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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

| | |
|---|---|
| Incident ID | |
| District RP | |
| Facility ID | |
| Application ID | |

# Release Notification

## Responsible Party

| | |
|---|---|
| Responsible Party: **Enterprise Field Services, LLC** | OGRID: **241602** |
| Contact Name: **Thomas Long** | Contact Telephone: **505-599-2286** |
| Contact email:**tjlong@eprod.com** | Incident # *(assigned by OCD)* **nAPP2207346984** |
| Contact mailing address: **614 Reilly Ave, Farmington, NM 87401** | |

## Location of Release Source

Latitude **36.447118** Longitude **-108.119250** *(NAD 83 in decimal degrees to 5 decimal places)*

| | |
|---|---|
| Site Name **Lateral 10A-5** | Site Type **Natural Gas Gathering Pipeline** |
| Date Release Discovered: **03/14/2022** | Serial Number *(if applicable)*: **N/A** |

| Unit Letter | Section | Township | Range | County |
|---|---|---|---|---|
| **F** | **33** | **26N** | **12W** | **San Juan** |

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

## Nature and Volume of Release

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

| | | |
|---|---|---|
| ☐ Crude Oil | Volume Released (bbls) | Volume Recovered (bbls) |
| ☐ Produced Water | Volume Released (bbls) | Volume Recovered (bbls) |
| | Is the concentration of dissolved chloride in the produced water >10,000 mg/l? | ☐ Yes ☐ No |
| ☒ Condensate | Volume Released (bbls): **3-5 BBLS** | Volume Recovered (bbls): **None** |
| ☒ Natural Gas | Volume Released (Mcf): **7 MCF** | Volume Recovered (Mcf): **None** |
| ☐ Other (describe) | Volume/Weight Released (provide units): | Volume/Weight Recovered (provide units) |

**Cause of Release:** : On March 9, 2022, Enterprise had a release of natural gas and condensate from the Lateral 10A-5 pipeline. The pipeline was isolated, depressurized, locked and tagged out. No residents were affected. No washes were affected. No emergency services responded. Enterprise began repairs and remediation on March 14, 2022 and determined this release reportable per NMOCD regulation due to the volume of impacted subsurface soil. The final excavation dimensions measured approximately 22 feet long by 18 feet wide by 6 feet deep. A total of 60 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.

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | |
| District RP | |
| Facility ID | |
| Application ID | |

# Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Thomas Long Title: Senior Environmental Scientist

Signature: Thomas Long Date: 05-06-2022

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: Nelson Velez Date: 06/24/2022

Printed Name: Nelson Velez Title: Environmental Specialist – Adv

ENSOLUM

# CLOSURE REPORT

Property:

**Lateral 10A-5 (3/14/22)**
**Unit Letter F, S33 T26N R12W**
**San Juan County, New Mexico**

**NM EMNRD OCD Incident ID No. NAPP2207346984**

April 26, 2022
Ensolum Project No. 05A1226187

Prepared for:

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

Prepared by:

Ranee Deechilly
Project Manager

Kyle Summers
Senior Project Manager

# TABLE OF CONTENTS



## LIST OF APPENDICES

# 1.0 INTRODUCTION

## 1.1 Site Description & Background

| | |
|---|---|
| **Operator:** | Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise) |
| **Site Name:** | Lateral 10A-5 (3/14/22) (Site) |
| **NM EMNRD OCD Incident ID No.** | NAPP2207346984 |
| **Location:** | 36.447118° North, 108.11925° West<br>Unit Letter F, Section 33, Township 26 North, Range 12 West<br>San Juan County, New Mexico |
| **Property:** | Navajo Nation |
| **Regulatory:** | Navajo Nation Environmental Protection Agency (NNEPA) and New Mexico (NM) Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD) |

On March 9, 2022, an Enterprise personnel discovered a release of natural gas on the Lateral 10A-5 pipeline. Enterprise subsequently isolated and locked the pipeline out of service. On March 11, 2022, Enterprise initiated activities to repair the pipeline and remediate potential petroleum hydrocarbon impact. On March 14, 2022, Enterprise determined the release was "reportable" due to the estimated volume of impacted soil. The NM EMNRD OCD was subsequently notified.

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

## 1.2 Project Objective

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

# 2.0 CLOSURE CRITERIA

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

- The NM Office of the State Engineer (OSE) tracks the usage and assignment of water rights and water well installations and records this information in the Water Rights Reporting System (WRRS) database. Water wells and other points of diversion (PODs) are each assigned POD numbers in the database (which is searchable and includes an interactive map). No PODs were identified in the same Public Land Survey System (PLSS) section as the Site, and no PODs were identified in the adjacent PLSS sections (**Figure A**, **Appendix B**).

- No cathodic protection wells (CPWs) were identified in the NM EMNRD OCD imaging database in the same PLSS section as the Site, and no CPWs were identified in the adjacent PLSS sections **Figure B** (**Appendix B**).
- The Site is not located within 300 feet of a NM EMNRD OCD-defined continuously flowing watercourse or significant watercourse (**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 within 300 feet of a wetland (**Figure F**, **Appendix B**).
- Based on information identified in the NM Mining and Minerals Division's Geographic Information System (GIS) Maps and Mine Data database, the Site is not within an area overlying a subsurface mine (**Figure G**, **Appendix B**).
- The Site is not located within an unstable area.
- Based on information provided by the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) geospatial database, the Site is not within a 100-year floodplain (**Figure H**, **Appendix B**).

Based on 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:

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

[1] – Constituent concentrations are in milligrams per kilograms (mg/kg).
[2] – Total Petroleum Hydrocarbons (TPH). Gasoline Range Organics (GRO). Diesel Range Organics (DRO). Motor Oil/Lube Oil Range Organics (MRO).
[3] – Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX).

## 3.0 SOIL REMEDIATION ACTIVITIES

On March 11, 2022, Enterprise initiated activities to remediate petroleum hydrocarbon impact resulting from the release. During the remediation and corrective action activities, Industrial Mechanical Inc (IMI), provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final excavation measured approximately 22 feet long and 18 feet wide at the maximum extents. The maximum depth of the excavation measured approximately six feet bgs. The lithology encountered during the completion of remediation activities consisted primarily of unconsolidated silty sand.

Approximately 60 cubic yards ($yd^3$) of petroleum hydrocarbon affected soils 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 laboratory-confirmed stockpiled soils and was subsequently contoured to the surrounding topography.

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

## 4.0 SOIL SAMPLING PROGRAM

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

Ensolum's soil sampling program included the collection of five composite soil samples (S-1 through S-5) from the excavation for laboratory analysis. In addition, one composite soil sample (SP-1) was collected from the stockpiled soils to confirm the material was suitable to use as backfill. The composite samples were comprised of five aliquots each and represent an estimated 200 square foot ($ft^2$) 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. Regulatory correspondence is provided in **Appendix E**.

**First Sampling Event**
On March 15, 2022, the first sampling event was performed at the Site. The NM EMNRD OCD and NNEPA were notified of the sampling event although no representatives were present during sampling activities. Composite soil sample S-1 (6') was collected from the floor of the excavation. Composites soil samples S-2 (0'-6'), S-3 (0'-6'), S-4 (0'-6'), and S-5 (0'-6') were collected from the sloped walls of the excavation. Composite soil sample SP-1 was collected from the stockpiled soil to demonstrate that the soil did not exhibit COC impact and that it was suitable for use as backfill.

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

## 5.0 SOIL LABORATORY ANALYTICAL METHODS

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

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

## 6.0 SOIL DATA EVALUATION

Ensolum compared the 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-5 and SP-1) to the Tier I NM EMNRD OCD closure criteria. The laboratory analytical results are summarized in **Table 1** (**Appendix F**).

- The laboratory analytical results for all 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 all 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 samples S-1, S-2, and S-4 indicate combined TPH GRO/DRO/MRO concentrations ranging from 24 mg/kg (S-2) to 28 mg/kg (S-4), which are less than the Tier I New Mexico EMNRD OCD closure criteria of 100 mg/kg. The laboratory analytical results for all other composite soil samples indicate combined TPH GRO/DRO/MRO is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the Tier I New Mexico EMNRD OCD closure criteria of 100 mg/kg.

- The laboratory analytical results for the composite soil samples indicate chloride concentrations ranging from 130 mg/kg (S-3) to 370 mg/kg (S-2), which are less than the Tier I New Mexico EMNRD OCD closure criteria of 600 mg/kg.

## 7.0 RECLAMATION AND REVEGETATION

The excavation was backfilled with imported fill and laboratory-confirmed stockpiled soil and was then contoured to surrounding grade.

## 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 60 $yd^3$ of petroleum hydrocarbon affected soils were transported to the Envirotech landfarm for disposal/remediation. The excavation was backfilled with imported fill and laboratory-confirmed stockpiled soils and was subsequently contoured to the surrounding topography.

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

## 9.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

### 9.1 Standard of Care

Ensolum's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Ensolum makes no warranties,

express or implied, as to the services performed hereunder. Additionally, Ensolum does not warrant the work of third parties supplying information used in the report (e.g., laboratories, regulatory agencies, or other third parties).

### 9.2 Limitations

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-Site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Ensolum cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during the investigation. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Ensolum's findings and recommendation are based solely upon data available to Ensolum at the time of these services.

