr: BFB	106	70-130		%Rec	1	9/13/2021 10:42:20 AM	G81229
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	0.062	0.019		mg/Kg	1	9/13/2021 10:42:20 AM	B81229
Toluene	0.20	0.038		mg/Kg	1	9/13/2021 10:42:20 AM	B81229
Ethylbenzene	0.054	0.038		mg/Kg	1	9/13/2021 10:42:20 AM	B81229
Xylenes, Total	0.51	0.077		mg/Kg	1	9/13/2021 10:42:20 AM	B81229
Surr: 4-Bromofluorobenzene	86.6	70-130		%Rec	1	9/13/2021 10:42:20 AM	B81229

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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 range due to dilution or matrix		



**Analytical Report**

Lab Order **2109583**

Date Reported: **9/15/2021**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Ensolum

**Client Sample ID:** S-2

**Project:** Lateral 3B 3

**Collection Date:** 9/10/2021 10:05:00 AM

**Lab ID:** 2109583-002

**Matrix:** MEOH (SOIL)

**Received Date:** 9/11/2021 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	9/13/2021 6:31:18 AM	62526
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/11/2021 5:33:22 PM	62523
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/11/2021 5:33:22 PM	62523
Surr: DNOP	101	70-130		%Rec	1	9/11/2021 5:33:22 PM	62523
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	9/13/2021 11:05:47 AM	G81229
Surr: BFB	97.6	70-130		%Rec	1	9/13/2021 11:05:47 AM	G81229
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.019		mg/Kg	1	9/13/2021 11:05:47 AM	B81229
Toluene	ND	0.038		mg/Kg	1	9/13/2021 11:05:47 AM	B81229
Ethylbenzene	ND	0.038		mg/Kg	1	9/13/2021 11:05:47 AM	B81229
Xylenes, Total	ND	0.076		mg/Kg	1	9/13/2021 11:05:47 AM	B81229
Surr: 4-Bromofluorobenzene	84.1	70-130		%Rec	1	9/13/2021 11:05:47 AM	B81229

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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 range due to dilution or matrix		

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2109583

15-Sep-21

**Client:** Ensolum  
**Project:** Lateral 3B 3

Sample ID: <b>MB-62526</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>62526</b>	RunNo: <b>81207</b>								
Prep Date: <b>9/13/2021</b>	Analysis Date: <b>9/13/2021</b>	SeqNo: <b>2868182</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-62526</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>62526</b>	RunNo: <b>81207</b>								
Prep Date: <b>9/13/2021</b>	Analysis Date: <b>9/13/2021</b>	SeqNo: <b>2868183</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.5	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 range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2109583

15-Sep-21

**Client:** Ensolum  
**Project:** Lateral 3B 3

Sample ID: <b>MB-62523</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>62523</b>	RunNo: <b>81216</b>								
Prep Date: <b>9/11/2021</b>	Analysis Date: <b>9/11/2021</b>	SeqNo: <b>2867368</b>	Units: <b>mg/Kg</b>							
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	9.3		10.00		93.0	70	130			

Sample ID: <b>LCS-62523</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>62523</b>	RunNo: <b>81216</b>								
Prep Date: <b>9/11/2021</b>	Analysis Date: <b>9/11/2021</b>	SeqNo: <b>2867369</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	89.6	68.9	135			
Surr: DNOP	4.4		5.000		88.6	70	130			

**Qualifiers:**

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2109583

15-Sep-21

**Client:** Ensolum  
**Project:** Lateral 3B 3

Sample ID: <b>mb</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>G81229</b>		RunNo: <b>81229</b>							
Prep Date:	Analysis Date: <b>9/13/2021</b>		SeqNo: <b>2868112</b>		Units: <b>mg/Kg</b>					
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		100	70	130			

Sample ID: <b>2.5ug gro lcs</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>G81229</b>		RunNo: <b>81229</b>							
Prep Date:	Analysis Date: <b>9/13/2021</b>		SeqNo: <b>2868113</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	111	78.6	131			
Surr: BFB	1200		1000		118	70	130			

**Qualifiers:**

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                  |
| 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 range due to dilution or matrix |   |

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2109583

15-Sep-21

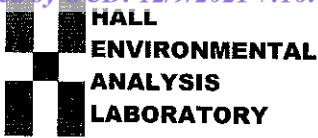
**Client:** Ensolum  
**Project:** Lateral 3B 3

Sample ID: <b>mb</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>B81229</b>	RunNo: <b>81229</b>								
Prep Date:	Analysis Date: <b>9/13/2021</b>	SeqNo: <b>2868148</b>	Units: <b>mg/Kg</b>							
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	0.86		1.000		85.6	70	130			

