

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: <b>Enterprise Field Services, LLC</b>	OGRID: <b>151618</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): NRM2035342531</b>
Contact mailing address: <b>614 Reilly Ave, Farmington, NM 87401</b>	

### Location of Release Source

Latitude **36.394070** Longitude **-107.995589** (NAD 83 in decimal degrees to 5 decimal places)

Site Name <b>Trunk 10A</b>	Site Type <b>Natural Gas Gathering Pipeline</b>
Date Release Discovered: <b>11/25/2020</b>	Serial Number (if applicable): <b>N/A</b>

Unit Letter	Section	Township	Range	County
<b>N</b>	<b>15</b>	<b>25N</b>	<b>11W</b>	<b>San Juan</b>

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

### 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>10-15 Barrels</b>	Volume Recovered (bbls): <b>None</b>
<input checked="" type="checkbox"/> Natural Gas	Volume Released (Mcf): <b>2.5 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 November 25, 2020, Enterprise had a release of natural gas and natural gas liquids from the Trunk 10A pipeline. Minimal amount of fluids were release to the ground surface. No washes/waterways were affected. The pipeline was isolated, depressurized, locked and tagged out. Enterprise began repairs and remediation December 2, 2020 and Enterprise determined this release reportable per NMOCD regulation, due to the volume of impacted subsurface soil. The final excavation dimensions measured approximately 41 feet long by 38 feet wide by 8 feet deep. Approximately 337 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	
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: Jon E. Fields

Title: Director, Environmental

Signature: 

Date: 3/4/2021

email: jefields@eprod.com

Telephone: (713) 381-6684

### 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: 05/02/2022

Printed Name: Nelson Velez

Title: Environmental Specialist – Adv



## CLOSURE REPORT

Property:

**Trunk 10A (11/25/20)  
SW ¼, S15 T25N R11W  
San Juan County, New Mexico**

January 22, 2021  
Ensolum Project No. 05A1226127

Prepared for:

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

Prepared by:

A handwritten signature in blue ink, reading "Rane Deechilly".

---

Rane Deechilly  
Environmental Scientist

A handwritten signature in blue ink, reading "Kyle Summers".

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Kyle Summers, CPG  
Sr. Project Manager

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## CLOSURE REPORT

**Trunk 10A (11/25/20)  
SW ¼, S15 T25N R11W  
San Juan County, New Mexico**

**Ensolum Project No. 05A1226127**

### 1.0 INTRODUCTION

#### 1.1 Site Description & Background

<b>Operator:</b>	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
<b>Site Name:</b>	Trunk 10A (11/25/20) (Site)
<b>Incident ID</b>	NRM2035342531
<b>Location:</b>	36.394070° North, 107.995589° West Southwest (SW) ¼ of Section 15, Township 25 North, Range 11 West San Juan County, New Mexico
<b>Property:</b>	Navajo Nation
<b>Regulatory:</b>	Navajo Nation Environmental Protection Agency (NNEPA) and New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On November 25, 2020, Enterprise personnel discovered a release of natural gas and condensate on the Trunk 10A pipeline. Enterprise subsequently isolated, locked the pipeline out of service, and repaired the pipeline. On December 2, 2020, Enterprise initiated activities to 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 New Mexico 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. Ensolum utilized the general site characteristics and information available from the New Mexico Office of the State Engineer (OSE) and the New Mexico EMNRD OCD imaging database to determine the appropriate closure criteria for the Site. Supporting figures and documentation associated with the following bullets are provided in **Appendix B**.

- 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

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and includes an interactive map). No PODs were identified within a one mile radius of the Site in the OSE WRRS database. In addition, no PODs were identified in adjacent Public Land Survey System (PLSS) sections. The nearest POD (SJ-00221) is located approximately 2.8 miles northwest of the Site and is located at a lower elevation (6,300 feet) than the Site (6,401 feet). The records for this POD indicate depth to water at 135 feet bgs (**Figure A, Appendix B**).

- One cathodic well was identified within one mile of the Site in the New Mexico EMNRD OCD imaging database. The records for the cathodic protection well located near the Colket #1 (Unit C, Sec15, T25N, R11W) well location do not indicate a depth to water (**Figure B, Appendix B**).
- The Site is not located within 300 feet of a New Mexico EMNRD OCD-defined continuously flowing watercourse or significant watercourse. The excavation is located approximately 730 feet northwest of an unnamed ephemeral wash that may convey water during significant rain events (**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 (5) 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 New Mexico 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.
- Based on information provided by the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) geospatial database the location of the Site is unlikely to be located within a 100-year floodplain (**Figure H, Appendix B**).

Based on available information, Enterprise estimates the depth to water at the Site to be greater than 50 feet bgs. Applicable closure criteria for soils (below four (4) feet) remaining in place at the Site include:

Closure Criteria for Soils Impacted by a Release (Tier II)		
Constituent	Method	Limit
Chloride	EPA 300.0 or SM4500 Cl B	10,000 mg/kg
TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015	2,500 mg/kg
TPH (GRO+DRO)	EPA SW-846 Method 8015	1,000 mg/kg
BTEX	EPA SW-846 Method 8021 or 8260	50 mg/kg
Benzene	EPA SW-846 Method 8021 or 8260	10 mg/kg



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In addition, the closure criteria (reclamation requirements of NMAC 19.15.29.13(D)(1)) for the upper four (4) feet of soils at the Site include:

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

### 3.0 SOIL REMEDIATION ACTIVITIES

On December 2, 2020, Enterprise initiated activities to remediate petroleum hydrocarbon impact resulting from the release. During the remediation and corrective action activities, Halo Services, Inc., provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final excavation measured approximately 41 feet long and 38 feet wide at the maximum extents. The maximum depth of the excavation measured approximately eight (8) feet bgs. The flow path measured approximately 117 feet long with an average width of approximately two (2) feet. The flow path exhibited minimal vertical saturation.

The lithology encountered during the completion of remediation activities consisted primarily of unconsolidated silty sand.

Approximately 337 cubic yards of petroleum hydrocarbon affected soils and 45 barrels (bbls) of hydro-excavation soil cuttings and water were transported to the Envirotech, Inc. (Envirotech) landfarm near Hilltop, New Mexico for disposal/remediation. The executed C-138 solid waste acceptance form is provided in **Appendix C**. The excavation was backfilled with imported fill and contoured to provide a suitable driving surface.

**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 Dextsil 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 16 composite soil samples (S-1 through S-16) from the excavation for laboratory analysis. In addition, two (2) composite soil samples (FP-1 and FP-2) were collected from the scraped flow path for laboratory analysis. The composite samples were comprised of five (5) aliquots each and represent an estimated 200 square foot (ft<sup>2</sup>) sample area per guidelines outlined in 19.15.29.12 Section D NMAC. A clean shovel was utilized to obtain fresh aliquots from each area of the excavation. Regulatory correspondence is provided in **Appendix E**.

#### First Sampling Event

On December 2, 2020, the first sampling event was performed at the Site. The NNEPA and New Mexico EMNRD OCD were notified of the sampling event although no representatives were present during sampling activities.

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Composite soil samples S-1 (8'), S-2 (8'), S-3 (7'), and S-4 (7') were collected from the floor of excavation. Composite soil samples S-5 (0'-8'), S-6 (0'-8'), S-7 (0'-8'), S-8 (0'-8'), S-9 (0'-8'), S-11 (0'-7'), S-12 (0'-7'), and S-13 (0'-7') were collected from sidewalls of the excavation. Composite soil sample S-10 (0'-8') was collected from soil directly beneath the pipeline (bridge soil) that was left in place to support the pipeline. In addition, composite soil sample FP-1 (0.25') was collected from the scraped flow path.

Subsequent analytical results for sample S-10 indicated COC concentrations that exceeded the soil requirements of NMAC 19.15.29.13(D)(1). In response to the data exceedance, Enterprise removed the bridge soil associated with sample S-10. The soil associated with sample S-10 was transported to the landfarm for disposal/remediation.

### **Second Sampling Event**

On December 4, 2020, subsequent to the additional excavation and removal of soils beneath the pipeline, a second sampling event was performed. The NNEPA and New Mexico EMNRD OCD were notified of the sampling event although no representatives were present during sampling activities.

Composite soil sample S-14 (8') was collected from the floor of the excavation to replace composite soil sample S-10 which exhibited closure criteria exceedances and was removed by excavation. Composite soil samples S-15 (0'-8') and S-16 (0'-8') were collected from newly exposed sidewalls of the excavation following the removal of the bridge soils. In addition, composite soil sample FP-2 (0.25') was collected from the scraped flow path.

The soil samples from these sampling events were 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, New Mexico, under proper chain-of-custody procedures.

## **5.0 SOIL LABORATORY ANALYTICAL METHODS**

The composite soil samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) using Environmental Protection Agency (EPA) SW-846 Method #8021/8260; total petroleum hydrocarbon (TPH) gasoline range organics (GRO) diesel range organics (DRO) and motor oil/lube oil range organics (MRO) using EPA SW-846 Method #8015; and, chlorides using EPA Method #300.0.

The laboratory analytical results are summarized in **Table 1A** and **Table 1B (Appendix F)**. **Table 1A** contains results for samples that include aliquots from within the soil zone (<4 feet bgs). **Table 1B** contains results for samples that only include aliquots from beneath the soil zone (>4 feet bgs). The laboratory data sheets and executed chain-of-custody forms are provided in **Appendix G**.

## **6.0 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-9, S-11 through S-16, FP-1, and FP-2) to the applicable New Mexico EMNRD OCD Tier II closure criteria. The soil associated with composite sample S-10 was transported to Envirotech landfarm for disposal/remediation and is not included in the following discussion.

- The laboratory analytical result for composite soil sample S-4 indicates a benzene concentration of 0.028 milligrams per kilogram (mg/kg), which is less than the applicable New Mexico EMNRD OCD closure criteria of 10 mg/kg. The laboratory analytical results for the remaining composite soil samples collected from soils remaining at the Site indicate benzene is not present at concentrations



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greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 10 mg/kg.

- The laboratory analytical result for composite soil sample S-4 indicates a total BTEX concentration of 0.146 mg/kg, which is less than the applicable New Mexico EMNRD OCD closure criteria of 50 mg/kg. The laboratory analytical results for the remaining composite soil samples collected from soils remaining at the Site indicate total BTEX is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 50 mg/kg.
- The laboratory analytical results for composite soil samples S-1 through S-4, S-8, and S-9 indicate combined TPH GRO/DRO concentrations ranging from 11 mg/kg (S-1) to 190 mg/kg (S-3), which are less than the applicable New Mexico EMNRD OCD closure criteria of 1,000 mg/kg. The laboratory analytical results for the remaining composite soil samples collected from soils remaining at the Site indicate combined TPH GRO/DRO is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 1,000 mg/kg.
- The laboratory analytical results for composite soil samples S-1 through S-4, S-8, and S-9 indicate combined TPH GRO/DRO/MRO concentrations ranging from 11 mg/kg (S-1) to 400 mg/kg (S-3), which are less than the applicable New Mexico EMNRD OCD closure criteria of 2,500 mg/kg. The laboratory analytical results for the remaining composite soil samples collected from soils remaining at the Site indicate combined TPH GRO/DRO/MRO is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 2,500 mg/kg.
- The laboratory analytical results for composite soil samples collected from soils remaining at the Site indicate chloride concentrations ranging from 69 mg/kg (S-6) to 1,000 mg/kg (S-4), which are less than the applicable New Mexico EMNRD OCD closure criteria of 10,000 mg/kg for chlorides.

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

## 7.0 RECLAMATION AND REVEGETATION

The excavation was backfilled with clean imported fill and contoured to provide a suitable driving surface.