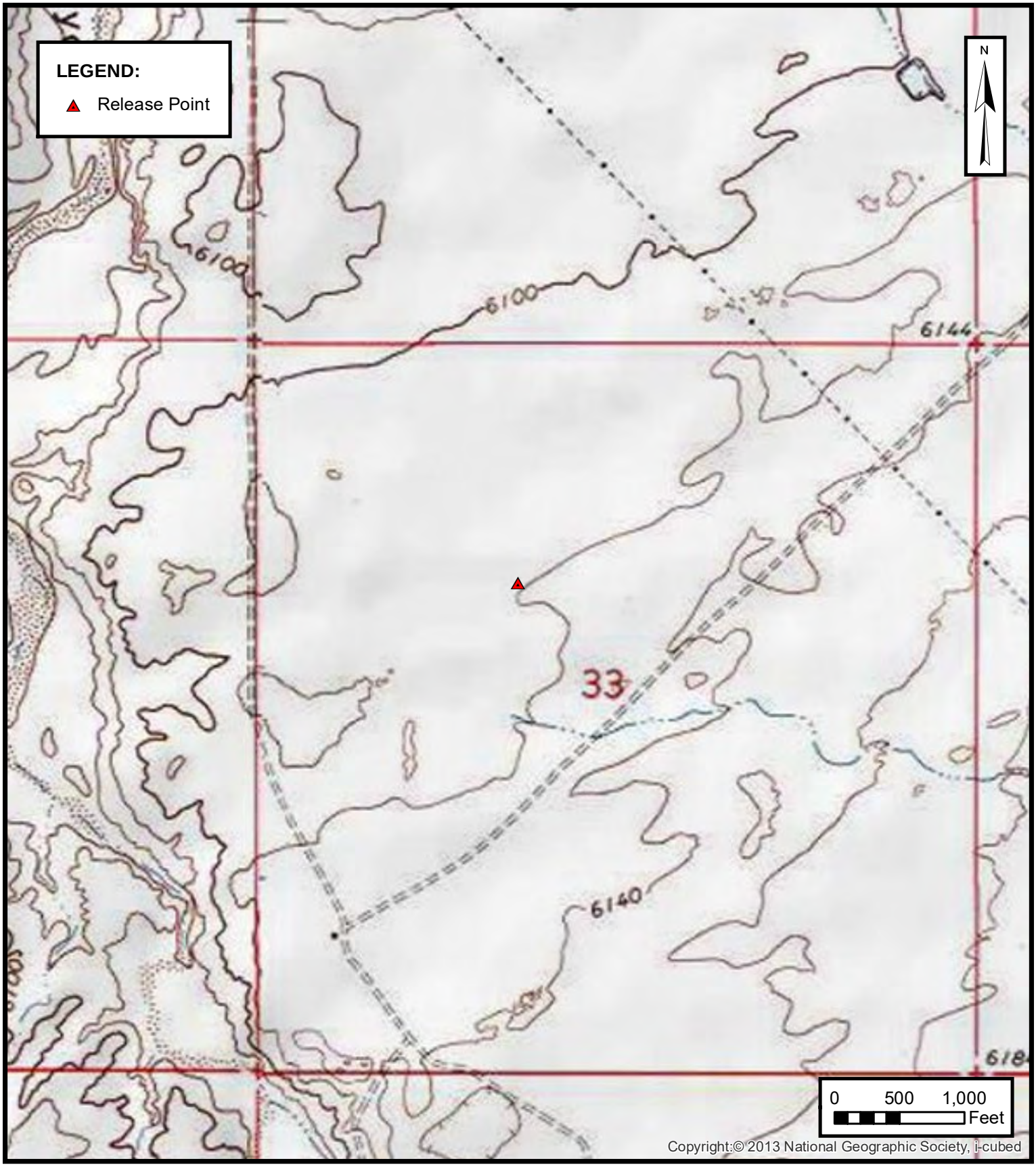
### 9.3 Reliance

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

ENSOLUM

# APPENDIX A

## Figures




ENSOLUM
Environmental & Hydrogeologic Consultants

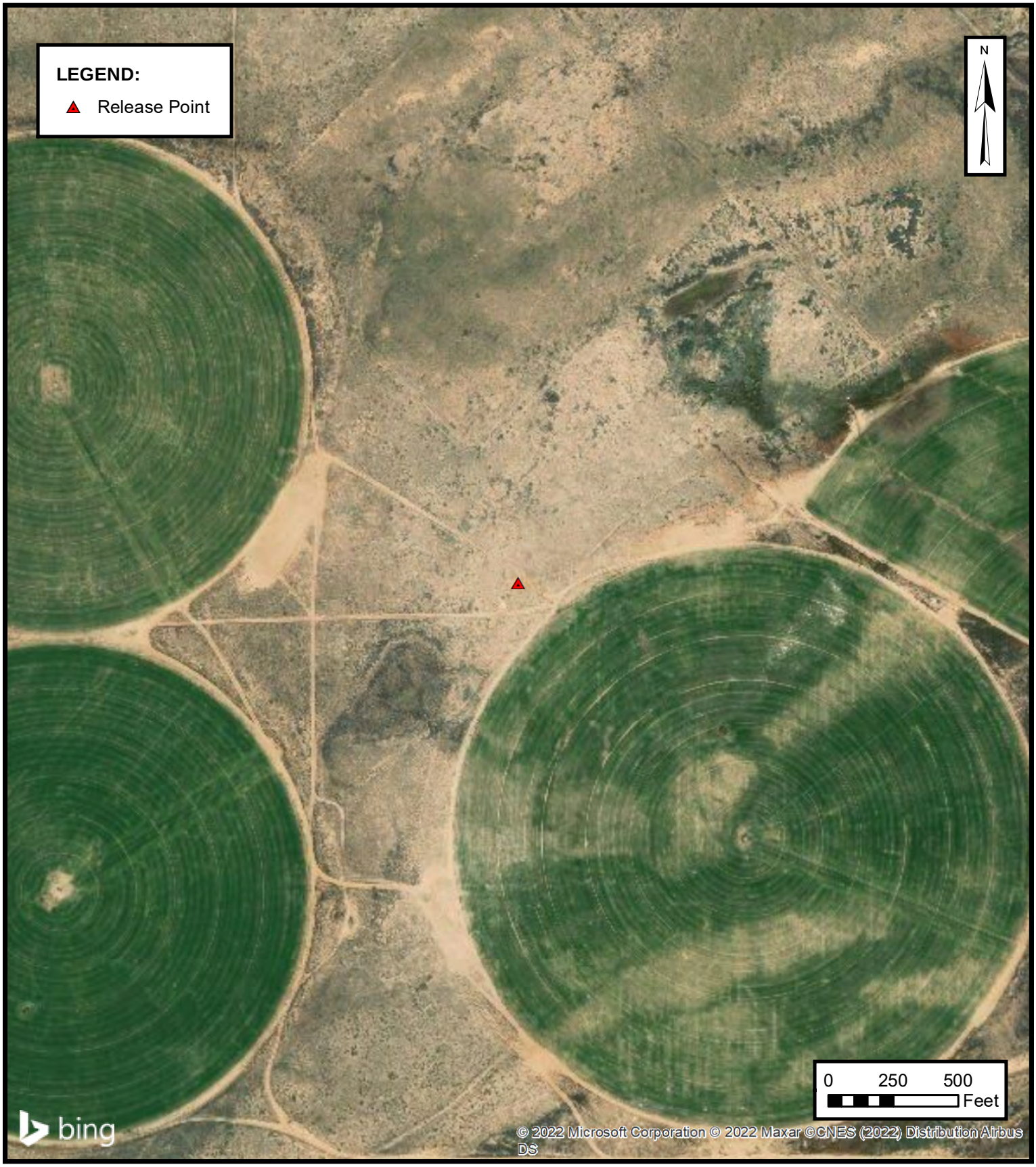
**TOPOGRAPHIC MAP**

ENTERPRISE FIELD SERVICES, LLC
LATERAL 10A-5 (3/14/22)
Unit Letter F, Sec 33 T26N R12W, San Juan County, New Mexico
36.447118° N, 108.11925° W

PROJECT NUMBER: 05A1226187

**FIGURE**

**1**

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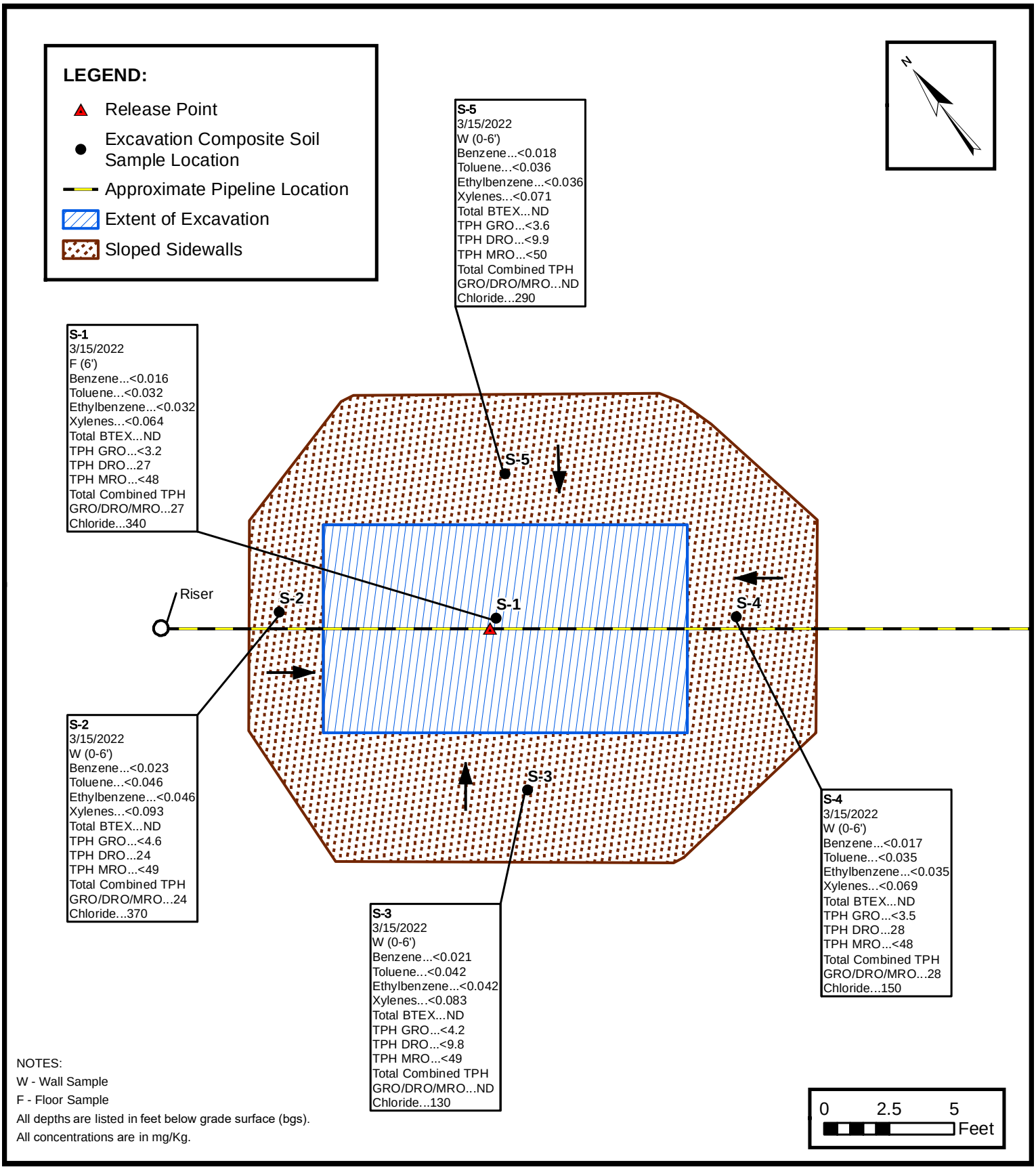
**SITE VICINITY MAP**

ENTERPRISE FIELD SERVICES, LLC
LATERAL 10A-5 (3/14/22)
Unit Letter F, Sec 33 T26N R12W, San Juan County, New Mexico
36.447118° N, 108.11925° W

PROJECT NUMBER: 05A1226187

**FIGURE**
**2**

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Environmental & Hydrogeologic Consultants

**SITE MAP WITH SOIL ANALYTICAL RESULTS**

ENTERPRISE FIELD SERVICES, LLC
LATERAL 10A-5 (3/14/22)
Unit Letter F, Sec 33 T26N R12W, San Juan County, New Mexico
36.447118° N, 108.11925° W