Sample ID: <b>100ng btex lcs</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>B81229</b>	RunNo: <b>81229</b>								
Prep Date:	Analysis Date: <b>9/13/2021</b>	SeqNo: <b>2868153</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	91.1	80	120			
Toluene	0.93	0.050	1.000	0	92.8	80	120			
Ethylbenzene	0.94	0.050	1.000	0	93.5	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.1	80	120			
Surr: 4-Bromofluorobenzene	0.87		1.000		87.0	70	130			

**Qualifiers:**

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



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

# Sample Log-In Check List

Client Name: **ENSOLUM** Work Order Number: **2109583** RcptNo: 1

Received By: **Desiree Dominguez** 9/11/2021 8:50:00 AM *DD*  
 Completed By: **Desiree Dominguez** 9/11/2021 9:18:37 AM *DD*  
 Reviewed By: *AD 09/11/2021*

**Chain of Custody**

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

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA   
 4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
 5. Sample(s) in proper container(s)? Yes  No   
 6. Sufficient sample volume for indicated test(s)? Yes  No   
 7. Are samples (except VOA and ONG) properly preserved? Yes  No   
 8. Was preservative added to bottles? Yes  No  NA   
 9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes  No  NA   
 10. Were any sample containers received broken? Yes  No   
 11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)  
 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? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH:  
 (<2 or >12 unless noted)  
 Adjusted?  
 Checked by: *DAD 9/11/21*

**Special Handling (if applicable)**

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

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.8	Good	Yes			

# Chain-of-Custody Record

Client: Ensolium LLC

Mailing Address: 604 S Rio Grande  
Suit A 87410

Phone #:

email or Fax#:

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

Accreditation:  Az Compliance  
 NELAC  Other  
 EDD (Type)

Turn-Around Time: 100%

Standard  Rush 9-13-21

Project Name: Lateral  
313 # 3

Project #: 05A1221155

Project Manager: K Summers

Sampler: C DiPonti

On Ice:  Yes  No

# of Coolers: 1

Cooler Temp (including CF): 0.8-0.0-0.8 (C)

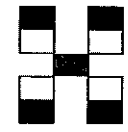
Container Type and #  
1 4oz Seal

Preservative Type  
acid

HEAL No  
2109583

-001

-002



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

### Analysis Request

BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)										
X	X					X													
X	X					X													

Date: 9/10/21 Time: 1316 Relinquished by: [Signature]

Received by: [Signature] Via:  Date: 9/10/21 Time: 1316

Remarks: pm Tom Long  
B Day Log RB21500

Date: 9/10/20 Time: 1804 Relinquished by: Christ Waite

Received by: [Signature] Via: courier Date: 9/11/21 Time: 8:50

Saint Day

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



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

September 21, 2021

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: Lateral 3B 3

OrderNo.: 2109806

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 9/16/2021 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](http://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 **2109806**

Date Reported: **9/21/2021**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** ENSOLUM

**Client Sample ID:** S-3

**Project:** Lateral 3B 3

**Collection Date:** 9/15/2021 10:00:00 AM

**Lab ID:** 2109806-001

**Matrix:** MEOH (SOIL) **Received Date:** 9/16/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	9/16/2021 10:33:54 AM	62615
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/16/2021 12:16:08 PM	62616
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/16/2021 12:16:08 PM	62616
Surr: DNOP	112	70-130		%Rec	1	9/16/2021 12:16:08 PM	62616
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	9/16/2021 12:38:31 PM	G81325
Surr: BFB	103	70-130		%Rec	1	9/16/2021 12:38:31 PM	G81325
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.020		mg/Kg	1	9/16/2021 12:38:31 PM	B81325
Toluene	ND	0.040		mg/Kg	1	9/16/2021 12:38:31 PM	B81325
Ethylbenzene	ND	0.040		mg/Kg	1	9/16/2021 12:38:31 PM	B81325
Xylenes, Total	ND	0.080		mg/Kg	1	9/16/2021 12:38:31 PM	B81325
Surr: 4-Bromofluorobenzene	88.4	70-130		%Rec	1	9/16/2021 12:38:31 PM	B81325

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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 range due to dilution or matrix		

**Analytical Report**

Lab Order **2109806**

Date Reported: **9/21/2021**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** ENSOLUM