## 8.0 FINDINGS AND RECOMMENDATION

- Sixteen (16) composite soil samples were collected from the excavation. Additionally, two (2) composite soil samples were collected from the flow path. Based on laboratory analytical results, the soils remaining at the Site exhibit COC concentrations that meet the soil requirements NMAC 19.15.29.13(D)(1) and NMAC 19.15.29.12 (Tier II closure criteria).
- A total of approximately 337 cubic yards of petroleum hydrocarbon affected soils and 45 bbls of hydro-excavation soil cuttings and water were transported to the Envirotech landfarm near Hilltop, New Mexico for disposal/remediation. The excavation was backfilled and contoured to provide a suitable driving surface.

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

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## **9.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE**

### **9.1 Standard of Care**

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

### **9.2 Limitations**

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

### **9.3 Reliance**

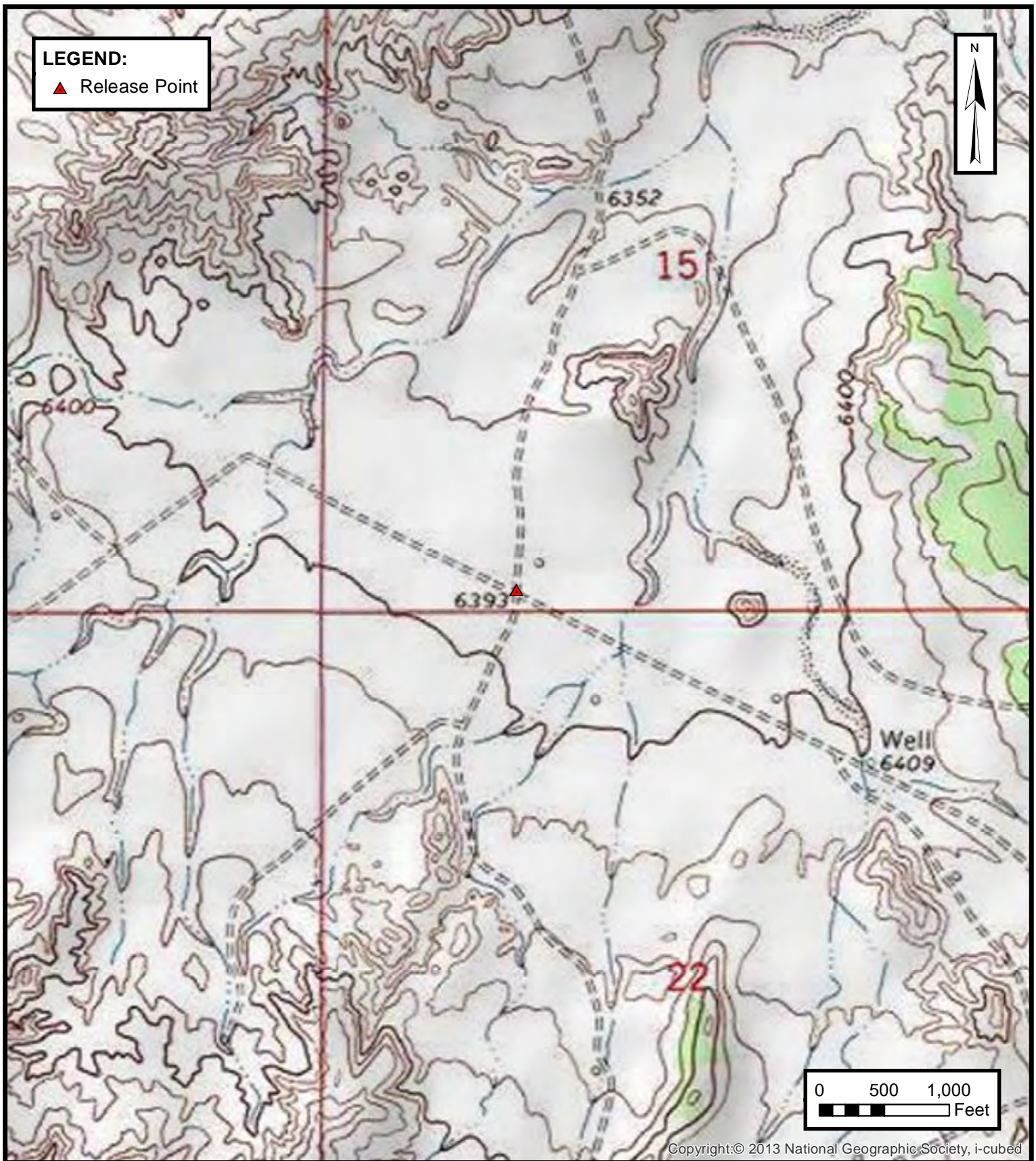
This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization of Enterprise and Ensolum. Any unauthorized distribution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



## APPENDIX A

### Figures





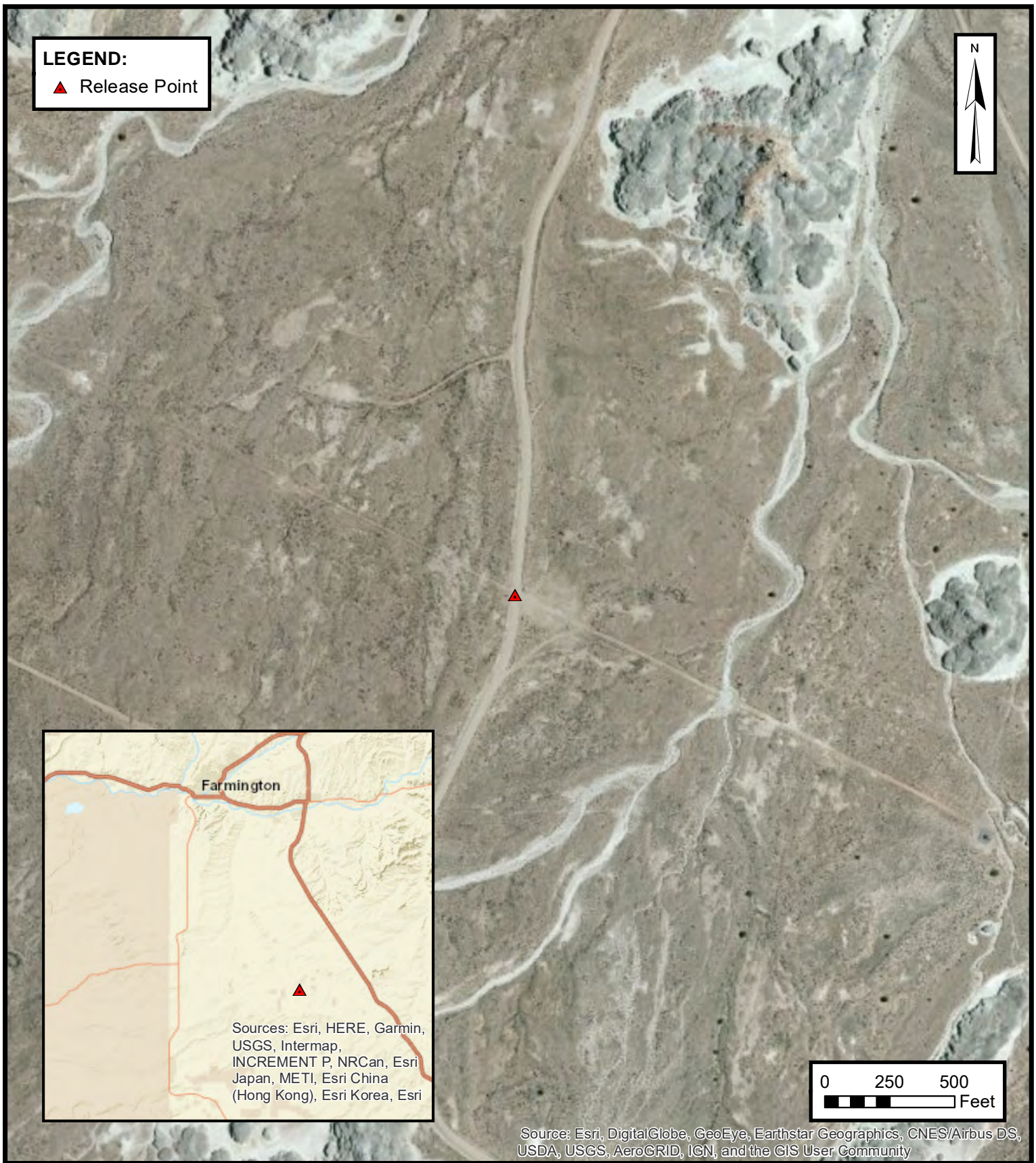
**ENSOLUM**  
Environmental & Hydrogeologic Consultants

**TOPOGRAPHIC MAP**  
ENTERPRISE FIELD SERVICES, LLC  
TRUNK 10A (11/25/20)  
SW ¼, S15 T25N R11W, San Juan County, New Mexico  
36.394070° N, 107.995589° W

PROJECT NUMBER: 05A1226127

**FIGURE**  
**1**





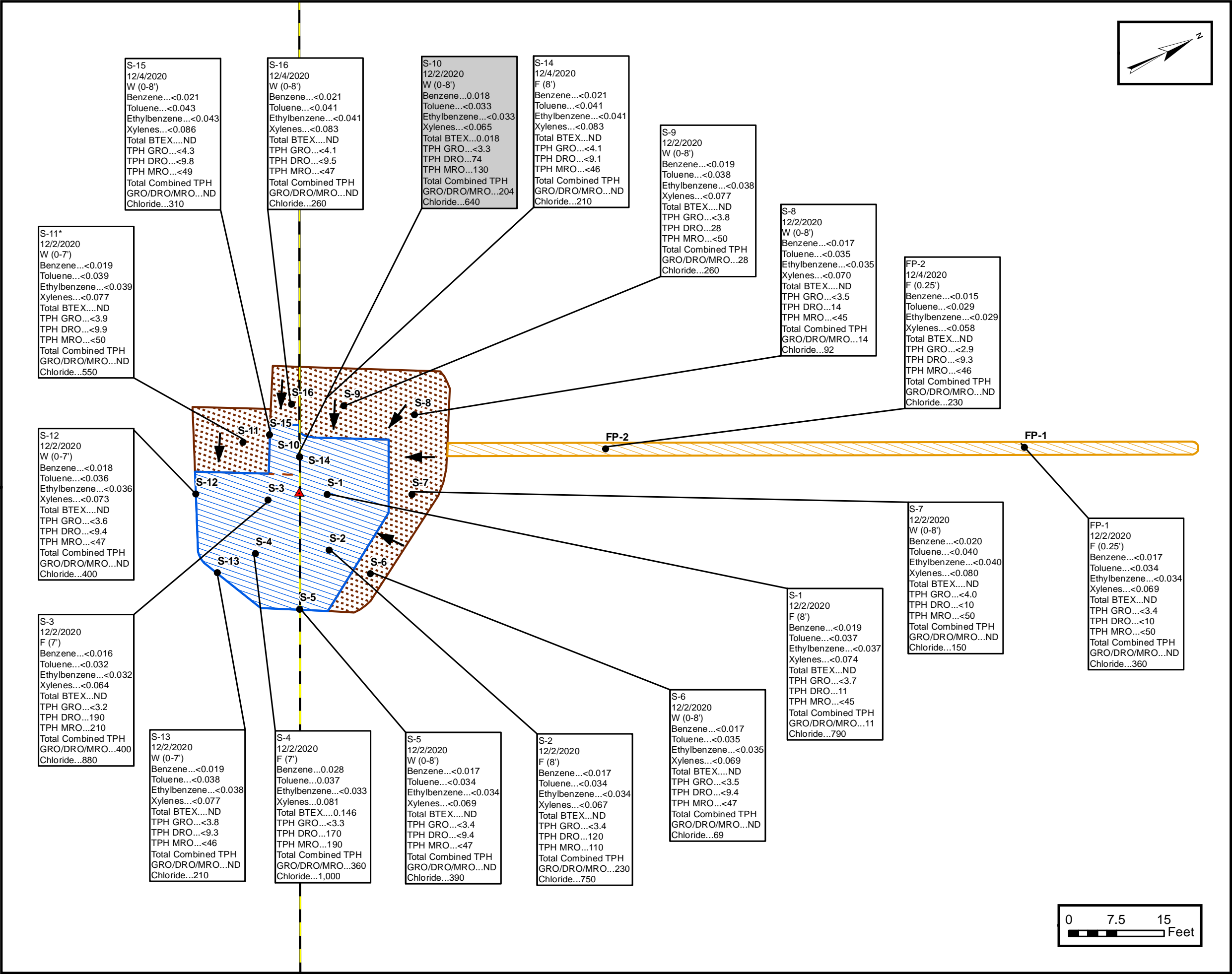
**SITE VICINITY MAP**

ENTERPRISE FIELD SERVICES, LLC  
TRUNK 10A (11/25/20)  
SW ¼, S15 T25N R11W, San Juan County, New Mexico  
36.394070° N, 107.995589° W