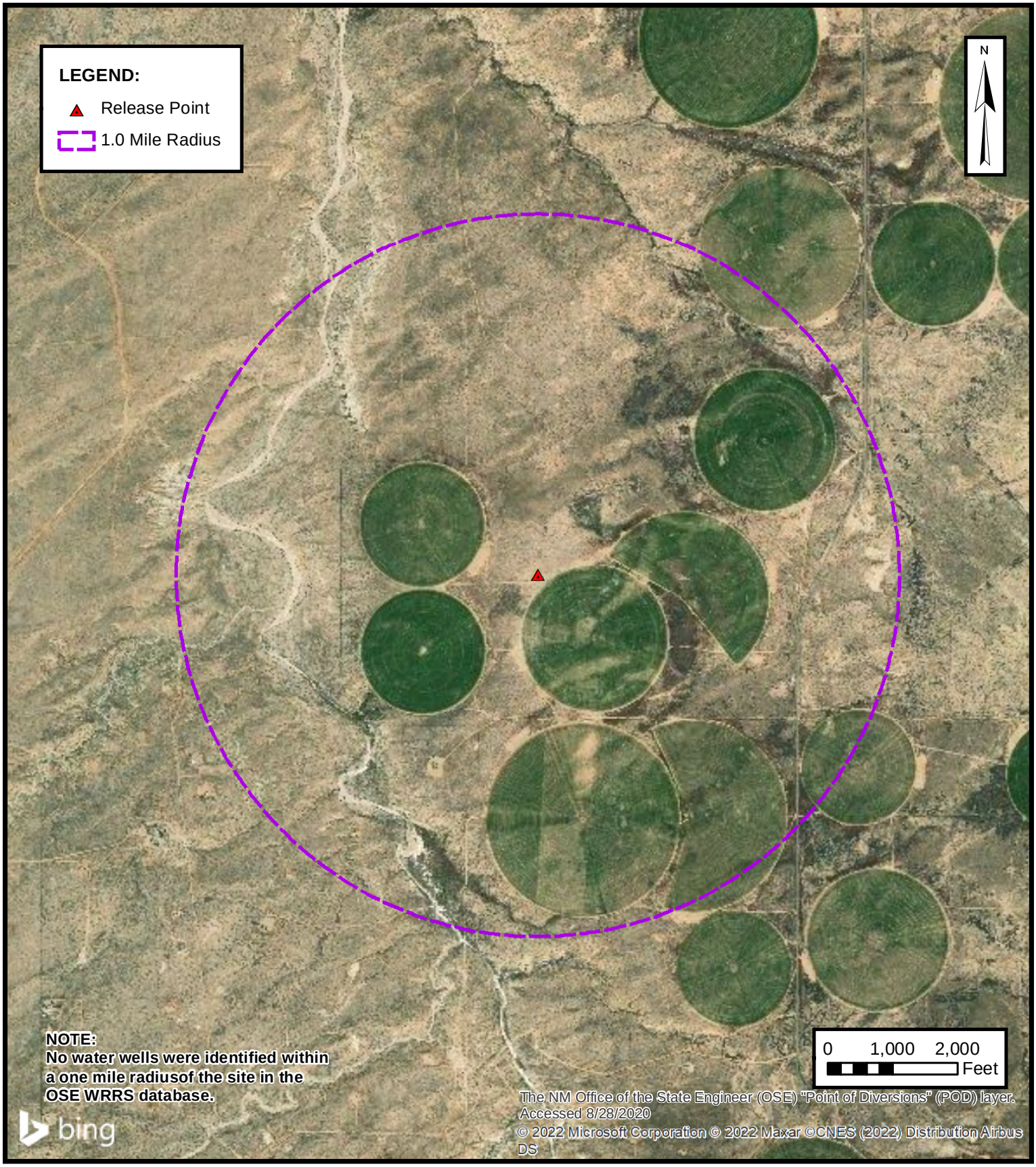
PROJECT NUMBER: 05A1226187

**FIGURE**
**3**

ENSOLUM

# APPENDIX B

## Siting Figures and Documentation

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Environmental & Hydrogeologic Consultants

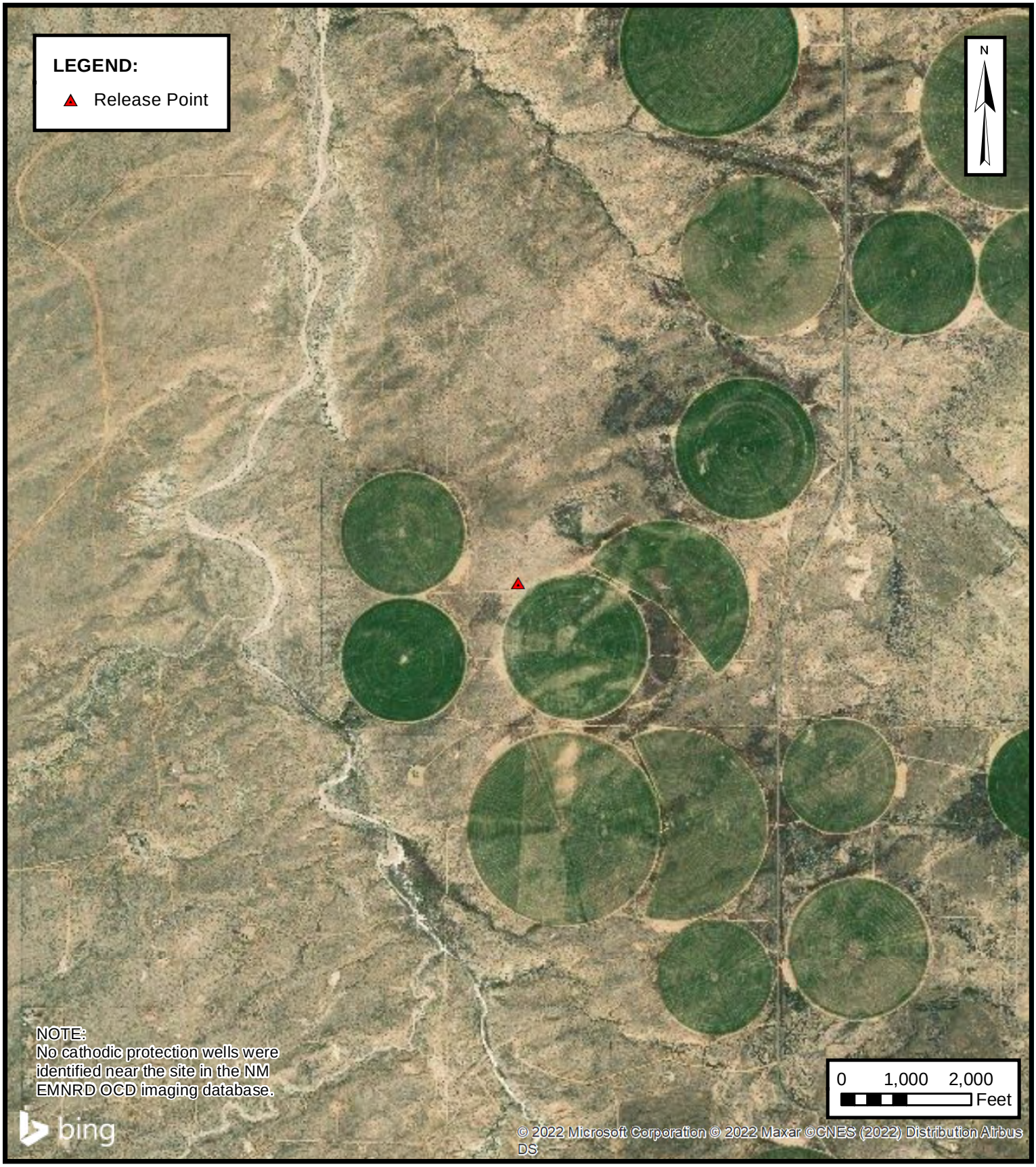
**1.0 MILE RADIUS WATER WELL/ POD LOCATION MAP**

ENTERPRISE FIELD SERVICES, LLC
LATERAL 10A-5 (3/14/22)
Unit Letter F, Sec 33 T26N R12W, San Juan County, New Mexico
36.447118° N, 108.11925° W

PROJECT NUMBER: 05A1226187

**FIGURE**

**A**




ENSOLUM
Environmental & Hydrogeologic Consultants

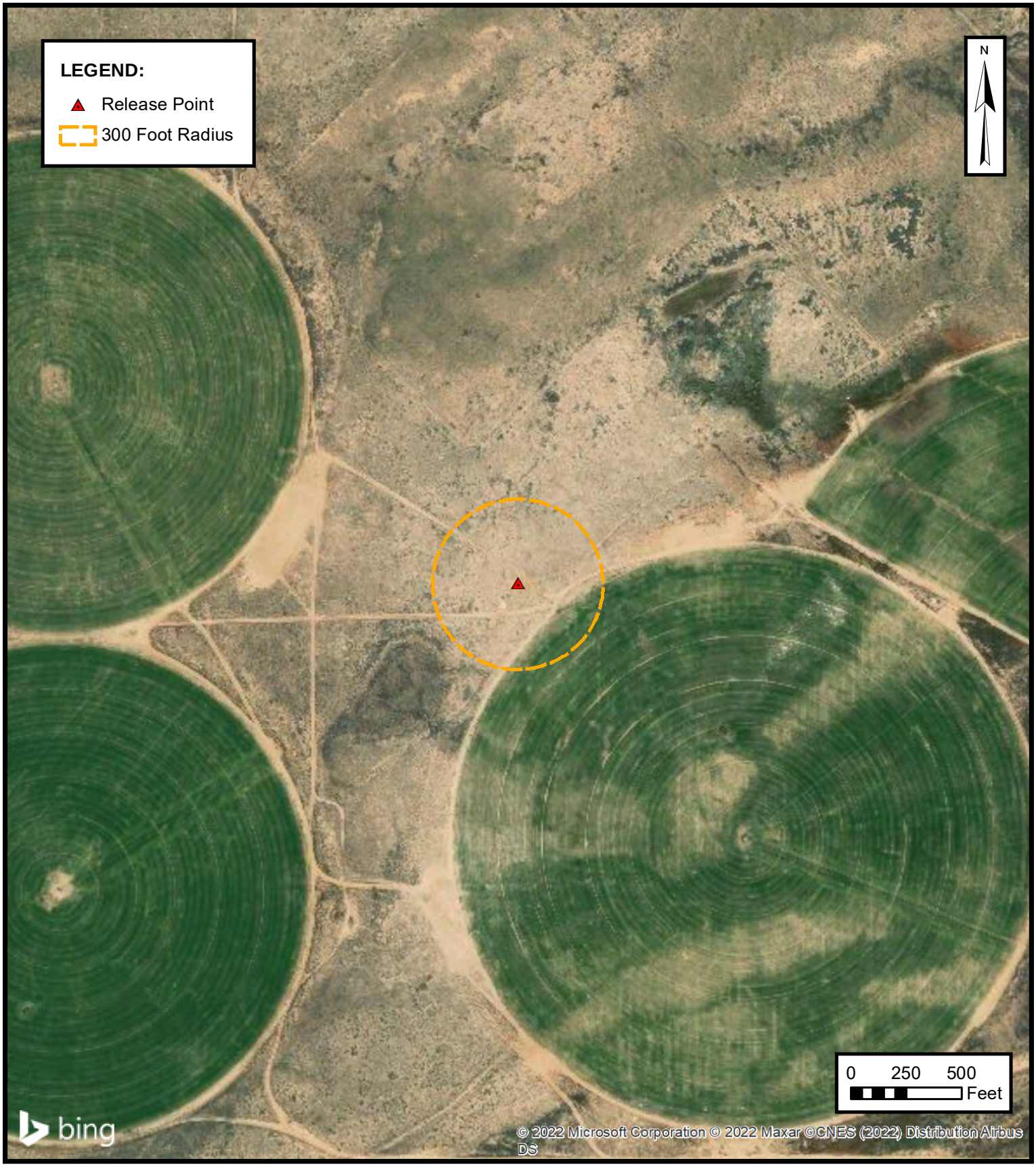
**CATHODIC PROTECTION WELL RECORDED DEPTH TO WATER**

ENTERPRISE FIELD SERVICES, LLC
LATERAL 10A-5 (3/14/22)
Unit Letter F, Sec 33 T26N R12W, San Juan County, New Mexico
36.447118° N, 108.11925° W