**Client Sample ID:** S-4

**Project:** Lateral 3B 3

**Collection Date:** 9/15/2021 10:05:00 AM

**Lab ID:** 2109806-002

**Matrix:** MEOH (SOIL)

**Received Date:** 9/16/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	9/16/2021 10:46:18 AM	62615
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	9/16/2021 12:25:51 PM	62616
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/16/2021 12:25:51 PM	62616
Surr: DNOP	96.2	70-130		%Rec	1	9/16/2021 12:25:51 PM	62616
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	9/16/2021 1:02:13 PM	G81325
Surr: BFB	110	70-130		%Rec	1	9/16/2021 1:02:13 PM	G81325
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	0.097	0.018		mg/Kg	1	9/16/2021 1:02:13 PM	B81325
Toluene	0.18	0.036		mg/Kg	1	9/16/2021 1:02:13 PM	B81325
Ethylbenzene	0.056	0.036		mg/Kg	1	9/16/2021 1:02:13 PM	B81325
Xylenes, Total	0.31	0.073		mg/Kg	1	9/16/2021 1:02:13 PM	B81325
Surr: 4-Bromofluorobenzene	91.3	70-130		%Rec	1	9/16/2021 1:02:13 PM	B81325

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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 range due to dilution or matrix		

**Analytical Report**

Lab Order **2109806**

Date Reported: **9/21/2021**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** ENSOLUM

**Client Sample ID:** S-5

**Project:** Lateral 3B 3

**Collection Date:** 9/15/2021 10:10:00 AM

**Lab ID:** 2109806-003

**Matrix:** MEOH (SOIL) **Received Date:** 9/16/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	9/16/2021 10:58:42 AM	62615
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/16/2021 11:26:17 AM	62616
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/16/2021 11:26:17 AM	62616
Surr: DNOP	85.0	70-130		%Rec	1	9/16/2021 11:26:17 AM	62616
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	9/16/2021 1:49:35 PM	G81325
Surr: BFB	103	70-130		%Rec	1	9/16/2021 1:49:35 PM	G81325
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.018		mg/Kg	1	9/16/2021 1:49:35 PM	B81325
Toluene	ND	0.036		mg/Kg	1	9/16/2021 1:49:35 PM	B81325
Ethylbenzene	ND	0.036		mg/Kg	1	9/16/2021 1:49:35 PM	B81325
Xylenes, Total	ND	0.072		mg/Kg	1	9/16/2021 1:49:35 PM	B81325
Surr: 4-Bromofluorobenzene	88.6	70-130		%Rec	1	9/16/2021 1:49:35 PM	B81325

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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 range due to dilution or matrix		

**Analytical Report**

Lab Order **2109806**

Date Reported: **9/21/2021**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** ENSOLUM

**Client Sample ID:** S-6

**Project:** Lateral 3B 3

**Collection Date:** 9/15/2021 10:15:00 AM

**Lab ID:** 2109806-004

**Matrix:** MEOH (SOIL) **Received Date:** 9/16/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	9/16/2021 11:11:07 AM	62615
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/16/2021 11:13:24 AM	62616
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/16/2021 11:13:24 AM	62616
Surr: DNOP	84.7	70-130		%Rec	1	9/16/2021 11:13:24 AM	62616
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	9/16/2021 2:13:22 PM	G81325
Surr: BFB	105	70-130		%Rec	1	9/16/2021 2:13:22 PM	G81325
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.019		mg/Kg	1	9/16/2021 2:13:22 PM	B81325
Toluene	ND	0.037		mg/Kg	1	9/16/2021 2:13:22 PM	B81325
Ethylbenzene	ND	0.037		mg/Kg	1	9/16/2021 2:13:22 PM	B81325
Xylenes, Total	ND	0.075		mg/Kg	1	9/16/2021 2:13:22 PM	B81325
Surr: 4-Bromofluorobenzene	89.1	70-130		%Rec	1	9/16/2021 2:13:22 PM	B81325

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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 range due to dilution or matrix		

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2109806

21-Sep-21

**Client:** ENSOLUM  
**Project:** Lateral 3B 3

Sample ID: <b>MB-62615</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>62615</b>	RunNo: <b>81307</b>								
Prep Date: <b>9/16/2021</b>	Analysis Date: <b>9/16/2021</b>	SeqNo: <b>2872858</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-62615</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>62615</b>	RunNo: <b>81307</b>								
Prep Date: <b>9/16/2021</b>	Analysis Date: <b>9/16/2021</b>	SeqNo: <b>2872859</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	98.0	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 range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2109806

21-Sep-21

**Client:** ENSOLUM  
**Project:** Lateral 3B 3

Sample ID: <b>LCS-62616</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>62616</b>	RunNo: <b>81323</b>								
Prep Date: <b>9/16/2021</b>	Analysis Date: <b>9/16/2021</b>	SeqNo: <b>2872052</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	104	68.9	135			
Surr: DNOP	5.9		5.000		119	70	130			