PROJECT NUMBER: 05A1226127

**FIGURE**

**2**



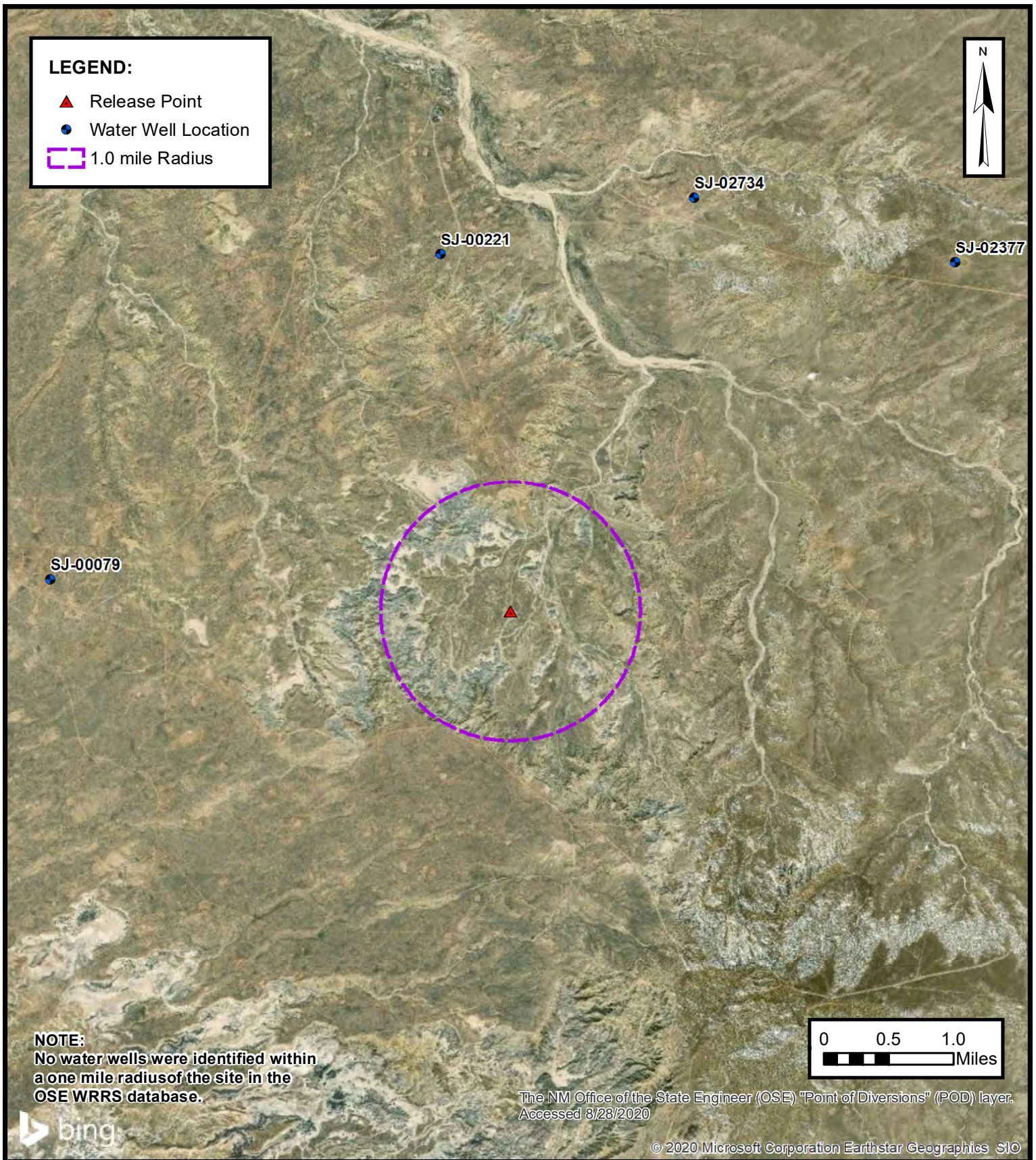




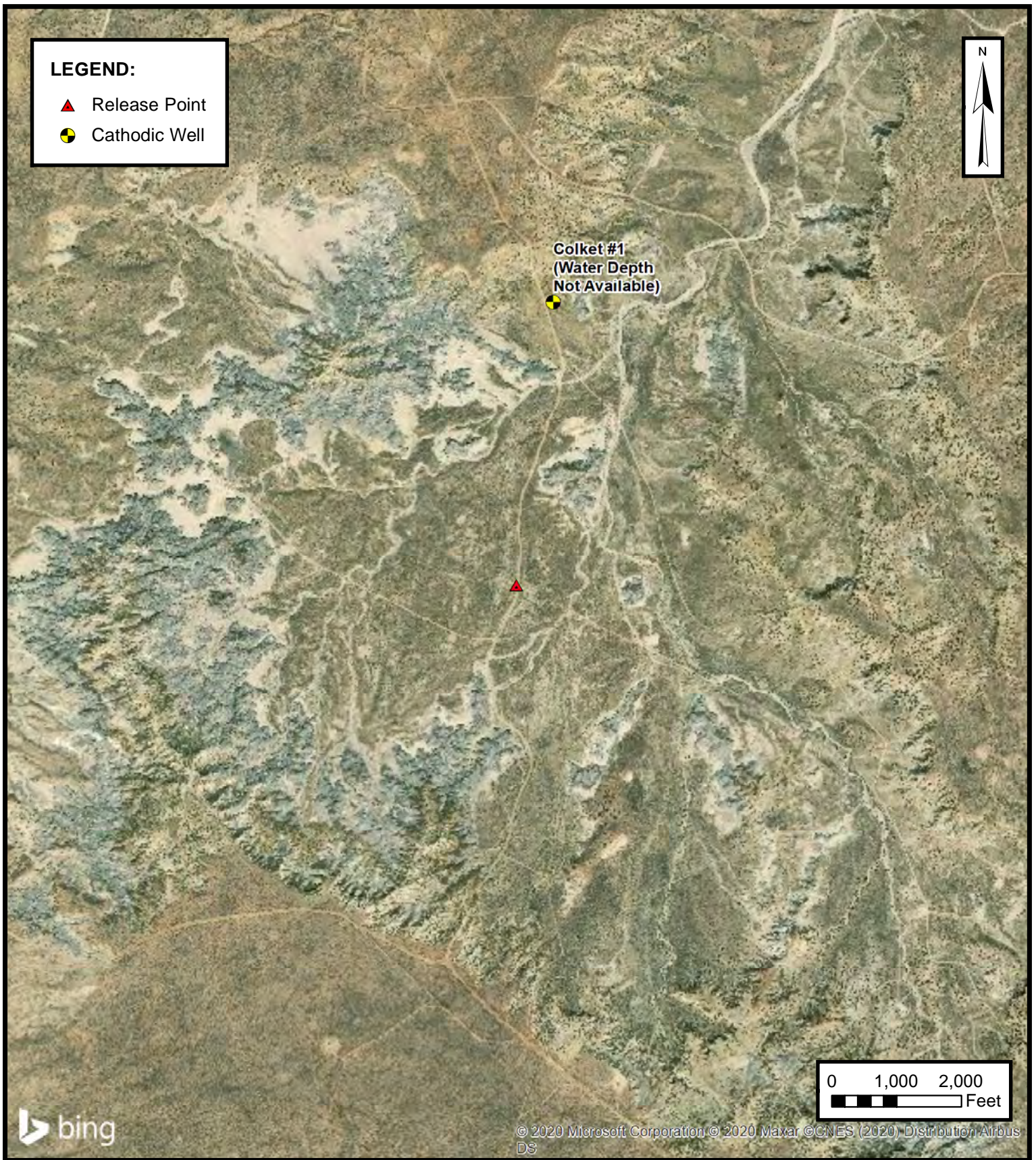
## APPENDIX B

### Siting Figures and Documentation

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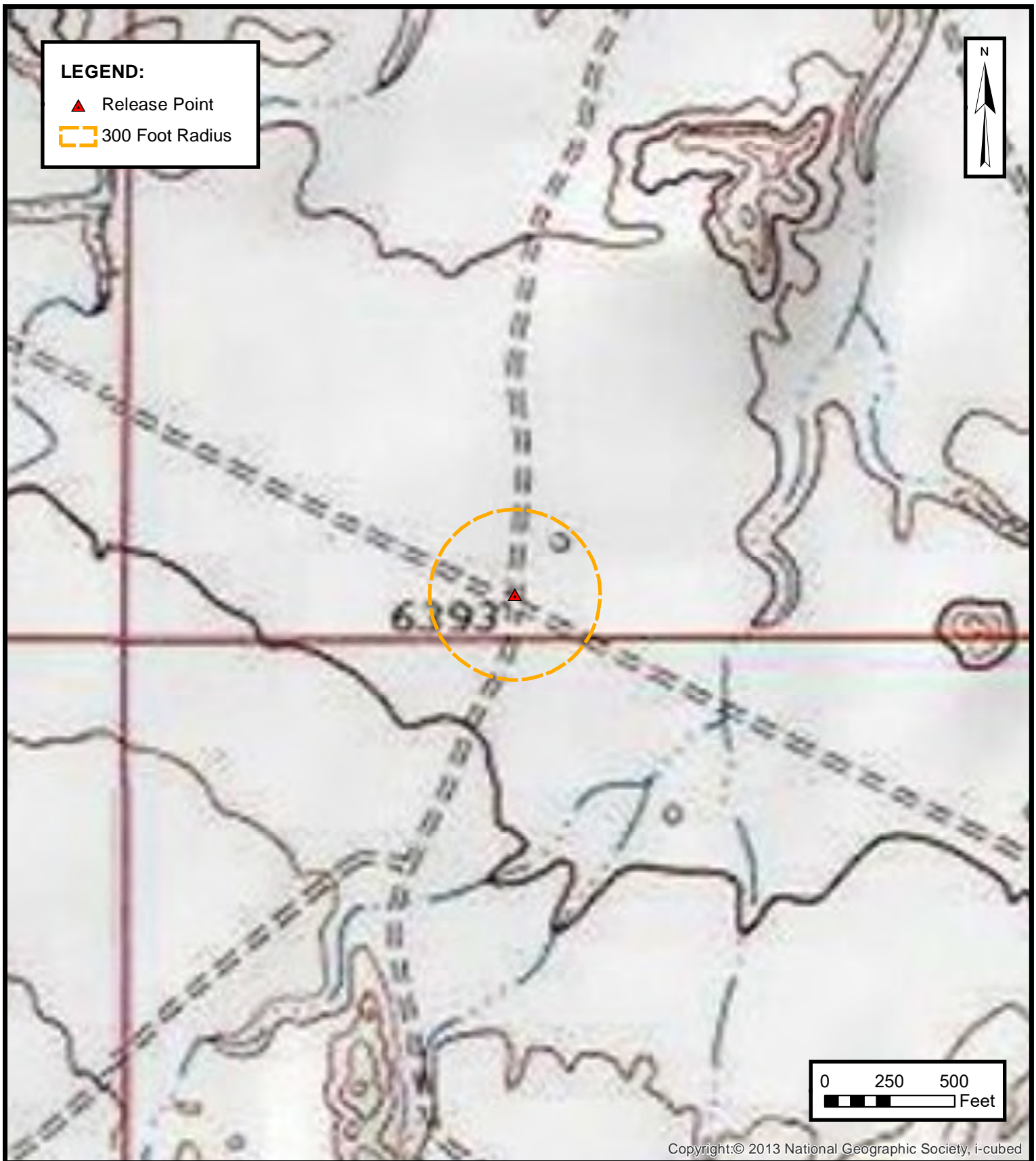
**CATHODIC PROTECTION WELL RECORDED  
DEPTH TO WATER**