PROJECT NUMBER: 05A1226187

**FIGURE**

**B**

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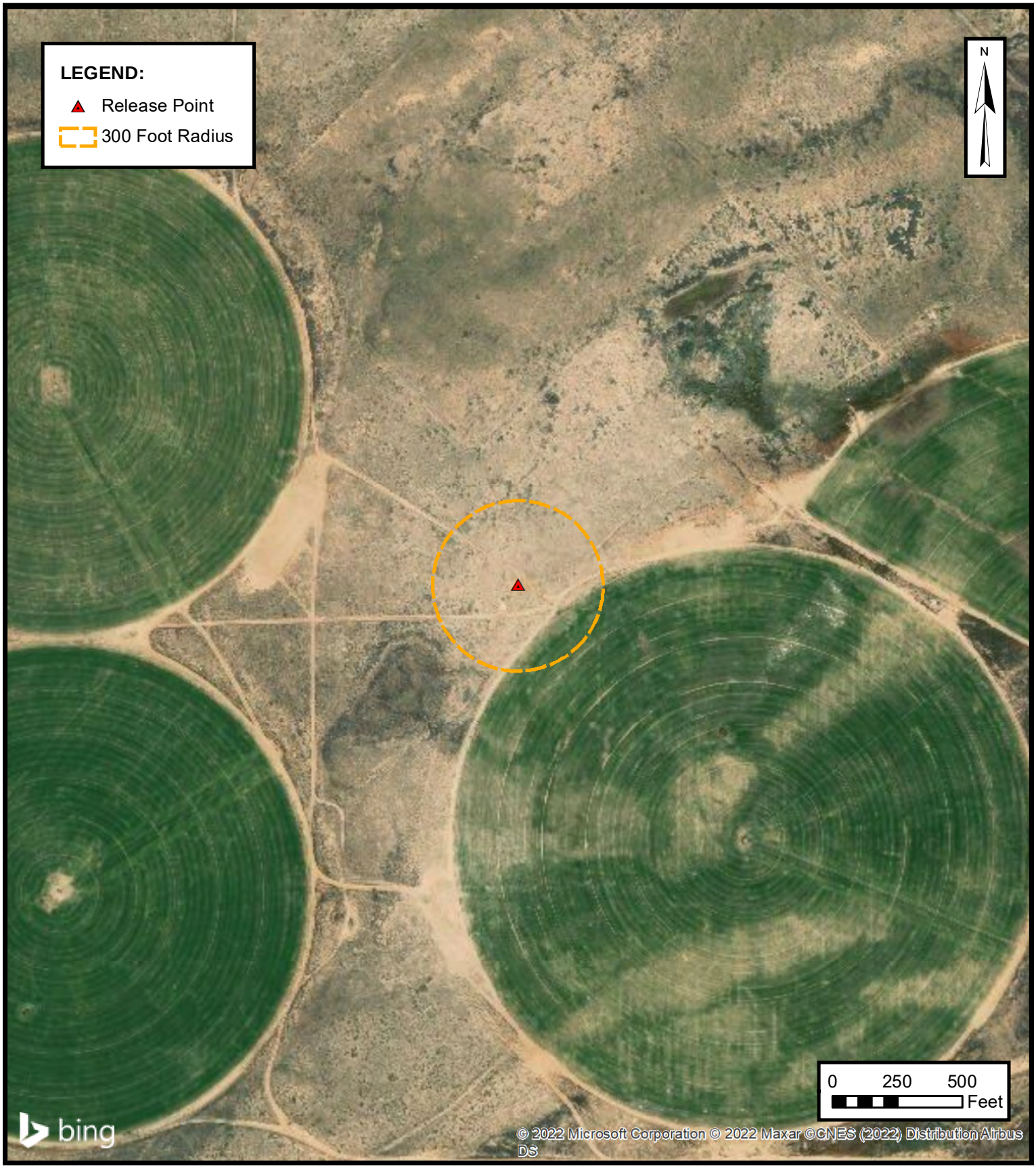
Environmental & Hydrogeologic Consultants

**300 FOOT RADIUS**
**WATERCOURSE AND DRAINAGE IDENTIFICATION**
ENTERPRISE FIELD SERVICES, LLC
LATERAL 10A-5 (3/14/22)
Unit Letter F, Sec 33 T26N R12W, San Juan County, New Mexico
36.447118° N, 108.11925° W

PROJECT NUMBER: 05A1226187

**FIGURE**
**C**



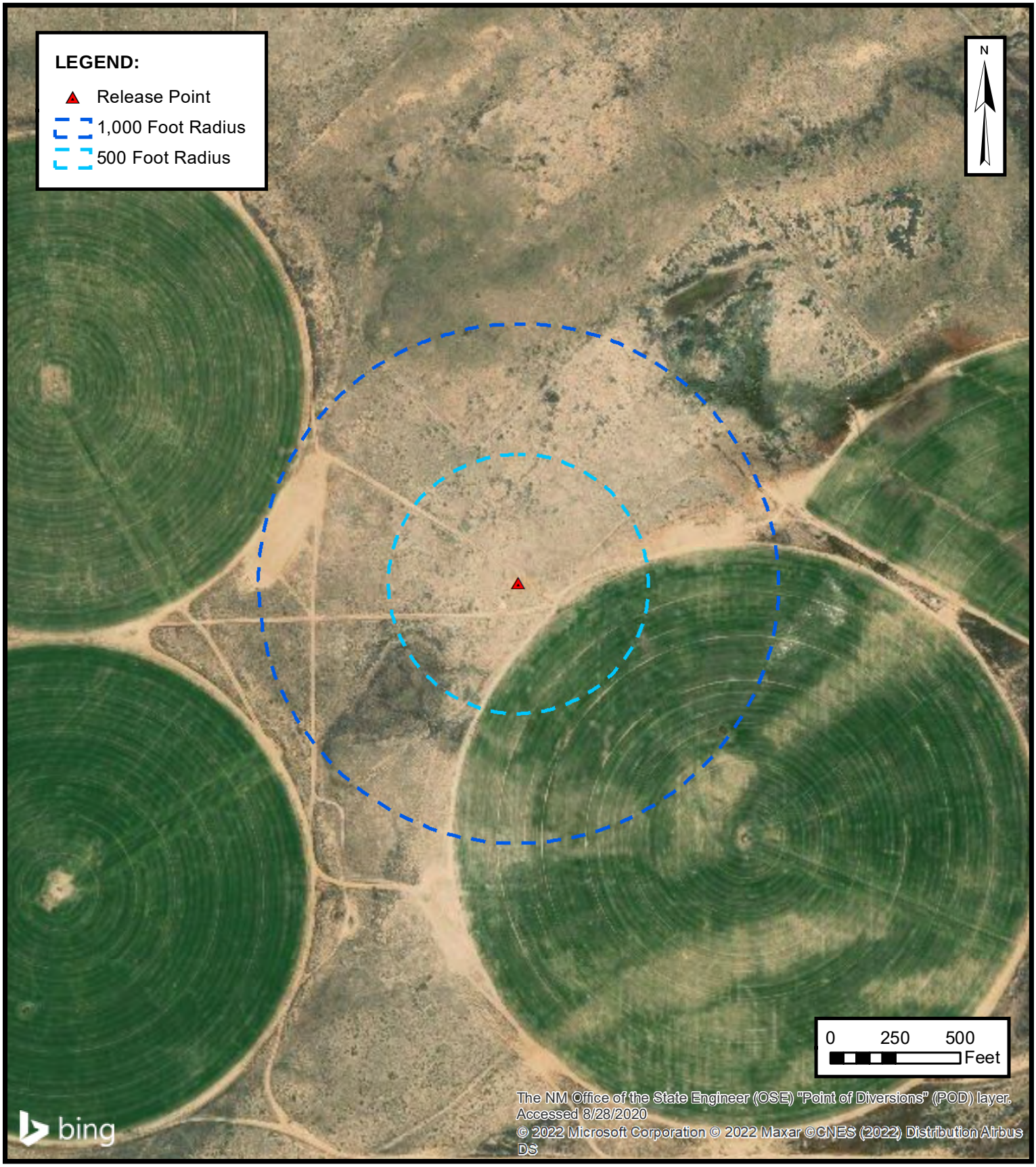

ENSOLUM
Environmental & Hydrogeologic Consultants

**300 FOOT RADIUS**
**OCCUPIED STRUCTURE IDENTIFICATION**

ENTERPRISE FIELD SERVICES, LLC
LATERAL 10A-5 (3/14/22)
Unit Letter F, Sec 33 T26N R12W, San Juan County, New Mexico
36.447118° N, 108.11925° W

PROJECT NUMBER: 05A1226187

**FIGURE**
**D**

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Environmental & Hydrogeologic Consultants