Sample ID: <b>MB-62616</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>62616</b>	RunNo: <b>81323</b>								
Prep Date: <b>9/16/2021</b>	Analysis Date: <b>9/16/2021</b>	SeqNo: <b>2872053</b>	Units: <b>mg/Kg</b>							
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	70	130			

**Qualifiers:**

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2109806

21-Sep-21

**Client:** ENSOLUM  
**Project:** Lateral 3B 3

Sample ID: <b>mb</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>G81325</b>	RunNo: <b>81325</b>								
Prep Date:	Analysis Date: <b>9/16/2021</b>	SeqNo: <b>2872524</b>	Units: <b>mg/Kg</b>							
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		106	70	130			

Sample ID: <b>2.5ug gro lcs</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>G81325</b>	RunNo: <b>81325</b>								
Prep Date:	Analysis Date: <b>9/16/2021</b>	SeqNo: <b>2872525</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	106	78.6	131			
Surr: BFB	1200		1000		120	70	130			

**Qualifiers:**

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2109806

21-Sep-21

**Client:** ENSOLUM  
**Project:** Lateral 3B 3

Sample ID: <b>mb</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>B81325</b>	RunNo: <b>81325</b>								
Prep Date:	Analysis Date: <b>9/16/2021</b>	SeqNo: <b>2872569</b>	Units: <b>mg/Kg</b>							
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	0.89		1.000		89.2	70	130			

Sample ID: <b>100ng btex lcs</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>B81325</b>	RunNo: <b>81325</b>								
Prep Date:	Analysis Date: <b>9/16/2021</b>	SeqNo: <b>2872570</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	100	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	99.9	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.8	80	120			
Surr: 4-Bromofluorobenzene	0.89		1.000		89.3	70	130			

**Qualifiers:**

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





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

Sample Log-In Check List

Client Name: ENSOLUM Work Order Number: 2109806 RcptNo: 1

Received By: Sean Livingston 9/16/2021 8:10:00 AM
Completed By: Sean Livingston 9/16/2021 8:34:57 AM
Reviewed By: JL 9/16/21

Handwritten signatures of Sean Livingston

Chain of Custody

- 1. Is Chain of Custody complete? Yes [checked] No [ ] Not Present [ ]
2. How was the sample delivered? Courier

Log In

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

# of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted?
Checked by: KPG 9/16/21

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes [ ] No [ ] NA [checked]

Person Notified: Date:
By Whom: Via: [ ] eMail [ ] Phone [ ] Fax [ ] In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Contains 2 rows of data.

# Chain-of-Custody Record

Client: Ensalom LLC

Mailing Address: 606 S Rio Grande  
Suite # 87410

Phone #: \_\_\_\_\_  
email or Fax#: \_\_\_\_\_

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

Accreditation:  Az Compliance  
 NELAC  Other \_\_\_\_\_

EDD (Type) \_\_\_\_\_

Turn-Around Time: 100%

Standard  Rush 9-16-21

Project Name: Lateral 3B #3

Project #: 05A1221155

Project Manager: K Summers

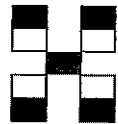
Sampler: AD Apozzi

On Ice:  Yes  No

# of Coolers: 2

Cooler Temp (including CF): -0.3 ± 0.03 (°C)

Container Type and # 1402 jar Preservative Type Cal  
HEAL No. 2109806



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

### Analysis Request

BTEX / MRE / TMBs (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)										
X	X				X													
X	X				X													
X	X				X													
X	X				X													

Date	Time	Matrix	Sample Name
9/15	1000	S	S-3
9/15	1005	S	S-4
9/15	1010	S	S-5
9/15	1015	S	S-6

Date: 9/15/21 Time: 1615 Relinquished by: [Signature]

Received by: [Signature] Via: \_\_\_\_\_ Date: 9/15/21 Time: 1615

Remarks: PM Tom Long  
Ray Key # RB21300

Date: 9/15/21 Time: 1824 Relinquished by: [Signature]

Received by: [Signature] Via: \_\_\_\_\_ Date: 9/16/21 Time: 8:10

Sample not frozen see 9/16/21  
Same Day

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

**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
 Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
 811 S. First St., Artesia, NM 88210  
 Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
 1220 S. St Francis Dr., Santa Fe, NM 87505  
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS  
 Action 65803

**CONDITIONS**

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 65803
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
nvez	None	1/5/2022