ENTERPRISE FIELD SERVICES, LLC  
TRUNK 10A (11/25/20)  
SW ¼, S15 T25N R11W, San Juan County, New Mexico  
36.394070° N, 107.995589° W

PROJECT NUMBER: 05A1226127

**FIGURE  
B**





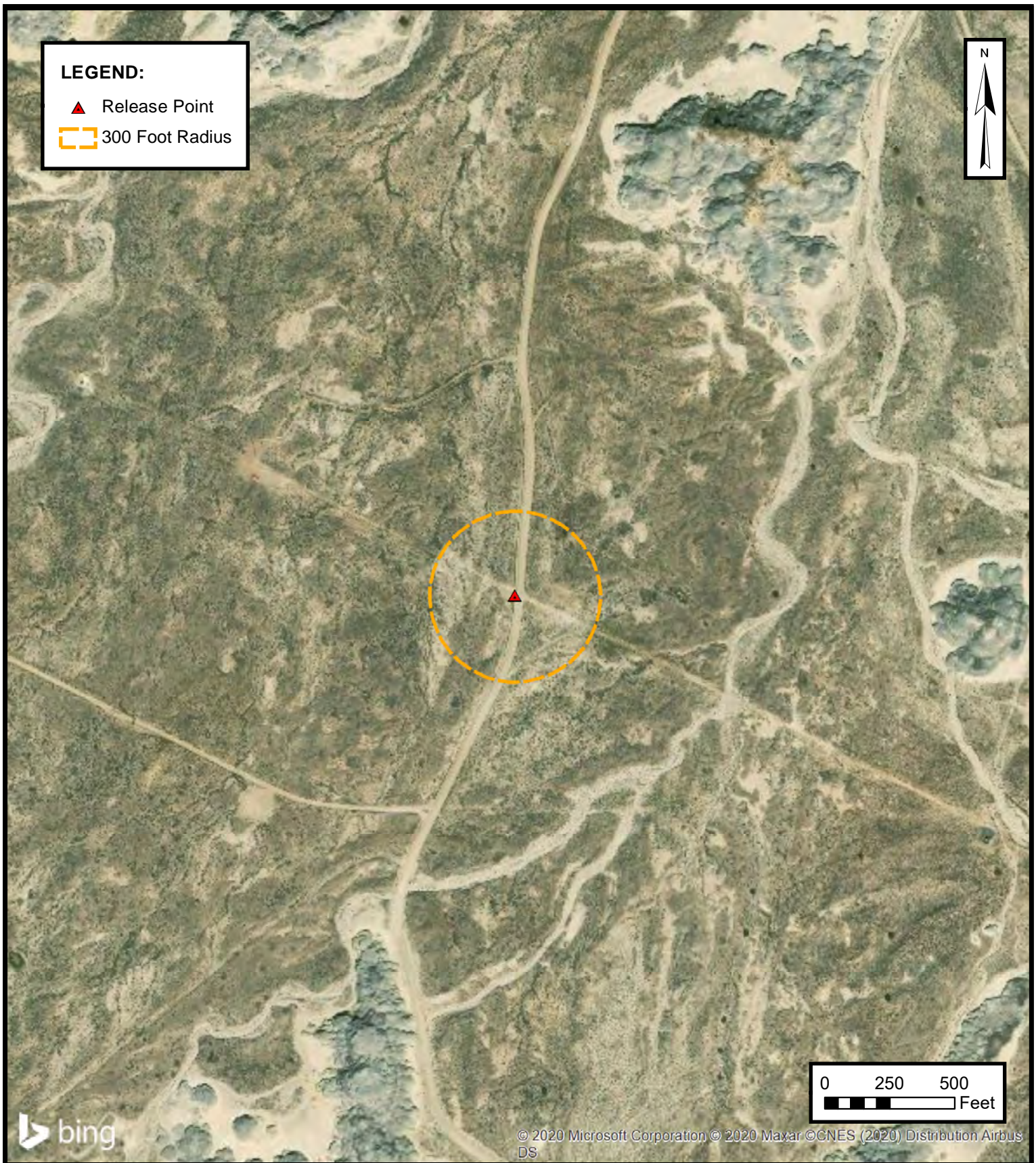
**300 FOOT RADIUS  
WATERCOURSE AND DRAINAGE IDENTIFICATION**

ENTERPRISE FIELD SERVICES, LLC  
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36.394070° N, 107.995589° W

PROJECT NUMBER: 05A1226127

**FIGURE  
C**



**ENSOLUM**

Environmental &amp; Hydrogeologic Consultants

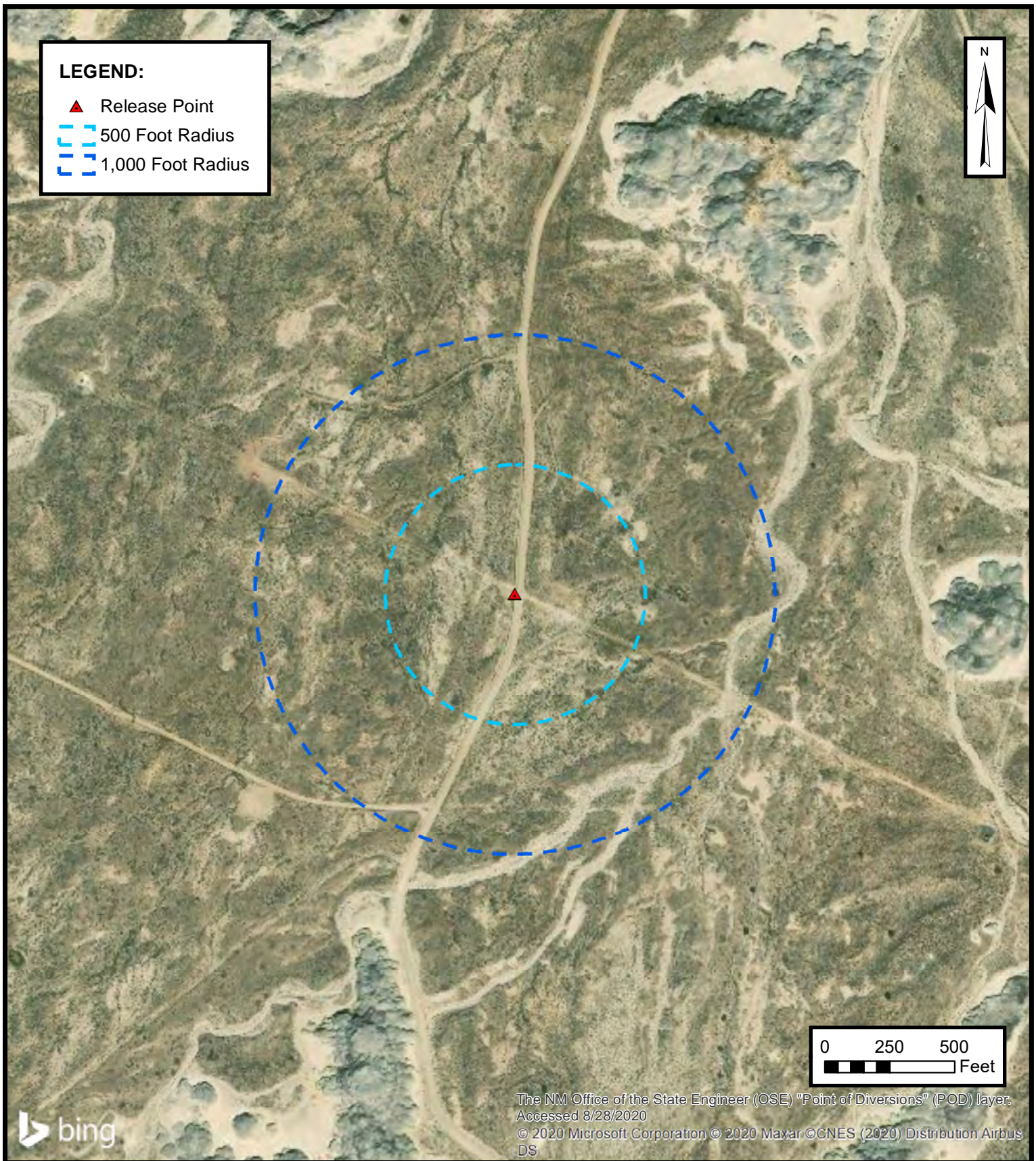
**300 FOOT RADIUS  
OCCUPIED STRUCTURE IDENTIFICATION**

ENTERPRISE FIELD SERVICES, LLC  
TRUNK 10A (11/25/20)  
SW ¼, S15 T25N R11W, San Juan County, New Mexico  
36.394070° N, 107.995589° W

PROJECT NUMBER: 05A1226127

**FIGURE****D**





**ENSOLUM**  
Environmental & Hydrogeologic Consultants

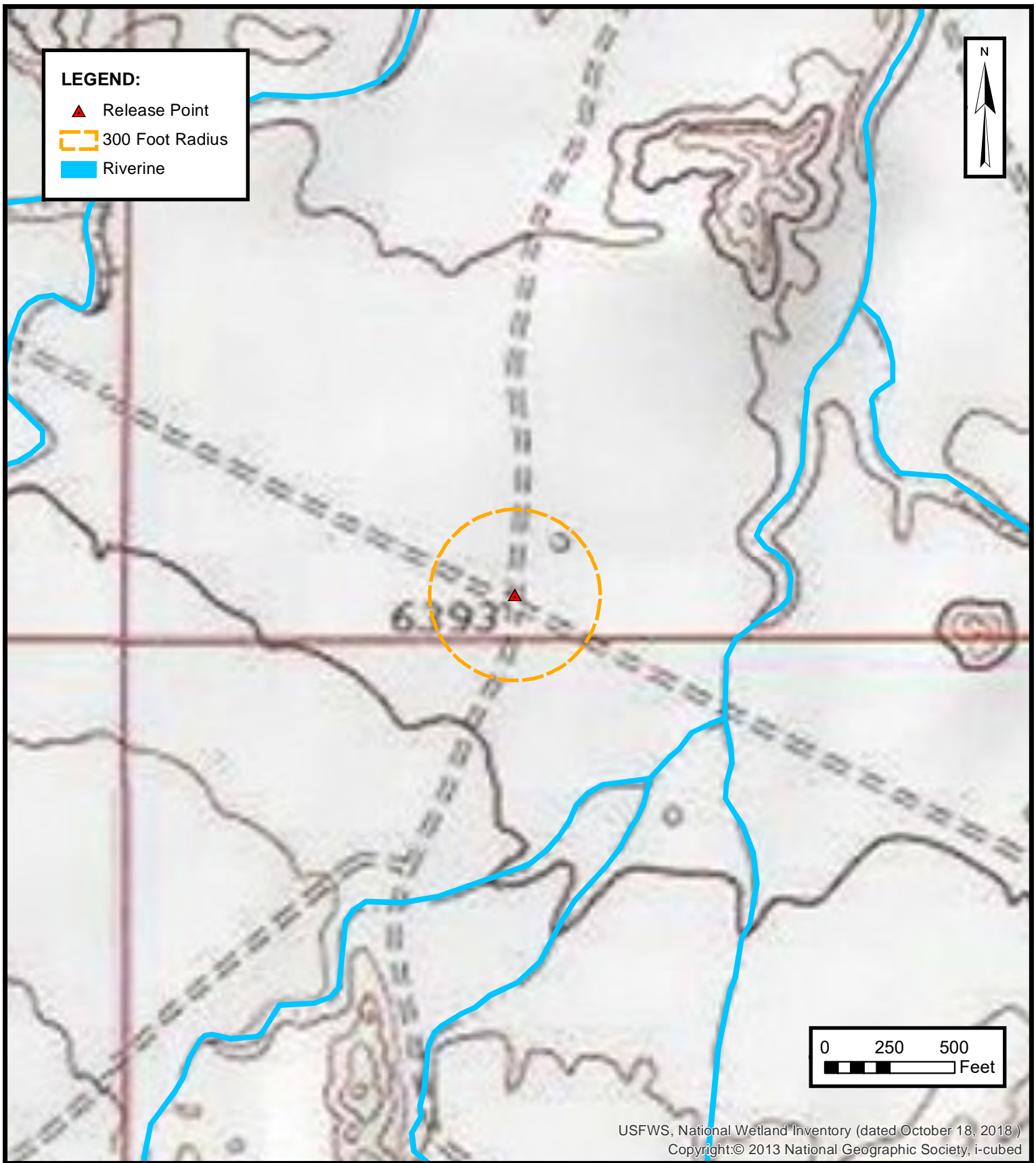
### WATER WELL AND NATURAL SPRING LOCATION