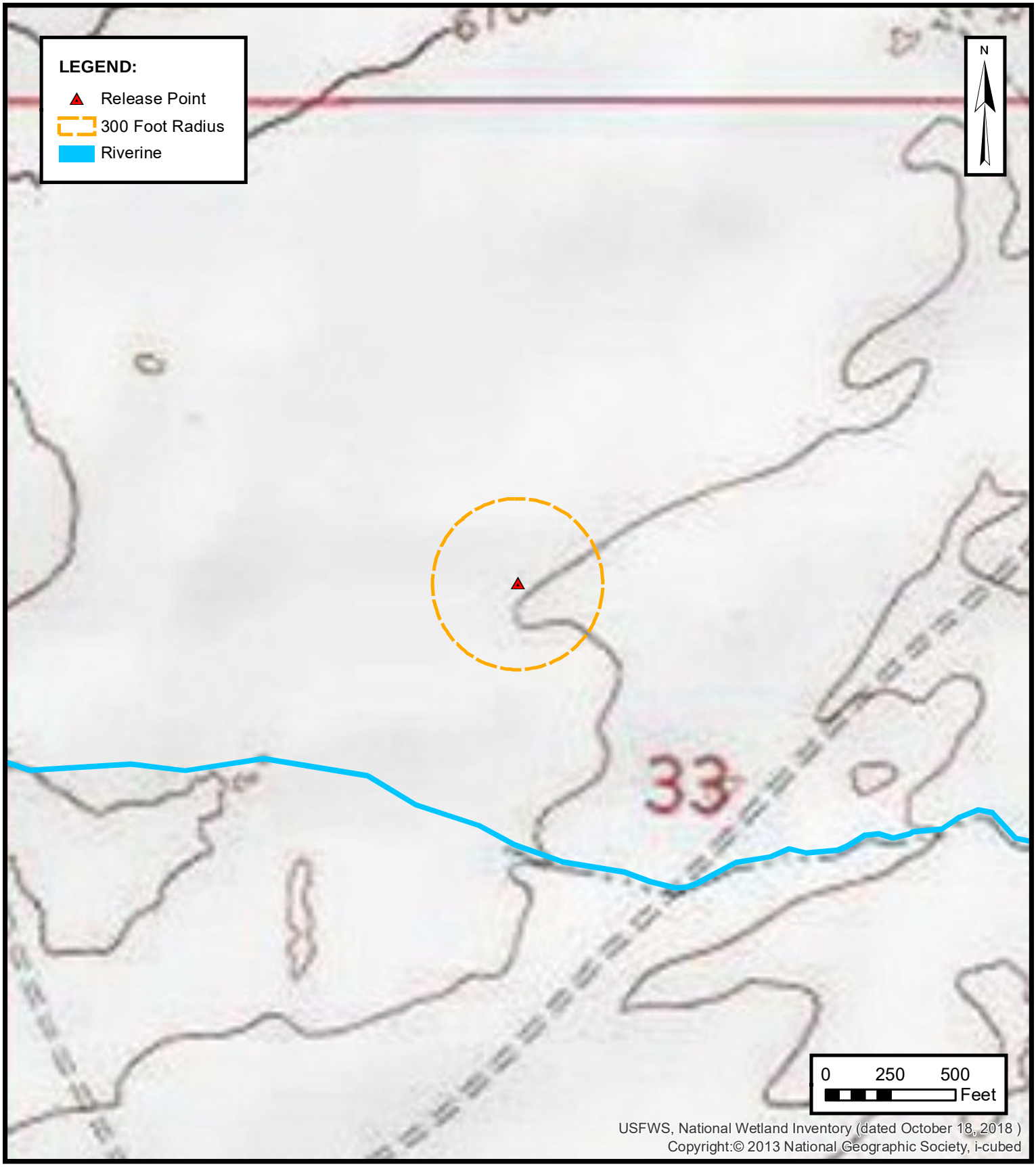
**WATER WELL AND NATURAL SPRING LOCATION**

ENTERPRISE FIELD SERVICES, LLC
LATERAL 10A-5 (3/14/22)
Unit Letter F, Sec 33 T26N R12W, San Juan County, New Mexico
36.447118° N, 108.11925° W

PROJECT NUMBER: 05A1226187

**FIGURE**

**E**




ENSOLUM
Environmental & Hydrogeologic Consultants

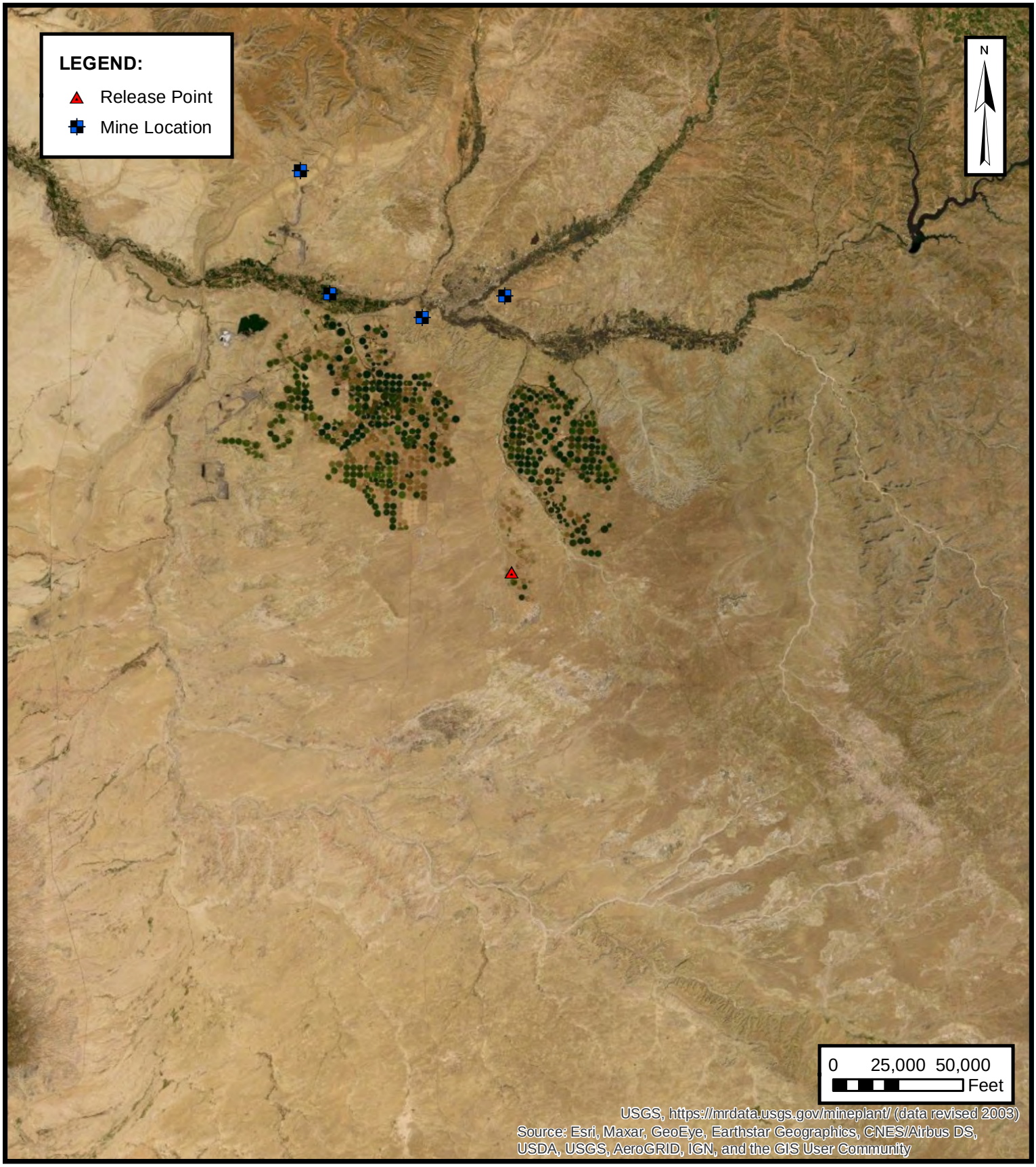
**WETLANDS**

ENTERPRISE FIELD SERVICES, LLC
LATERAL 10A-5 (3/14/22)
Unit Letter F, Sec 33 T26N R12W, San Juan County, New Mexico
36.447118° N, 108.11925° W

PROJECT NUMBER: 05A1226187

**FIGURE**

**F**




ENSOLUM
Environmental & Hydrogeologic Consultants

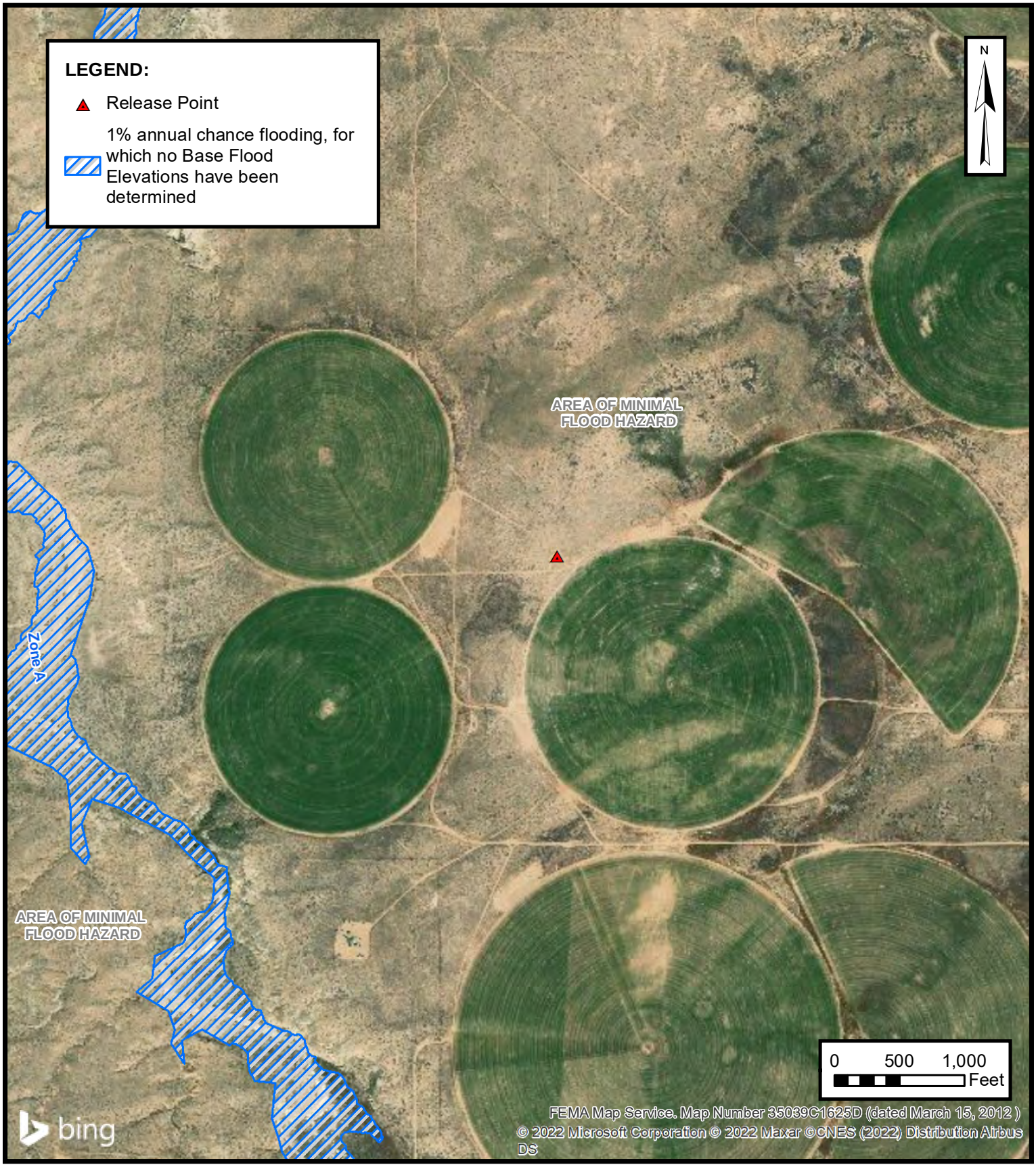
**MINES, MILLS, AND QUARRIES**

ENTERPRISE FIELD SERVICES, LLC
LATERAL 10A-5 (3/14/22)
Unit Letter F, Sec 33 T26N R12W, San Juan County, New Mexico
36.447118° N, 108.11925° W

PROJECT NUMBER: 05A1226187

**FIGURE**

**G**




ENSOLUM
Environmental & Hydrogeologic Consultants

**100-YEAR FLOOD PLAIN MAP**

ENTERPRISE FIELD SERVICES, LLC
LATERAL 10A-5 (3/14/22)
Unit Letter F, Sec 33 T26N R12W, San Juan County, New Mexico
36.447118° N, 108.11925° W

PROJECT NUMBER: 05A1226187

**FIGURE**
**H**

# New Mexico Office of the State Engineer
# Water Column/Average Depth to Water

No records found.