ENTERPRISE FIELD SERVICES, LLC  
TRUNK 10A (11/25/20)  
SW ¼, S15 T25N R11W, San Juan County, New Mexico  
36.394070° N, 107.995589° W

PROJECT NUMBER: 05A1226127

**FIGURE**  
**E**





**ENSOLUM**  
Environmental & Hydrogeologic Consultants

### WETLANDS

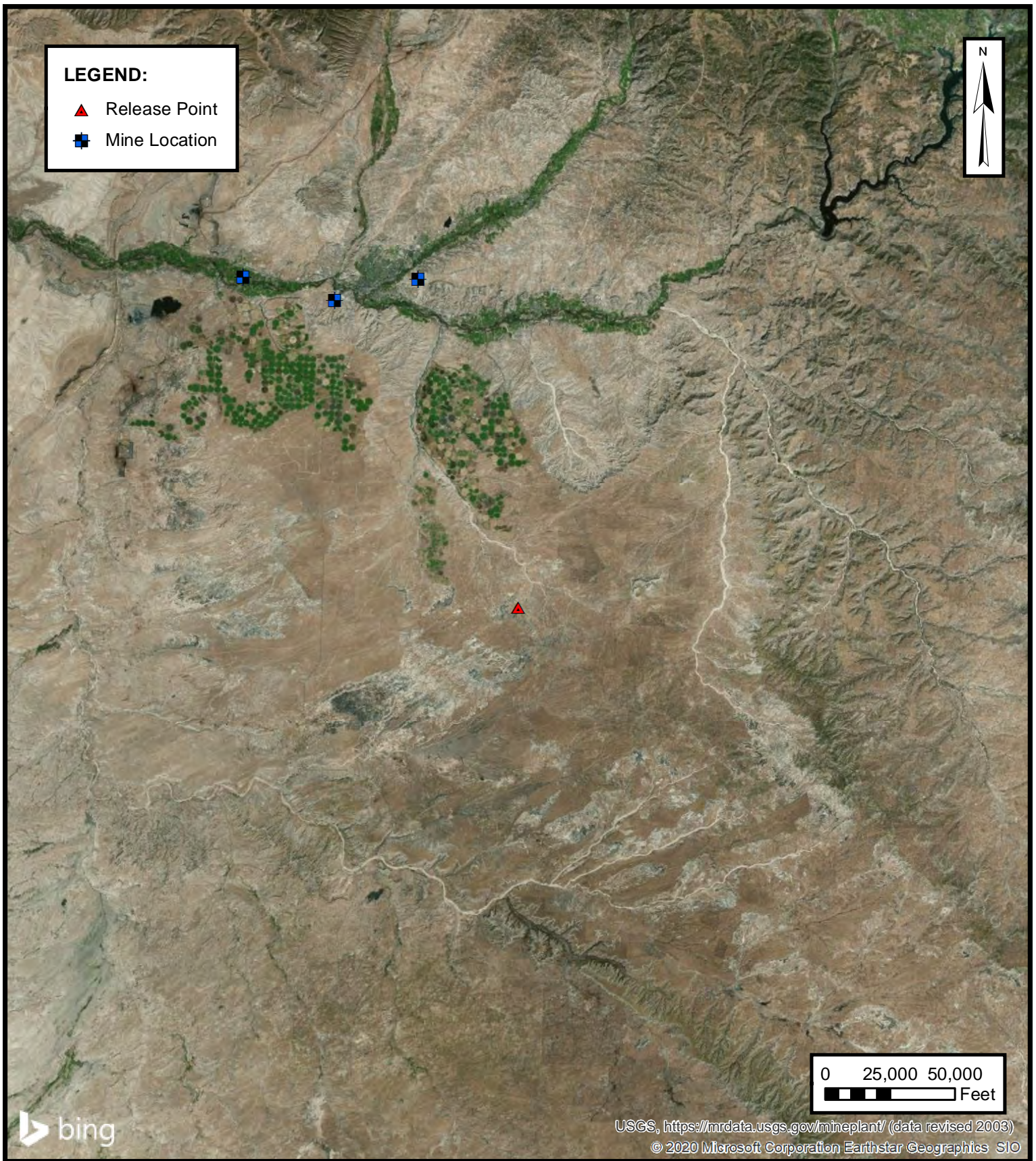
ENTERPRISE FIELD SERVICES, LLC  
TRUNK 10A (11/25/20)  
SW ¼, S15 T25N R11W, San Juan County, New Mexico  
36.394070° N, 107.995589° W

PROJECT NUMBER: 05A1226127

FIGURE

**F**



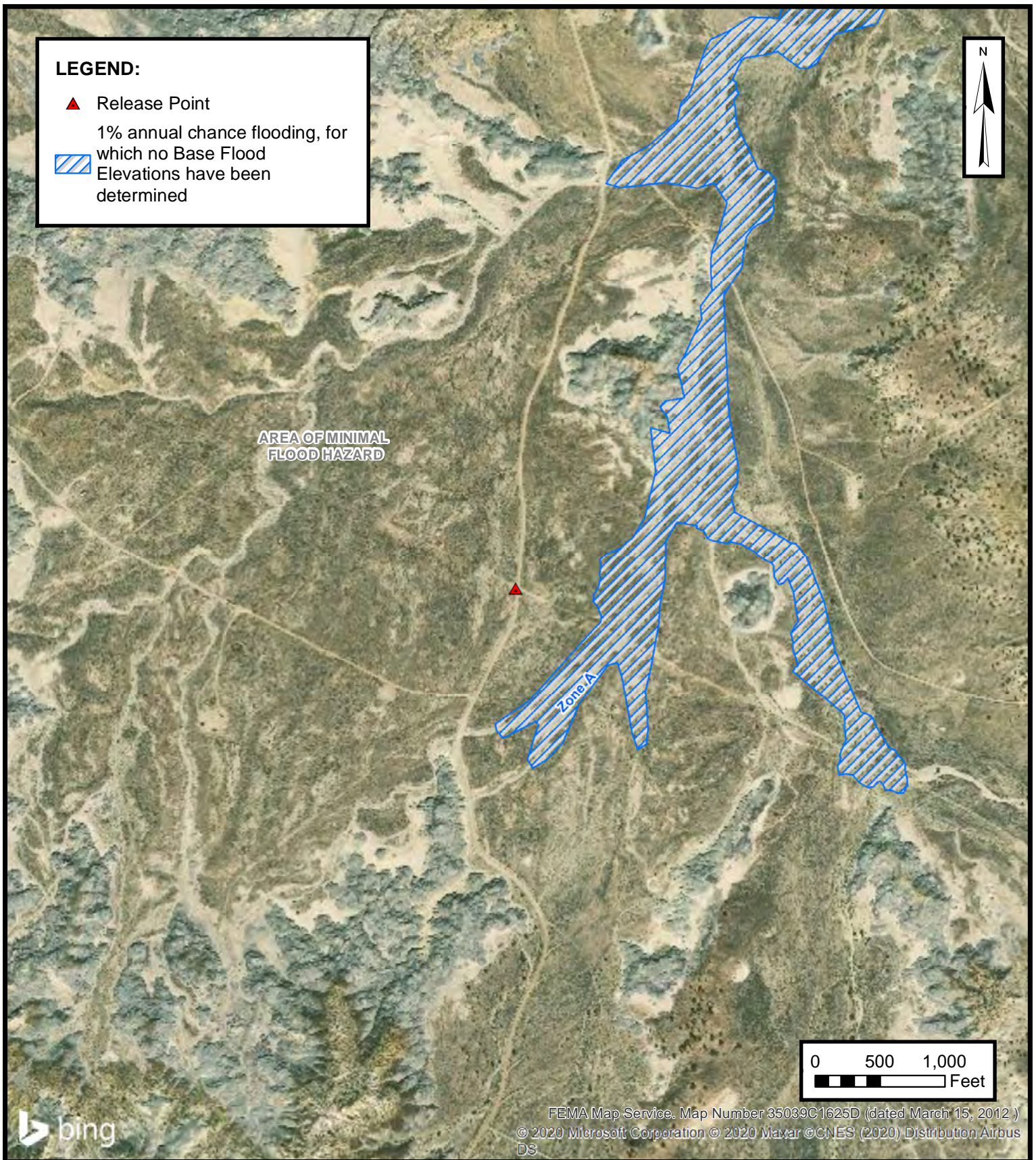


**ENSOLUM**  
Environmental & Hydrogeologic Consultants

**MINES, MILLS AND QUARRIES**  
ENTERPRISE FIELD SERVICES, LLC  
TRUNK 10A (11/25/20)  
SW ¼, S15 T25N R11W, San Juan County, New Mexico  
36.394070° N, 107.995589° W  
PROJECT NUMBER: 05A1226127

**FIGURE**  
**G**





**ENSOLUM**  
 Environmental & Hydrogeologic Consultants

**100-YEAR FLOOD PLAIN MAP**  
 ENTERPRISE FIELD SERVICES, LLC  
 TRUNK 10A (11/25/20)  
 SW ¼, S15 T25N R11W, San Juan County, New Mexico  
 36.394070° N, 107.995589° W

PROJECT NUMBER: 05A1226127

**FIGURE**  
**H**



## 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
2. Originating Site: Trunk 10A Pipeline
3. Location of Material (Street Address, City, State or ULSTR): Unit Letter N Section 15 T25N R 11W; 36.394070, -107.995589
4. Source and Description of Waste: Source: Soil/Sediment/water from remediation activities associated with a natural gas pipeline leak. Description: Soil/Sediment/water from remediation activities associated with a natural gas pipeline leak. Estimated Volume <u>50</u> yd <sup>3</sup> / bbls Known Volume (to be entered by the operator at the end of the haul) <u>337.45</u> yd <sup>3</sup> / bbls

Nov/Dec 2020

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
I, Thomas Long <i>Thomas Long</i> , representative or authorized agent for Enterprise Products Operating do hereby Generator Signature certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification) <input checked="" type="checkbox"/> RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non- exempt waste. <u>Operator Use Only: Waste Acceptance Frequency</u> <input type="checkbox"/> Monthly <input type="checkbox"/> Weekly <input type="checkbox"/> Per Load <input type="checkbox"/> RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items) <input type="checkbox"/> MSDS Information <input type="checkbox"/> RCRA Hazardous Waste Analysis <input type="checkbox"/> Process Knowledge <input type="checkbox"/> Other (Provide description in Box 4)

### GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long <i>Thomas Long</i> , representative for Enterprise Field Services, LLC authorizes <u>Envirotech, Inc.</u> to complete Generator Signature the required testing/sign the Generator Waste Testing Certification. I, <i>Yun Cui</i> , representative for <u>Envirotech, Inc.</u> do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.
---

5. Transporter: Riley Industrial
----------------------------------

### OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Envirotech, Inc. Soil Remediation Facility \* Permit #: NM01-0011  
Address of Facility: Hill Top, NM  
Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

### Waste Acceptance Status:

☒ APPROVED

☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Greg Crabtree

TITLE: Enviro Manager

DATE: 11/25/20

SIGNATURE: *Yun Cui*  
Surface Waste Management Facility Authorized Agent

TELEPHONE NO.: 505-632-0615



## APPENDIX D

### Photographic Documentation

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## SITE PHOTOGRAPHS

Enterprise Field Services, LLC  
Closure Report  
Trunk 10A (11/25/20)  
Ensolum Project No. 05A1226127

**Photograph 1**

Photograph Description: View of in-process excavation activities.

**Photograph 2**

Photograph Description: View of the initial excavation (first sampling event).

**Photograph 3**

Photograph Description: View of the initial excavation (first sampling event).





## SITE PHOTOGRAPHS

Enterprise Field Services, LLC  
Closure Report  
Trunk 10A (11/25/20)  
Ensolum Project No. 05A1226127

**Photograph 4**

Photograph Description: View of the scraped flow path.

**Photograph 5**

Photograph Description: View of the excavation (second sampling event).

**Photograph 6**

Photograph Description: View of the excavation after initial restoration.





## APPENDIX E

### Regulatory Correspondence

---

**From:** [Long, Thomas](#)  
**To:** "Steve Austin"; "Smith, Cory, EMNRD (Cory.Smith@state.nm.us)"  
**Cc:** [Stone, Brian](#)  
**Subject:** FW: [EXTERNAL] RE: Trunk 10A - UL N Section 15 T25N R 11W; 36.394070, -107.995589  
**Date:** Monday, December 7, 2020 2:39:00 PM  
**Attachments:** [Trunk 10A Site Map Dv2.PDF](#)  
[Trunk 10 A.pdf](#)

---

Cory/Steve,

Please find the attached site sketch and lab report for the Trunk 10A excavation. All sample results are below the Tier II remediation standards. Enterprise will backfill the excavation with clean imported fill material. 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:** Friday, December 4, 2020 7:53 AM  
**To:** 'Steve Austin' <nnepawq@frontiernet.net>; 'Smith, Cory, EMNRD' <Cory.Smith@state.nm.us>  
**Cc:** Stone, Brian <bmstone@eprod.com>  
**Subject:** RE: [EXTERNAL] RE: Trunk 10A - UL N Section 15 T25N R 11W; 36.394070, -107.995589

Cory/Steve,

Please find the attaches site sketch and lab report for the Trunk 10A excavation. All sample results are below the Tier II remediation standard except for S-10 with where to top 4 feet don't meet the Tier I remediation standard. Enterprise will excavate more and resample today. 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:** Steve Austin <[nnepawq@frontiernet.net](mailto:nnepawq@frontiernet.net)>  
**Sent:** Wednesday, December 2, 2020 1:43 PM  
**To:** 'Smith, Cory, EMNRD' <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; Long, Thomas <[tjlong@eprod.com](mailto:tjlong@eprod.com)>  
**Cc:** Stone, Brian <[bmstone@eprod.com](mailto:bmstone@eprod.com)>  
**Subject:** [EXTERNAL] RE: Trunk 10A - UL N Section 15 T25N R 11W; 36.394070, -107.995589

[Use caution with links/attachments]

Tom,

NNEPA also approves your planned sampling for this release today. Please continue to keep me informed as remediation progresses.

--Steve

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

---

**From:** Smith, Cory, EMNRD [<mailto:Cory.Smith@state.nm.us>]  
**Sent:** Wednesday, December 02, 2020 1:32 PM  
**To:** Long, Thomas <[tjlong@eprod.com](mailto:tjlong@eprod.com)>; Steve Austin <[nnepawq@frontiernet.net](mailto:nnepawq@frontiernet.net)>  
**Cc:** Stone, Brian <[bmstone@eprod.com](mailto:bmstone@eprod.com)>  
**Subject:** RE: Trunk 10A - UL N Section 15 T25N R 11W; 36.394070, -107.995589

Tom,

OCD approves Enterprise to collect confirmation samples so long as the NNEPA is ok with the proposed sampling time/date!

Please include this approval in your final C-141 as a hard copy will not be sent to you.

**Cory Smith • Environmental Specialist**  
Environmental Bureau  
EMNRD - Oil Conservation Division  
1000 Rio Brazos | Aztec, NM 87410  
505.334.6178 x115 | [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:** Wednesday, December 2, 2020 1:05 PM

**To:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; Steve Austin <[nnepawq@frontiernet.net](mailto:nnepawq@frontiernet.net)>  
**Cc:** Stone, Brian <[bmstone@eprod.com](mailto:bmstone@eprod.com)>  
**Subject:** [EXT] RE: Trunk 10A - UL N Section 15 T25N R 11W; 36.394070, -107.995589

Cory/Steve,

Please find the attached pictures of the Trunk 10A excavation.

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:** Wednesday, December 2, 2020 12:48 PM  
**To:** Long, Thomas <[tjlong@eprod.com](mailto:tjlong@eprod.com)>; Steve Austin <[nnepawq@frontiernet.net](mailto:nnepawq@frontiernet.net)>  
**Cc:** Stone, Brian <[bmstone@eprod.com](mailto:bmstone@eprod.com)>  
**Subject:** [EXTERNAL] RE: Trunk 10A - UL N Section 15 T25N R 11W; 36.394070, -107.995589

[Use caution with links/attachments]

Tom,

Could you please send some pictures of the excavation.

**Cory Smith** • Environmental Specialist  
Environmental Bureau  
EMNRD - Oil Conservation Division  
1000 Rio Brazos | Aztec, NM 87410  
505.3346178 x115 | [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:** Wednesday, December 2, 2020 12:44 PM  
**To:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; Steve Austin <[nnepawq@frontiernet.net](mailto:nnepawq@frontiernet.net)>  
**Cc:** Stone, Brian <[bmstone@eprod.com](mailto:bmstone@eprod.com)>  
**Subject:** [EXT] Trunk 10A - UL N Section 15 T25N R 11W; 36.394070, -107.995589

Cory/Steve,



This email is a notification that Enterprise had a release of natural gas and natural gas liquids on November 25, 2020 from the Trunk 10A pipeline. Minimal amount of fluids were released to the ground surface. No washes/waterways were affected. The pipeline was isolated, depressurized, locked and tagged out. Enterprise began repairs and remediation December 2, 2020 and determined this release reportable per NMOC regulation, due to the volume of impacted subsurface soil. In addition, Enterprise is requesting a variance for the 48 hour sampling notification requirement, and requesting to sample part of the excavation today. The variance request is necessary as that the remediation activities and the excavation is encroaching into the county road and Enterprise does not want to restrict residences along county road 7150. Please acknowledge acceptance of this variance request. If you have any questions, please call or email.

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

### Tables



TABLE 1A Trunk 10A (11/25/20) SOIL ANALYTICAL SUMMARY (SOIL ZONE: CONTAINS ALIQUOTS FROM < 4 FEET BGS)														
Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample Depth (Feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO) (mg/kg)	Total Combined TPH (GRO/DRO/MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria (Tier II)				10	NE	NE	NE	50				1,000	2,500	10,000
Composite Soil Samples Removed by Excavation and Transported to the Landfarm for Disposal/Remediation														
S-10	12.02.20	C	0 to 8	0.018	<0.033	<0.033	<0.065	0.018	<3.3	74	130	74	204	640
Composite Soil Sample Collected from Flow Path														
FP-1	12.02.20	C	0.25	<0.017	<0.034	<0.034	<0.069	ND	<3.4	<10	<50	ND	ND	360
FP-2	12.04.20	C	0.25	<0.015	<0.029	<0.029	<0.058	ND	<2.9	<9.3	<46	ND	ND	230
Excavation Composite Soil Samples														
S-5	12.02.20	C	0 to 8	<0.017	<0.034	<0.034	<0.069	ND	<3.4	<9.4	<47	ND	ND	390
S-6	12.02.20	C	0 to 8	<0.017	<0.035	<0.035	<0.069	ND	<3.5	<9.4	<47	ND	ND	69
S-7	12.02.20	C	0 to 8	<0.020	<0.040	<0.040	<0.080	ND	<4.0	<10	<50	ND	ND	150
S-8	12.02.20	C	0 to 8	<0.017	<0.035	<0.035	<0.070	ND	<3.5	14	<45	14	14	92
S-9	12.02.20	C	0 to 8	<0.019	<0.038	<0.038	<0.077	ND	<3.8	28	<50	28	28	260
S-11*	12.02.20	C	0 to 7	<0.019	<0.039	<0.039	<0.077	ND	<3.9	<9.9	<50	ND	ND	550
S-12	12.02.20	C	0 to 7	<0.018	<0.036	<0.036	<0.073	ND	<3.6	<9.4	<47	ND	ND	400
S-13	12.02.20	C	0 to 7	<0.019	<0.038	<0.038	<0.077	ND	<3.8	<9.3	<46	ND	ND	210
S-15	12.04.20	C	0 to 8	<0.021	<0.043	<0.043	<0.086	ND	<4.3	<9.8	<49	ND	ND	310
S-16	12.04.20	C	0 to 8	<0.021	<0.041	<0.041	<0.083	ND	<4.1	<9.5	<47	ND	ND	260

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

\* = Partially Removed by Excavation

ND = Not Detected above the Practical Quantitation Limits or Reporting Limits

NA = Not Analyzed

NE = Not Established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPH = Total Petroleum Hydrocarbon

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics



TABLE 1B Trunk 10A (11/25/20) SOIL ANALYTICAL SUMMARY (CONTAINS ALIQUOTS FROM >4 FEET BGS)														
Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample Depth (Feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO) (mg/kg)	Total Combined TPH (GRO/DRO/MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria (Tier II)				10	NE	NE	NE	50				1,000	2,500	10,000
Excavation Composite Soil Samples														
S-1	12.02.20	C	8	<0.019	<0.037	<0.037	<0.074	ND	<3.7	11	<45	11	11	790
S-2	12.02.20	C	8	<0.017	<0.034	<0.034	<0.067	ND	<3.4	120	110	120	230	750
S-3	12.02.20	C	7	<0.016	<0.032	<0.032	<0.064	ND	<3.2	190	210	190	400	880
S-4	12.02.20	C	7	0.028	0.037	<0.033	0.081	0.146	<3.3	170	190	170	360	1,000
S-14	12.04.20	C	8	<0.021	<0.041	<0.041	<0.083	ND	<4.1	<9.1	<46	ND	ND	210

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

ND = Not Detected above the Practical Quantitation Limits or Reporting Limits

NA = Not Analyzed

NE = Not Established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPH = Total Petroleum Hydrocarbon

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)

December 07, 2020

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: Trunk 10A

OrderNo.: 2012160

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 14 sample(s) on 12/3/2020 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 2012160

Date Reported: 12/7/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-1

Project: Trunk 10A

Collection Date: 12/2/2020 2:30:00 PM

Lab ID: 2012160-001

Matrix: SOIL

Received Date: 12/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	790	60		mg/Kg	20	12/3/2020 11:06:51 AM	56775
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	11	9.0		mg/Kg	1	12/3/2020 9:37:15 AM	56771
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	12/3/2020 9:37:15 AM	56771
Surr: DNOP	99.7	30.4-154		%Rec	1	12/3/2020 9:37:15 AM	56771
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	12/3/2020 11:03:37 AM	56759
Surr: BFB	101	75.3-105		%Rec	1	12/3/2020 11:03:37 AM	56759
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.019		mg/Kg	1	12/3/2020 11:03:37 AM	56759
Toluene	ND	0.037		mg/Kg	1	12/3/2020 11:03:37 AM	56759
Ethylbenzene	ND	0.037		mg/Kg	1	12/3/2020 11:03:37 AM	56759
Xylenes, Total	ND	0.074		mg/Kg	1	12/3/2020 11:03:37 AM	56759
Surr: 4-Bromofluorobenzene	96.1	80-120		%Rec	1	12/3/2020 11:03:37 AM	56759