**PLSS Search:**

**Section(s):** 33, 32, 29, 28, 27, 34 **Township:** 26N **Range:** 12W

# New Mexico Office of the State Engineer
# Water Column/Average Depth to Water

No records found.

**PLSS Search:**

**Section(s):** 4, 5, 3 **Township:** 25N **Range:** 12W

ENSOLUM

# 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**

**Invoicing Information**
**PayKey: RB21200**
**PM: ME Eddleman**
**AFE: N58867**

**2. Originating Site:**
**Lateral 10A-5**

**3. Location of Material (Street Address, City, State or ULSTR):**
**UL F Section 33 T26N R12W; 36.447118, -108.119250**

March 2022

**4. Source and Description of Waste:**
**Source:** Sediment/Soil/sludge from remediation activities associated with a natural gas pipeline release.
**Description:** Soil/Sediment/sludge associated with remediation activities.
Estimated Volume 50 $yd^3$ / bbls Known Volume (to be entered by the operator at the end of the haul) 60 $yd^3$ / 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 esentative for Enterprise Products Operating authorizes Envirotech, Inc. to complete
**Generator S**
the required testi aste Testing Certification.

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

**5. Transporter: IMI or Subcontractors**

**OCD Permitted Surface Waste Management Facility**

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

**Waste Acceptance Status:**

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Greg Crabtree TITLE: Envir. Manager DATE: 03/14/22

SIGNATURE: _____ TELEPHONE NO.: 505-632-0615
Surface Waste Management Facility Authorized Agent

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# APPENDIX D

## Photographic Documentation

# SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Lateral 10A-5 (3/14/22)
Ensolum Project No. 05A1226187

ENSOLUM

| | |
|---|---|
| **Photograph 1**<br><br>Photograph Description: View of in-process excavation activities. |  |
| **Photograph 2**<br><br>Photograph Description: View of the final excavation. |  |
| **Photograph 3**<br><br>Photograph Description: View of the final excavation. |  |

## SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Lateral 10A-5 (3/14/22)
Ensolum Project No. 05A1226187

ENSOLUM

| | |
|---|---|
| **Photograph 4**<br><br>Photograph Description: View of the site after initial restoration. |  |
| **Photograph 5**<br><br>Photograph Description: View of the site after initial restoration. |  |

ENSOLUM

# APPENDIX E

## Regulatory Correspondence

**From:** Velez, Nelson, EMNRD
**To:** Long, Thomas; Steve Austin
**Cc:** Stone, Brian
**Subject:** RE: [EXTERNAL] RE: Lateral 10A-5 - UL F Section 33 T26N R12W; 36.447118, -108.119250; Incident #nAPP2207346984
**Date:** Thursday, March 17, 2022 2:16:02 PM

[Use caution with links/attachments]

Tom,

Your request to utilize the stockpiled soils as backfill material is approved. Please keep a copy of this communication for inclusion within the final closure report submittal.

Thanks

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

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

**From:** Long, Thomas <tjlong@eprod.com>
**Sent:** Thursday, March 17, 2022 7:49 AM
**To:** Steve Austin <nnepawq@frontiernet.net>; Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
**Cc:** Stone, Brian <bmstone@eprod.com>
**Subject:** RE: [EXTERNAL] RE: Lateral 10A-5 - UL F Section 33 T26N R12W; 36.447118, -108.119250; Incident #nAPP2207346984

Steve/Nelson,

Please find the attached site sketch and lab reports for the Lateral 10A-5 excavation and stockpile. All sample results are below NMOCD Tier I soil remediation standards. The sample from the stock piled soil is approximately 20 cubic yards. Enterprise requests utilizing this stock piled soil as backfill material. Please acknowledge acceptance of the request. If you have any questions, please call or email.

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

**From:** Steve Austin <nnepawq@frontiernet.net>
**Sent:** Tuesday, March 15, 2022 9:54 AM
**To:** Long, Thomas <tjlong@eprod.com>; 'Velez, Nelson, EMNRD' <Nelson.Velez@state.nm.us>
**Cc:** Stone, Brian <bmstone@eprod.com>
**Subject:** [EXTERNAL] RE: Lateral 10A-5 - UL F Section 33 T26N R12W; 36.447118, -108.119250

[Use caution with links/attachments]
Thanks for the notification—please forward the sample results when they become available.

--Steve

Steve Austin
Senior Hydrologist
NNEPA WQ/NPDES Program
505-368-1037

**From:** Long, Thomas [mailto:tjlong@eprod.com]
**Sent:** Monday, March 14, 2022 11:22 AM
**To:** Steve Austin <nnepawq@frontiernet.net>; Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
**Cc:** Stone, Brian <bmstone@eprod.com>
**Subject:** Lateral 10A-5 - UL F Section 33 T26N R12W; 36.447118, -108.119250

Nelson/Steve,

This email is a notification that Enterprise had a release of natural gas and condensate from the Lateral 10A-5 pipeline on March 9, 2022. No liquids were observed on the ground surface. No washes were affected. No fire nor injuries resulted from the release. No emergency services responded to the release. Enterprise began repairs and remediation today and determined this release reportable per NMOCD regulation due to the volume of impacted subsurface soil. This email also serves as a notification that Enterprise will be collecting soil samples for laboratory analysis tomorrow March 15, 2022 at 10:00 a.m. I will be submitting the NOR and subsequent C-141 via the NMOCD website. 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**
**505-215-4727 (Cell)**
**tjlong@eprod.com**


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# APPENDIX F

## Table 1 – Soil Analytical Summary

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# TABLE 1
## Lateral 10A-5 (3/14/22)
### SOIL ANALYTICAL SUMMARY

| Sample I.D. | Date | Sample Type<br>C- Composite<br>G - Grab | Sample Depth<br>(feet) | Benzene<br>(mg/kg) | Toluene<br>(mg/kg) | Ethylbenzene<br>(mg/kg) | Xylenes<br>(mg/kg) | Total BTEX[1]<br>(mg/kg) | TPH GRO<br>(mg/kg) | TPH DRO<br>(mg/kg) | TPH MRO<br>(mg/kg) | Total Combined TPH (GRO/DRO/MRO)[1]<br>(mg/kg) | Chloride<br>(mg/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria (Tier I)** | | | | **10** | **NE** | **NE** | **NE** | **50** | | | | **100** | **600** |
| **Composite Soil Sample Collected from Stockpiled Soil** | | | | | | | | | | | | | |
| SP-1 | 3.15.22 | C | Stockpile | <0.019 | <0.038 | <0.038 | <0.076 | ND | <3.8 | <10 | <50 | ND | 140 |
| **Excavation Composite Soil Samples** | | | | | | | | | | | | | |
| S-1 | 3.15.22 | C | 6 | <0.016 | <0.032 | <0.032 | <0.064 | ND | <3.2 | 27 | <48 | 27 | 340 |
| S-2 | 3.15.22 | C | 0 to 6 | <0.023 | <0.046 | <0.046 | <0.093 | ND | <4.6 | 24 | <49 | 24 | 370 |
| S-3 | 3.15.22 | C | 0 to 6 | <0.021 | <0.042 | <0.042 | <0.083 | ND | <4.2 | <9.8 | <49 | ND | 130 |
| S-4 | 3.15.22 | C | 0 to 6 | <0.017 | <0.035 | <0.035 | <0.069 | ND | <3.5 | 28 | <48 | 28 | 150 |
| S-5 | 3.15.22 | C | 0 to 6 | <0.018 | <0.036 | <0.036 | <0.071 | ND | <3.6 | <9.9 | <50 | ND | 290 |

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

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

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

NA = Not Analyzed

NE = Not established

mg/kg = 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

ENSOLUM

# APPENDIX G

## Laboratory Data Sheets & Chain of Custody Documentation

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

March 18, 2022

Kyle Summers

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

RE: Lateral 10A 5 OrderNo.: 2203829

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 3/16/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

**Analytical Report**
Lab Order **2203829**
Date Reported: **3/18/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** ENSOLUM
**Client Sample ID:** S-1
**Project:** Lateral 10A 5
**Collection Date:** 3/15/2022 10:00:00 AM
**Lab ID:** 2203829-001 **Matrix:** SOIL **Received Date:** 3/16/2022 8:00:00 AM

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **MRA** | |
| Chloride | 340 | 60 | | mg/Kg | 20 | 3/16/2022 11:10:20 AM | 66211 |
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** | |
| Diesel Range Organics (DRO) | 27 | 9.6 | | mg/Kg | 1 | 3/16/2022 11:02:47 AM | 66204 |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 3/16/2022 11:02:47 AM | 66204 |
| Surr: DNOP | 96.6 | 51.1-141 | | %Rec | 1 | 3/16/2022 11:02:47 AM | 66204 |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **RAA** | |
| Gasoline Range Organics (GRO) | ND | 3.2 | | mg/Kg | 1 | 3/16/2022 11:12:00 AM | 66198 |
| Surr: BFB | 106 | 70-130 | | %Rec | 1 | 3/16/2022 11:12:00 AM | 66198 |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **RAA** | |
| Benzene | ND | 0.016 | | mg/Kg | 1 | 3/16/2022 11:12:00 AM | 66198 |
| Toluene | ND | 0.032 | | mg/Kg | 1 | 3/16/2022 11:12:00 AM | 66198 |
| Ethylbenzene | ND | 0.032 | | mg/Kg | 1 | 3/16/2022 11:12:00 AM | 66198 |
| Xylenes, Total | ND | 0.064 | | mg/Kg | 1 | 3/16/2022 11:12:00 AM | 66198 |
| Surr: 4-Bromofluorobenzene | 88.0 | 70-130 | | %Rec | 1 | 3/16/2022 11:12:00 AM | 66198 |

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

**Qualifiers:**

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

**Analytical Report**
Lab Order **2203829**
Date Reported: **3/18/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** ENSOLUM
**Project:** Lateral 10A 5
**Lab ID:** 2203829-002 **Matrix:** SOIL

**Client Sample ID:** S-2
**Collection Date:** 3/15/2022 10:05:00 AM
**Received Date:** 3/16/2022 8:00:00 AM

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **MRA** | |
| Chloride | 370 | 60 | | mg/Kg | 20 | 3/16/2022 11:22:44 AM | 66211 |
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** | |
| Diesel Range Organics (DRO) | 24 | 9.7 | | mg/Kg | 1 | 3/16/2022 11:13:19 AM | 66204 |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 3/16/2022 11:13:19 AM | 66204 |
| Surr: DNOP | 90.9 | 51.1-141 | | %Rec | 1 | 3/16/2022 11:13:19 AM | 66204 |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **RAA** | |
| Gasoline Range Organics (GRO) | ND | 4.6 | | mg/Kg | 1 | 3/16/2022 11:31:00 AM | 66198 |
| Surr: BFB | 103 | 70-130 | | %Rec | 1 | 3/16/2022 11:31:00 AM | 66198 |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **RAA** | |
| Benzene | ND | 0.023 | | mg/Kg | 1 | 3/16/2022 11:31:00 AM | 66198 |
| Toluene | ND | 0.046 | | mg/Kg | 1 | 3/16/2022 11:31:00 AM | 66198 |
| Ethylbenzene | ND | 0.046 | | mg/Kg | 1 | 3/16/2022 11:31:00 AM | 66198 |
| Xylenes, Total | ND | 0.093 | | mg/Kg | 1 | 3/16/2022 11:31:00 AM | 66198 |
| Surr: 4-Bromofluorobenzene | 86.2 | 70-130 | | %Rec | 1 | 3/16/2022 11:31:00 AM | 66198 |