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		

Page 1 of 21



## Analytical Report

Lab Order 2012160

Date Reported: 12/7/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-2

Project: Trunk 10A

Collection Date: 12/2/2020 2:35:00 PM

Lab ID: 2012160-002

Matrix: SOIL

Received Date: 12/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	750	60		mg/Kg	20	12/3/2020 11:19:15 AM	56775
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	120	9.1		mg/Kg	1	12/3/2020 9:46:32 AM	56771
Motor Oil Range Organics (MRO)	110	46		mg/Kg	1	12/3/2020 9:46:32 AM	56771
Surr: DNOP	106	30.4-154		%Rec	1	12/3/2020 9:46:32 AM	56771
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	12/3/2020 11:27:03 AM	56759
Surr: BFB	99.8	75.3-105		%Rec	1	12/3/2020 11:27:03 AM	56759
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.017		mg/Kg	1	12/3/2020 11:27:03 AM	56759
Toluene	ND	0.034		mg/Kg	1	12/3/2020 11:27:03 AM	56759
Ethylbenzene	ND	0.034		mg/Kg	1	12/3/2020 11:27:03 AM	56759
Xylenes, Total	ND	0.067		mg/Kg	1	12/3/2020 11:27:03 AM	56759
Surr: 4-Bromofluorobenzene	98.8	80-120		%Rec	1	12/3/2020 11:27:03 AM	56759

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		

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## Analytical Report

Lab Order 2012160

Date Reported: 12/7/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-3

Project: Trunk 10A

Collection Date: 12/2/2020 2:40:00 PM

Lab ID: 2012160-003

Matrix: SOIL

Received Date: 12/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: VP
Chloride	880	60		mg/Kg	20	12/3/2020 11:31:40 AM	56775
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	190	9.4		mg/Kg	1	12/3/2020 9:55:53 AM	56771
Motor Oil Range Organics (MRO)	210	47		mg/Kg	1	12/3/2020 9:55:53 AM	56771
Surr: DNOP	114	30.4-154		%Rec	1	12/3/2020 9:55:53 AM	56771
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	12/3/2020 11:50:42 AM	56759
Surr: BFB	99.5	75.3-105		%Rec	1	12/3/2020 11:50:42 AM	56759
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.016		mg/Kg	1	12/3/2020 11:50:42 AM	56759
Toluene	ND	0.032		mg/Kg	1	12/3/2020 11:50:42 AM	56759
Ethylbenzene	ND	0.032		mg/Kg	1	12/3/2020 11:50:42 AM	56759
Xylenes, Total	ND	0.064		mg/Kg	1	12/3/2020 11:50:42 AM	56759
Surr: 4-Bromofluorobenzene	95.5	80-120		%Rec	1	12/3/2020 11:50:42 AM	56759

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		

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## Analytical Report

Lab Order 2012160

Date Reported: 12/7/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-4

Project: Trunk 10A

Collection Date: 12/2/2020 2:45:00 PM

Lab ID: 2012160-004

Matrix: SOIL

Received Date: 12/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: VP
Chloride	1000	60		mg/Kg	20	12/3/2020 11:44:04 AM	56775
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	170	8.8		mg/Kg	1	12/3/2020 10:05:18 AM	56771
Motor Oil Range Organics (MRO)	190	44		mg/Kg	1	12/3/2020 10:05:18 AM	56771
Surr: DNOP	101	30.4-154		%Rec	1	12/3/2020 10:05:18 AM	56771
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	12/3/2020 12:14:12 PM	56759
Surr: BFB	105	75.3-105		%Rec	1	12/3/2020 12:14:12 PM	56759
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	0.028	0.017		mg/Kg	1	12/3/2020 12:14:12 PM	56759
Toluene	0.037	0.033		mg/Kg	1	12/3/2020 12:14:12 PM	56759
Ethylbenzene	ND	0.033		mg/Kg	1	12/3/2020 12:14:12 PM	56759
Xylenes, Total	0.081	0.066		mg/Kg	1	12/3/2020 12:14:12 PM	56759
Surr: 4-Bromofluorobenzene	99.8	80-120		%Rec	1	12/3/2020 12:14:12 PM	56759

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		

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## Analytical Report

Lab Order 2012160

Date Reported: 12/7/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-5

Project: Trunk 10A

Collection Date: 12/2/2020 2:50:00 PM

Lab ID: 2012160-005

Matrix: SOIL

Received Date: 12/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: VP
Chloride	390	60		mg/Kg	20	12/3/2020 11:56:28 AM	56775
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/3/2020 10:14:46 AM	56771
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/3/2020 10:14:46 AM	56771
Surr: DNOP	100	30.4-154		%Rec	1	12/3/2020 10:14:46 AM	56771
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	12/3/2020 12:37:38 PM	56759
Surr: BFB	97.4	75.3-105		%Rec	1	12/3/2020 12:37:38 PM	56759
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.017		mg/Kg	1	12/3/2020 12:37:38 PM	56759
Toluene	ND	0.034		mg/Kg	1	12/3/2020 12:37:38 PM	56759
Ethylbenzene	ND	0.034		mg/Kg	1	12/3/2020 12:37:38 PM	56759
Xylenes, Total	ND	0.069		mg/Kg	1	12/3/2020 12:37:38 PM	56759
Surr: 4-Bromofluorobenzene	98.7	80-120		%Rec	1	12/3/2020 12:37:38 PM	56759

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		

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## Analytical Report

Lab Order 2012160

Date Reported: 12/7/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-6

Project: Trunk 10A

Collection Date: 12/2/2020 2:55:00 PM

Lab ID: 2012160-006

Matrix: SOIL

Received Date: 12/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: VP
Chloride	69	59		mg/Kg	20	12/3/2020 12:08:53 PM	56775
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/3/2020 10:24:15 AM	56771
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/3/2020 10:24:15 AM	56771
Surr: DNOP	97.8	30.4-154		%Rec	1	12/3/2020 10:24:15 AM	56771
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	12/3/2020 1:01:13 PM	56759
Surr: BFB	100	75.3-105		%Rec	1	12/3/2020 1:01:13 PM	56759
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.017		mg/Kg	1	12/3/2020 1:01:13 PM	56759
Toluene	ND	0.035		mg/Kg	1	12/3/2020 1:01:13 PM	56759
Ethylbenzene	ND	0.035		mg/Kg	1	12/3/2020 1:01:13 PM	56759
Xylenes, Total	ND	0.069		mg/Kg	1	12/3/2020 1:01:13 PM	56759
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	12/3/2020 1:01:13 PM	56759

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		

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## Analytical Report

Lab Order 2012160

Date Reported: 12/7/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-7

Project: Trunk 10A

Collection Date: 12/2/2020 3:00:00 PM

Lab ID: 2012160-007

Matrix: SOIL

Received Date: 12/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: VP
Chloride	150	61		mg/Kg	20	12/3/2020 12:21:18 PM	56775
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/3/2020 10:33:51 AM	56771
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/3/2020 10:33:51 AM	56771
Surr: DNOP	97.2	30.4-154		%Rec	1	12/3/2020 10:33:51 AM	56771
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	12/3/2020 1:24:53 PM	56759
Surr: BFB	101	75.3-105		%Rec	1	12/3/2020 1:24:53 PM	56759
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.020		mg/Kg	1	12/3/2020 1:24:53 PM	56759
Toluene	ND	0.040		mg/Kg	1	12/3/2020 1:24:53 PM	56759
Ethylbenzene	ND	0.040		mg/Kg	1	12/3/2020 1:24:53 PM	56759
Xylenes, Total	ND	0.080		mg/Kg	1	12/3/2020 1:24:53 PM	56759
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	12/3/2020 1:24:53 PM	56759

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		

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## Analytical Report

Lab Order 2012160

Date Reported: 12/7/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-8

Project: Trunk 10A

Collection Date: 12/2/2020 3:05:00 PM

Lab ID: 2012160-008

Matrix: SOIL

Received Date: 12/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	92	60		mg/Kg	20	12/3/2020 12:33:42 PM	56775
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	14	9.0		mg/Kg	1	12/3/2020 10:43:20 AM	56771
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	12/3/2020 10:43:20 AM	56771
Surr: DNOP	99.0	30.4-154		%Rec	1	12/3/2020 10:43:20 AM	56771
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	12/3/2020 1:48:24 PM	56759
Surr: BFB	101	75.3-105		%Rec	1	12/3/2020 1:48:24 PM	56759
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.017		mg/Kg	1	12/3/2020 1:48:24 PM	56759
Toluene	ND	0.035		mg/Kg	1	12/3/2020 1:48:24 PM	56759
Ethylbenzene	ND	0.035		mg/Kg	1	12/3/2020 1:48:24 PM	56759
Xylenes, Total	ND	0.070		mg/Kg	1	12/3/2020 1:48:24 PM	56759
Surr: 4-Bromofluorobenzene	99.0	80-120		%Rec	1	12/3/2020 1:48:24 PM	56759

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		

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## Analytical Report

Lab Order 2012160

Date Reported: 12/7/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-9

Project: Trunk 10A

Collection Date: 12/2/2020 3:10:00 PM

Lab ID: 2012160-009

Matrix: SOIL

Received Date: 12/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	260	61		mg/Kg	20	12/3/2020 1:10:55 PM	56775
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	28	9.9		mg/Kg	1	12/3/2020 10:52:54 AM	56771
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/3/2020 10:52:54 AM	56771
Surr: DNOP	101	30.4-154		%Rec	1	12/3/2020 10:52:54 AM	56771
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	12/3/2020 2:11:57 PM	56759
Surr: BFB	99.0	75.3-105		%Rec	1	12/3/2020 2:11:57 PM	56759
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.019		mg/Kg	1	12/3/2020 2:11:57 PM	56759
Toluene	ND	0.038		mg/Kg	1	12/3/2020 2:11:57 PM	56759
Ethylbenzene	ND	0.038		mg/Kg	1	12/3/2020 2:11:57 PM	56759
Xylenes, Total	ND	0.077		mg/Kg	1	12/3/2020 2:11:57 PM	56759
Surr: 4-Bromofluorobenzene	98.6	80-120		%Rec	1	12/3/2020 2:11:57 PM	56759

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		

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## Analytical Report

Lab Order 2012160

Date Reported: 12/7/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-10

Project: Trunk 10A

Collection Date: 12/2/2020 3:15:00 PM

Lab ID: 2012160-010

Matrix: SOIL

Received Date: 12/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: VP
Chloride	640	60		mg/Kg	20	12/3/2020 1:23:20 PM	56775
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	74	10		mg/Kg	1	12/3/2020 11:02:13 AM	56771
Motor Oil Range Organics (MRO)	130	50		mg/Kg	1	12/3/2020 11:02:13 AM	56771
Surr: DNOP	99.5	30.4-154		%Rec	1	12/3/2020 11:02:13 AM	56771
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	12/3/2020 2:35:32 PM	56759
Surr: BFB	106	75.3-105	S	%Rec	1	12/3/2020 2:35:32 PM	56759
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	0.018	0.016		mg/Kg	1	12/3/2020 2:35:32 PM	56759
Toluene	ND	0.033		mg/Kg	1	12/3/2020 2:35:32 PM	56759
Ethylbenzene	ND	0.033		mg/Kg	1	12/3/2020 2:35:32 PM	56759
Xylenes, Total	ND	0.065		mg/Kg	1	12/3/2020 2:35:32 PM	56759
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	12/3/2020 2:35:32 PM	56759