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

**Qualifiers:**

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

**Analytical Report**
Lab Order **2203829**
Date Reported: **3/18/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** ENSOLUM
**Project:** Lateral 10A 5
**Lab ID:** 2203829-003 **Matrix:** SOIL

**Client Sample ID:** S-3
**Collection Date:** 3/15/2022 10:10:00 AM
**Received Date:** 3/16/2022 8:00:00 AM

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **MRA** | |
| Chloride | 130 | 60 | | mg/Kg | 20 | 3/16/2022 11:35:09 AM | 66211 |
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** | |
| Diesel Range Organics (DRO) | ND | 9.8 | | mg/Kg | 1 | 3/16/2022 11:23:52 AM | 66204 |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 3/16/2022 11:23:52 AM | 66204 |
| Surr: DNOP | 95.5 | 51.1-141 | | %Rec | 1 | 3/16/2022 11:23:52 AM | 66204 |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **RAA** | |
| Gasoline Range Organics (GRO) | ND | 4.2 | | mg/Kg | 1 | 3/16/2022 11:51:00 AM | 66198 |
| Surr: BFB | 101 | 70-130 | | %Rec | 1 | 3/16/2022 11:51:00 AM | 66198 |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **RAA** | |
| Benzene | ND | 0.021 | | mg/Kg | 1 | 3/16/2022 11:51:00 AM | 66198 |
| Toluene | ND | 0.042 | | mg/Kg | 1 | 3/16/2022 11:51:00 AM | 66198 |
| Ethylbenzene | ND | 0.042 | | mg/Kg | 1 | 3/16/2022 11:51:00 AM | 66198 |
| Xylenes, Total | ND | 0.083 | | mg/Kg | 1 | 3/16/2022 11:51:00 AM | 66198 |
| Surr: 4-Bromofluorobenzene | 85.6 | 70-130 | | %Rec | 1 | 3/16/2022 11:51:00 AM | 66198 |

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

**Qualifiers:**

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

**Analytical Report**
Lab Order **2203829**
Date Reported: **3/18/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** ENSOLUM
**Client Sample ID:** S-4
**Project:** Lateral 10A 5
**Collection Date:** 3/15/2022 10:15:00 AM
**Lab ID:** 2203829-004 **Matrix:** SOIL **Received Date:** 3/16/2022 8:00:00 AM

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **MRA** | |
| Chloride | 150 | 60 | | mg/Kg | 20 | 3/16/2022 11:47:33 AM | 66211 |
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** | |
| Diesel Range Organics (DRO) | 28 | 9.6 | | mg/Kg | 1 | 3/16/2022 11:34:24 AM | 66204 |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 3/16/2022 11:34:24 AM | 66204 |
| Surr: DNOP | 92.2 | 51.1-141 | | %Rec | 1 | 3/16/2022 11:34:24 AM | 66204 |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **RAA** | |
| Gasoline Range Organics (GRO) | ND | 3.5 | | mg/Kg | 1 | 3/16/2022 12:11:00 PM | 66198 |
| Surr: BFB | 103 | 70-130 | | %Rec | 1 | 3/16/2022 12:11:00 PM | 66198 |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **RAA** | |
| Benzene | ND | 0.017 | | mg/Kg | 1 | 3/16/2022 12:11:00 PM | 66198 |
| Toluene | ND | 0.035 | | mg/Kg | 1 | 3/16/2022 12:11:00 PM | 66198 |
| Ethylbenzene | ND | 0.035 | | mg/Kg | 1 | 3/16/2022 12:11:00 PM | 66198 |
| Xylenes, Total | ND | 0.069 | | mg/Kg | 1 | 3/16/2022 12:11:00 PM | 66198 |
| Surr: 4-Bromofluorobenzene | 87.4 | 70-130 | | %Rec | 1 | 3/16/2022 12:11:00 PM | 66198 |

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

**Qualifiers:**

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

**Analytical Report**
Lab Order **2203829**
Date Reported: **3/18/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** ENSOLUM
**Client Sample ID:** S-5
**Project:** Lateral 10A 5
**Collection Date:** 3/15/2022 10:20:00 AM
**Lab ID:** 2203829-005 **Matrix:** SOIL **Received Date:** 3/16/2022 8:00:00 AM

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **MRA** | |
| Chloride | 290 | 60 | | mg/Kg | 20 | 3/16/2022 11:59:58 AM | 66211 |
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** | |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 3/16/2022 11:44:59 AM | 66204 |
| Motor Oil Range Organics (MRO) | ND | 50 | | mg/Kg | 1 | 3/16/2022 11:44:59 AM | 66204 |
| Surr: DNOP | 91.2 | 51.1-141 | | %Rec | 1 | 3/16/2022 11:44:59 AM | 66204 |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **RAA** | |
| Gasoline Range Organics (GRO) | ND | 3.6 | | mg/Kg | 1 | 3/16/2022 12:30:00 PM | 66198 |
| Surr: BFB | 106 | 70-130 | | %Rec | 1 | 3/16/2022 12:30:00 PM | 66198 |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **RAA** | |
| Benzene | ND | 0.018 | | mg/Kg | 1 | 3/16/2022 12:30:00 PM | 66198 |
| Toluene | ND | 0.036 | | mg/Kg | 1 | 3/16/2022 12:30:00 PM | 66198 |
| Ethylbenzene | ND | 0.036 | | mg/Kg | 1 | 3/16/2022 12:30:00 PM | 66198 |
| Xylenes, Total | ND | 0.071 | | mg/Kg | 1 | 3/16/2022 12:30:00 PM | 66198 |
| Surr: 4-Bromofluorobenzene | 88.7 | 70-130 | | %Rec | 1 | 3/16/2022 12:30:00 PM | 66198 |

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

**Qualifiers:**

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2203829**

***18-Mar-22***

**Client:** ENSOLUM

**Project:** Lateral 10A 5

Sample ID: **MB-66211** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **66211** RunNo: **86512**

Prep Date: **3/16/2022** Analysis Date: **3/16/2022** SeqNo: **3053142** Units: **mg/Kg**

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

Sample ID: **LCS-66211** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **66211** RunNo: **86512**

Prep Date: **3/16/2022** Analysis Date: **3/16/2022** SeqNo: **3053143** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 14 | 1.5 | 15.00 | 0 | 92.5 | 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 Quanitative Limit |
| S | % Recovery outside of range due to dilution or matrix interference |
| B | Analyte detected in the associated Method Blank |
| E | Estimated value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2203829**

***18-Mar-22***

**Client:** ENSOLUM

**Project:** Lateral 10A 5

Sample ID: **LCS-66204** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **66204** RunNo: **86505**

Prep Date: **3/16/2022** Analysis Date: **3/16/2022** SeqNo: **3052645** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 47 | 10 | 50.00 | 0 | 94.7 | 68.9 | 135 | | | |
| Surr: DNOP | 4.6 | | 5.000 | | 92.3 | 51.1 | 141 | | | |

Sample ID: **MB-66204** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **66204** RunNo: **86505**

Prep Date: **3/16/2022** Analysis Date: **3/16/2022** SeqNo: **3052646** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | ND | 10 | | | | | | | | |
| Motor Oil Range Organics (MRO) | ND | 50 | | | | | | | | |
| Surr: DNOP | 9.2 | | 10.00 | | 92.2 | 51.1 | 141 | | | |

**Qualifiers:**

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2203829**

***18-Mar-22***

**Client:** ENSOLUM

**Project:** Lateral 10A 5

Sample ID: **mb-66198** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **66198** RunNo: **86499**

Prep Date: **3/15/2022** Analysis Date: **3/16/2022** SeqNo: **3052369** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | ND | 5.0 | | | | | | | | |
| Surr: BFB | 1100 | | 1000 | | 107 | 70 | 130 | | | |

Sample ID: **lcs-66198** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **66198** RunNo: **86499**

Prep Date: **3/15/2022** Analysis Date: **3/16/2022** SeqNo: **3052374** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | 30 | 5.0 | 25.00 | 0 | 120 | 78.6 | 131 | | | |
| Surr: BFB | 2300 | | 1000 | | 235 | 70 | 130 | | | S |

**Qualifiers:**

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2203829**

***18-Mar-22***

**Client:** ENSOLUM

**Project:** Lateral 10A 5

Sample ID: **lcs-66198** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **66198** RunNo: **86499**

Prep Date: **3/15/2022** Analysis Date: **3/16/2022** SeqNo: **3052378** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.97 | 0.025 | 1.000 | 0 | 96.9 | 80 | 120 | | | |
| Toluene | 0.99 | 0.050 | 1.000 | 0 | 98.8 | 80 | 120 | | | |
| Ethylbenzene | 0.99 | 0.050 | 1.000 | 0 | 99.4 | 80 | 120 | | | |
| Xylenes, Total | 3.0 | 0.10 | 3.000 | 0 | 99.3 | 80 | 120 | | | |
| Surr: 4-Bromofluorobenzene | 0.88 | | 1.000 | | 88.4 | 70 | 130 | | | |

Sample ID: **mb-66198** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **66198** RunNo: **86499**

Prep Date: **3/15/2022** Analysis Date: **3/16/2022** SeqNo: **3052379** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.025 | | | | | | | | |
| Toluene | ND | 0.050 | | | | | | | | |
| Ethylbenzene | ND | 0.050 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 0.91 | | 1.000 | | 91.0 | 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 Quanitative Limit |
| S | % Recovery outside of range due to dilution or matrix interference |
| B | Analyte detected in the associated Method Blank |
| E | Estimated value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

# Sample Log-In Check List

Client Name: ENSOLUM Work Order Number: 2203829 RcptNo: 1

Received By: **Tracy Casarrubias** 3/16/2022 8:00:00 AM

Completed By: **Tracy Casarrubias** 3/16/2022 8:58:38 AM

Reviewed By: SC 3/16/22

## Chain of Custody

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

## Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Samples not Frozen.
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

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

Checked by: JN 3/16/22

## Special Handling (if applicable)

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

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

16. Additional remarks:

17. **Cooler Information**

| Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|---|---|---|---|---|---|---|
| 1 | -0.9 | Good | Yes | | | |

# Chain-of-Custody Record

Client: Ensolum, LLC

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

Phone #:

email or Fax#: KSummers@ensolum.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time: 100% Rush
☐ Standard ☒ Rush SAME DAY

Project Name: Lateral 10A-5

Project #: see nods

Project Manager: ksummers

Sampler: RDeechilly
On Ice: ☒ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): -1.1+0.2=-0.9(°C)

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

Analysis Request

| Date | Time | Matrix | Sample Name | Container Type and # | Preservative Type | HEAL No. 2203829 | BTEX / MTBE / TMB's (8021) | TPH:8015D(GRO / DRO / MRO) | 8081 Pesticides/8082 PCB's | EDB (Method 504.1) | PAHs by 8310 or 8270SIMS | RCRA 8 Metals | Cl, F, Br, $NO_3$, $NO_2$, $PO_4$, $SO_4$ | 8260 (VOA) | 8270 (Semi-VOA) | Total Coliform (Present/Absent) | Chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/15/22 | 1000 | S | S-1 | 1x4oz Jar | cool | 001 | X | X | | | | | | | | | X |
| 3/15/22 | 1005 | S | S-2 | 1x4oz Jar | cool | 002 | X | X | | | | | | | | | X |
| 3/15/22 | 1010 | S | S-3 | 1x4oz Jar | cool | 003 | X | X | | | | | | | | | X |
| 3/15/22 | 1015 | S | S-4 | 1x4oz Jar | cool | 004 | X | X | | | | | | | | | X |
| 3/15/22 | 1020 | S | S-5 | 1x4oz Jar | cool | 005 | X | X | | | | | | | | | X |

| Date | Time | Relinquished by: | Received by: | Via: | Date | Time |
|---|---|---|---|---|---|---|
| 3/15/22 | 1244 | | | | 3/15/22 | 1244 |
| 3/15/22 | 1740 | | | Courier | 3/16/22 | 8:00 |

Remarks:
SAME DAY
-samples not frozen. -Trace 3/16/22
PM-Tom Long (EPROD)
PayKey = RB21200
NonAFE- N58867

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

March 18, 2022

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

RE: Lateral 10A 5 OrderNo.: 2203822

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/16/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

**Analytical Report**
Lab Order **2203822**
Date Reported: **3/18/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** ENSOLUM
**Project:** Lateral 10A 5
**Lab ID:** 2203822-001 **Matrix:** SOIL

**Client Sample ID:** SP-1
**Collection Date:** 3/15/2022 10:25:00 AM
**Received Date:** 3/16/2022 8:00:00 AM

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **MRA** | |
| Chloride | 140 | 60 | | mg/Kg | 20 | 3/16/2022 12:37:11 PM | 66211 |
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** | |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/16/2022 10:52:17 AM | 66204 |
| Motor Oil Range Organics (MRO) | ND | 50 | | mg/Kg | 1 | 3/16/2022 10:52:17 AM | 66204 |
| Surr: DNOP | 96.2 | 51.1-141 | | %Rec | 1 | 3/16/2022 10:52:17 AM | 66204 |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **RAA** | |
| Gasoline Range Organics (GRO) | ND | 3.8 | | mg/Kg | 1 | 3/16/2022 10:52:00 AM | 66198 |
| Surr: BFB | 104 | 70-130 | | %Rec | 1 | 3/16/2022 10:52:00 AM | 66198 |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **RAA** | |
| Benzene | ND | 0.019 | | mg/Kg | 1 | 3/16/2022 10:52:00 AM | 66198 |
| Toluene | ND | 0.038 | | mg/Kg | 1 | 3/16/2022 10:52:00 AM | 66198 |
| Ethylbenzene | ND | 0.038 | | mg/Kg | 1 | 3/16/2022 10:52:00 AM | 66198 |
| Xylenes, Total | ND | 0.076 | | mg/Kg | 1 | 3/16/2022 10:52:00 AM | 66198 |
| Surr: 4-Bromofluorobenzene | 88.0 | 70-130 | | %Rec | 1 | 3/16/2022 10:52:00 AM | 66198 |

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

**Qualifiers:**

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2203822**

***18-Mar-22***

**Client:** ENSOLUM

**Project:** Lateral 10A 5

Sample ID: **MB-66211** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **66211** RunNo: **86512**

Prep Date: **3/16/2022** Analysis Date: **3/16/2022** SeqNo: **3053142** Units: **mg/Kg**

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

Sample ID: **LCS-66211** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **66211** RunNo: **86512**

Prep Date: **3/16/2022** Analysis Date: **3/16/2022** SeqNo: **3053143** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 14 | 1.5 | 15.00 | 0 | 92.5 | 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 Quanitative Limit |
| S | % Recovery outside of range due to dilution or matrix interference |
| B | Analyte detected in the associated Method Blank |
| E | Estimated value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2203822**

***18-Mar-22***

**Client:** ENSOLUM

**Project:** Lateral 10A 5

Sample ID: **2203822-001AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **SP-1** Batch ID: **66204** RunNo: **86505**

Prep Date: **3/16/2022** Analysis Date: **3/16/2022** SeqNo: **3052638** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 51 | 9.6 | 48.12 | 10.02 | 86.0 | 36.1 | 154 | | | |
| Surr: DNOP | 4.4 | | 4.812 | | 91.7 | 51.1 | 141 | | | |

Sample ID: **2203822-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **SP-1** Batch ID: **66204** RunNo: **86505**

Prep Date: **3/16/2022** Analysis Date: **3/16/2022** SeqNo: **3052639** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 61 | 9.8 | 49.16 | 10.02 | 104 | 36.1 | 154 | 17.2 | 33.9 | |
| Surr: DNOP | 4.6 | | 4.916 | | 92.7 | 51.1 | 141 | 0 | 0 | |

Sample ID: **LCS-66204** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **66204** RunNo: **86505**

Prep Date: **3/16/2022** Analysis Date: **3/16/2022** SeqNo: **3052645** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 47 | 10 | 50.00 | 0 | 94.7 | 68.9 | 135 | | | |
| Surr: DNOP | 4.6 | | 5.000 | | 92.3 | 51.1 | 141 | | | |

Sample ID: **MB-66204** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **66204** RunNo: **86505**

Prep Date: **3/16/2022** Analysis Date: **3/16/2022** SeqNo: **3052646** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | ND | 10 | | | | | | | | |
| Motor Oil Range Organics (MRO) | ND | 50 | | | | | | | | |
| Surr: DNOP | 9.2 | | 10.00 | | 92.2 | 51.1 | 141 | | | |

**Qualifiers:**

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2203822**

***18-Mar-22***

**Client:** ENSOLUM

**Project:** Lateral 10A 5

| Sample ID: **mb-66198** | SampType: **MBLK** | TestCode: **EPA Method 8015D: Gasoline Range** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **66198** | RunNo: **86499** |
| Prep Date: **3/15/2022** | Analysis Date: **3/16/2022** | SeqNo: **3052369** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | ND | 5.0 | | | | | | | | |
| Surr: BFB | 1100 | | 1000 | | 107 | 70 | 130 | | | |

| Sample ID: **lcs-66198** | SampType: **LCS** | TestCode: **EPA Method 8015D: Gasoline Range** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **66198** | RunNo: **86499** |
| Prep Date: **3/15/2022** | Analysis Date: **3/16/2022** | SeqNo: **3052374** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | 30 | 5.0 | 25.00 | 0 | 120 | 78.6 | 131 | | | |
| Surr: BFB | 2300 | | 1000 | | 235 | 70 | 130 | | | S |

**Qualifiers:**

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2203822**

***18-Mar-22***

**Client:** ENSOLUM

**Project:** Lateral 10A 5

Sample ID: **lcs-66198** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **66198** RunNo: **86499**

Prep Date: **3/15/2022** Analysis Date: **3/16/2022** SeqNo: **3052378** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.97 | 0.025 | 1.000 | 0 | 96.9 | 80 | 120 | | | |
| Toluene | 0.99 | 0.050 | 1.000 | 0 | 98.8 | 80 | 120 | | | |
| Ethylbenzene | 0.99 | 0.050 | 1.000 | 0 | 99.4 | 80 | 120 | | | |
| Xylenes, Total | 3.0 | 0.10 | 3.000 | 0 | 99.3 | 80 | 120 | | | |
| Surr: 4-Bromofluorobenzene | 0.88 | | 1.000 | | 88.4 | 70 | 130 | | | |

Sample ID: **mb-66198** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **66198** RunNo: **86499**

Prep Date: **3/15/2022** Analysis Date: **3/16/2022** SeqNo: **3052379** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.025 | | | | | | | | |
| Toluene | ND | 0.050 | | | | | | | | |
| Ethylbenzene | ND | 0.050 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 0.91 | | 1.000 | | 91.0 | 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 Quanitative Limit |
| S | % Recovery outside of range due to dilution or matrix interference |
| B | Analyte detected in the associated Method Blank |
| E | Estimated value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

# Sample Log-In Check List

Client Name: ENSOLUM Work Order Number: 2203822 RcptNo: 1

Received By: **Tracy Casarrubias** 3/16/2022 8:00:00 AM

Completed By: **Tracy Casarrubias** 3/16/2022 8:23:14 AM

Reviewed By: SR 3/16/22

## Chain of Custody

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

## Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
5. Sample(s) in proper container(s)? Samples not Frozen Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted?
Checked by: JR 3/16/22

## Special Handling (if applicable)

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

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

16. Additional remarks:

17. Cooler Information

| Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|---|---|---|---|---|---|---|
| 1 | -0.9 | Good | Yes | | | |

# Chain-of-Custody Record

Client: Ensolum, LLC

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

Phone #:

email or Fax#: ksummers@ensolum.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time: SAME DAY 10546
☐ Standard ☒ Rush

Project Name: Lateral 10A-5

Project #: See notes

Project Manager: Ksummers

Sampler: RDeechilly
On Ice: ☑ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): -1.1 +0.2 = -0.9 (°C)

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

**Analysis Request**

| Date | Time | Matrix | Sample Name | Container Type and # | Preservative Type | HEAL No. 2203822 | BTEX / ~~MTBE / TMB's~~ (8021) | TPH:8015D(GRO / DRO / MRO) | 8081 Pesticides/8082 PCB's | EDB (Method 504.1) | PAHs by 8310 or 8270SIMS | RCRA 8 Metals | Cl, F, Br, $NO_3$, $NO_2$, $PO_4$, $SO_4$ | 8260 (VOA) | 8270 (Semi-VOA) | Total Coliform (Present/Absent) | Chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/15/22 | 1025 | S | SP-1 | 1x4oz Jar | Cool | 001 | X | X | | | | | | | | | X |

| Date: | Time: | Relinquished by: | Received by: | Via: | Date | Time |
|---|---|---|---|---|---|---|
| 3/15/22 | 1244 | | | | 3/15/22 | 1244 |
| 3/15/22 | 1740 | Cynthia Waeters | | Courier | 3/16/22 | 0:00 |

Remarks: SAME DAY
PM - Tom Long (EPROD)
Pay Key - RB21200
NON AFE - N58867

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

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

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



## CONDITIONS

| | |
|---|---|
| Operator:<br>Enterprise Field Services, LLC<br>PO Box 4324<br>Houston, TX 77210 | OGRID:<br>241602 |
| | Action Number:<br>104840 |
| | Action Type:<br>[C-141] Release Corrective Action (C-141) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| nvelez | None | 6/24/2022 |