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 2012160

Date Reported: 12/7/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-11

Project: Trunk 10A

Collection Date: 12/2/2020 3:20:00 PM

Lab ID: 2012160-011

Matrix: SOIL

Received Date: 12/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	550	60		mg/Kg	20	12/3/2020 1:35:45 PM	56775
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	12/3/2020 1:54:29 PM	G73763
Surr: BFB	108	70-130		%Rec	1	12/3/2020 1:54:29 PM	G73763
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/3/2020 9:36:41 AM	56771
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/3/2020 9:36:41 AM	56771
Surr: DNOP	102	30.4-154		%Rec	1	12/3/2020 9:36:41 AM	56771
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
Benzene	ND	0.019		mg/Kg	1	12/3/2020 1:54:29 PM	S73763
Toluene	ND	0.039		mg/Kg	1	12/3/2020 1:54:29 PM	S73763
Ethylbenzene	ND	0.039		mg/Kg	1	12/3/2020 1:54:29 PM	S73763
Xylenes, Total	ND	0.077		mg/Kg	1	12/3/2020 1:54:29 PM	S73763
Surr: 1,2-Dichloroethane-d4	96.3	70-130		%Rec	1	12/3/2020 1:54:29 PM	S73763
Surr: Dibromofluoromethane	109	70-130		%Rec	1	12/3/2020 1:54:29 PM	S73763
Surr: Toluene-d8	87.6	70-130		%Rec	1	12/3/2020 1:54:29 PM	S73763

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		

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## Analytical Report

Lab Order 2012160

Date Reported: 12/7/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-12

Project: Trunk 10A

Collection Date: 12/2/2020 3:25:00 PM

Lab ID: 2012160-012

Matrix: SOIL

Received Date: 12/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	400	60		mg/Kg	20	12/3/2020 1:48:09 PM	56775
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	12/3/2020 1:25:53 PM	G73763
Surr: BFB	107	70-130		%Rec	1	12/3/2020 1:25:53 PM	G73763
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/3/2020 10:00:37 AM	56771
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/3/2020 10:00:37 AM	56771
Surr: DNOP	99.6	30.4-154		%Rec	1	12/3/2020 10:00:37 AM	56771
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
Benzene	ND	0.018		mg/Kg	1	12/3/2020 1:25:53 PM	S73763
Toluene	ND	0.036		mg/Kg	1	12/3/2020 1:25:53 PM	S73763
Ethylbenzene	ND	0.036		mg/Kg	1	12/3/2020 1:25:53 PM	S73763
Xylenes, Total	ND	0.073		mg/Kg	1	12/3/2020 1:25:53 PM	S73763
Surr: 1,2-Dichloroethane-d4	95.9	70-130		%Rec	1	12/3/2020 1:25:53 PM	S73763
Surr: Dibromofluoromethane	108	70-130		%Rec	1	12/3/2020 1:25:53 PM	S73763
Surr: Toluene-d8	89.6	70-130		%Rec	1	12/3/2020 1:25:53 PM	S73763

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		

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## Analytical Report

Lab Order 2012160

Date Reported: 12/7/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-13

Project: Trunk 10A

Collection Date: 12/2/2020 3:30:00 PM

Lab ID: 2012160-013

Matrix: SOIL

Received Date: 12/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	210	60		mg/Kg	20	12/3/2020 2:00:34 PM	56775
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	12/3/2020 12:57:16 PM	G73763
Surr: BFB	111	70-130		%Rec	1	12/3/2020 12:57:16 PM	G73763
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/3/2020 10:24:24 AM	56771
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/3/2020 10:24:24 AM	56771
Surr: DNOP	105	30.4-154		%Rec	1	12/3/2020 10:24:24 AM	56771
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
Benzene	ND	0.019		mg/Kg	1	12/3/2020 12:57:16 PM	S73763
Toluene	ND	0.038		mg/Kg	1	12/3/2020 12:57:16 PM	S73763
Ethylbenzene	ND	0.038		mg/Kg	1	12/3/2020 12:57:16 PM	S73763
Xylenes, Total	ND	0.077		mg/Kg	1	12/3/2020 12:57:16 PM	S73763
Surr: 1,2-Dichloroethane-d4	92.5	70-130		%Rec	1	12/3/2020 12:57:16 PM	S73763
Surr: Dibromofluoromethane	107	70-130		%Rec	1	12/3/2020 12:57:16 PM	S73763
Surr: Toluene-d8	90.5	70-130		%Rec	1	12/3/2020 12:57:16 PM	S73763

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		

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## Analytical Report

Lab Order 2012160

Date Reported: 12/7/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: FP-1

Project: Trunk 10A

Collection Date: 12/2/2020 3:35:00 PM

Lab ID: 2012160-014

Matrix: SOIL

Received Date: 12/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	360	60		mg/Kg	20	12/3/2020 2:12:59 PM	56775
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	12/3/2020 12:28:43 PM	G73763
Surr: BFB	108	70-130		%Rec	1	12/3/2020 12:28:43 PM	G73763
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/3/2020 10:48:20 AM	56771
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/3/2020 10:48:20 AM	56771
Surr: DNOP	103	30.4-154		%Rec	1	12/3/2020 10:48:20 AM	56771
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
Benzene	ND	0.017		mg/Kg	1	12/3/2020 12:28:43 PM	S73763
Toluene	ND	0.034		mg/Kg	1	12/3/2020 12:28:43 PM	S73763
Ethylbenzene	ND	0.034		mg/Kg	1	12/3/2020 12:28:43 PM	S73763
Xylenes, Total	ND	0.069		mg/Kg	1	12/3/2020 12:28:43 PM	S73763
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%Rec	1	12/3/2020 12:28:43 PM	S73763
Surr: Dibromofluoromethane	111	70-130		%Rec	1	12/3/2020 12:28:43 PM	S73763
Surr: Toluene-d8	92.0	70-130		%Rec	1	12/3/2020 12:28:43 PM	S73763

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#: 2012160

07-Dec-20

**Client:** ENSOLUM**Project:** Trunk 10A

Sample ID: <b>MB-56775</b>		SampType: <b>MBLK</b>		TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>PBS</b>		Batch ID: <b>56775</b>		RunNo: <b>73764</b>						
Prep Date: <b>12/3/2020</b>		Analysis Date: <b>12/3/2020</b>		SeqNo: <b>2600925</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-56775</b>		SampType: <b>LCS</b>		TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>LCSS</b>		Batch ID: <b>56775</b>		RunNo: <b>73764</b>						
Prep Date: <b>12/3/2020</b>		Analysis Date: <b>12/3/2020</b>		SeqNo: <b>2600926</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	93.1	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

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012160

07-Dec-20

**Client:** ENSOLUM**Project:** Trunk 10A

Sample ID: <b>LCS-56771</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>56771</b>			RunNo: <b>73748</b>						
Prep Date: <b>12/3/2020</b>	Analysis Date: <b>12/3/2020</b>			SeqNo: <b>2599477</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.5	70	130			
Surr: DNOP	5.0		5.000		99.9	30.4	154			

Sample ID: <b>MB-56771</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>56771</b>			RunNo: <b>73748</b>						
Prep Date: <b>12/3/2020</b>	Analysis Date: <b>12/3/2020</b>			SeqNo: <b>2599478</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	9.8		10.00		97.7	30.4	154			

**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

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012160

07-Dec-20

**Client:** ENSOLUM**Project:** Trunk 10A

Sample ID: <b>lcs-56759</b>		SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>					
Client ID: <b>LCSS</b>		Batch ID: <b>56759</b>			RunNo: <b>73762</b>					
Prep Date: <b>12/2/2020</b>		Analysis Date: <b>12/3/2020</b>			SeqNo: <b>2600108</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	108	72.5	106			S
Surr: BFB	1100		1000		114	75.3	105			S

Sample ID: <b>mb-56759</b>		SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>PBS</b>		Batch ID: <b>56759</b>			RunNo: <b>73762</b>						
Prep Date: <b>12/2/2020</b>		Analysis Date: <b>12/3/2020</b>			SeqNo: <b>2600109</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		103	75.3	105			

**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#: 2012160

07-Dec-20

**Client:** ENSOLUM**Project:** Trunk 10A

Sample ID: <b>LCS-56759</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>56759</b>			RunNo: <b>73762</b>						
Prep Date: <b>12/2/2020</b>	Analysis Date: <b>12/3/2020</b>			SeqNo: <b>2600159</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.0	80	120			
Toluene	0.97	0.050	1.000	0	97.3	80	120			
Ethylbenzene	0.98	0.050	1.000	0	97.8	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.7	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID: <b>mb-56759</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>PBS</b>	Batch ID: <b>56759</b>			RunNo: <b>73762</b>						
Prep Date: <b>12/2/2020</b>	Analysis Date: <b>12/3/2020</b>			SeqNo: <b>2600160</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	1.0		1.000		102	80	120			

**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

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012160

07-Dec-20

**Client:** ENSOLUM**Project:** Trunk 10A

Sample ID: <b>100ng lcs</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>S73763</b>		RunNo: <b>73763</b>							
Prep Date:	Analysis Date: <b>12/3/2020</b>		SeqNo: <b>2600093</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	113	70	130			
Toluene	0.98	0.050	1.000	0	98.4	70	130			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		95.1	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.2	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		98.9	70	130			
Surr: Toluene-d8	0.43		0.5000		86.8	70	130			

Sample ID: <b>mb1</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>							
Client ID: <b>PBS</b>	Batch ID: <b>S73763</b>		RunNo: <b>73763</b>							
Prep Date:	Analysis Date: <b>12/3/2020</b>		SeqNo: <b>2600094</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: 1,2-Dichloroethane-d4	0.48		0.5000		96.6	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		106	70	130			
Surr: Toluene-d8	0.46		0.5000		91.7	70	130			

Sample ID: <b>2012160-011ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>							
Client ID: <b>S-11</b>	Batch ID: <b>S73763</b>		RunNo: <b>73763</b>							
Prep Date:	Analysis Date: <b>12/3/2020</b>		SeqNo: <b>2601262</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.019	0.7734	0	125	67.9	137			
Toluene	0.82	0.039	0.7734	0	106	70	130			
Surr: 1,2-Dichloroethane-d4	0.38		0.3867		97.5	70	130			
Surr: 4-Bromofluorobenzene	0.38		0.3867		97.9	70	130			
Surr: Dibromofluoromethane	0.41		0.3867		106	70	130			
Surr: Toluene-d8	0.36		0.3867		92.4	70	130			

Sample ID: <b>2012160-011amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>							
Client ID: <b>S-11</b>	Batch ID: <b>S73763</b>		RunNo: <b>73763</b>							
Prep Date:	Analysis Date: <b>12/3/2020</b>		SeqNo: <b>2601263</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.019	0.7734	0	122	67.9	137	2.48	20	
Toluene	0.75	0.039	0.7734	0	97.5	70	130	7.95	20	

**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#: 2012160

07-Dec-20

Client: ENSOLUM

Project: Trunk 10A

Sample ID: 2012160-011amsd		SampType: MSD		TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: S-11		Batch ID: S73763		RunNo: 73763						
Prep Date:		Analysis Date: 12/3/2020		SeqNo: 2601263		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.39		0.3867		99.7	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.39		0.3867		101	70	130	0	0	
Surr: Dibromofluoromethane	0.40		0.3867		104	70	130	0	0	
Surr: Toluene-d8	0.33		0.3867		86.2	70	130	0	0	

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012160

07-Dec-20

**Client:** ENSOLUM**Project:** Trunk 10A

Sample ID: <b>2.5ug gro lcs</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>G73763</b>		RunNo: <b>73763</b>							
Prep Date:	Analysis Date: <b>12/3/2020</b>		SeqNo: <b>2600110</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.4	70	130			
Surr: BFB	570		500.0		113	70	130			

Sample ID: <b>mb1</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>G73763</b>		RunNo: <b>73763</b>							
Prep Date:	Analysis Date: <b>12/3/2020</b>		SeqNo: <b>2600111</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	570		500.0		113	70	130			

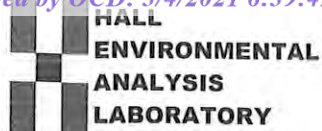
Sample ID: <b>2012160-012ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>S-12</b>	Batch ID: <b>G73763</b>		RunNo: <b>73763</b>							
Prep Date:	Analysis Date: <b>12/3/2020</b>		SeqNo: <b>2601264</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	17	3.6	18.22	0	95.3	49.2	122			
Surr: BFB	420		364.4		116	70	130			

Sample ID: <b>2012160-012amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>S-12</b>	Batch ID: <b>G73763</b>		RunNo: <b>73763</b>							
Prep Date:	Analysis Date: <b>12/3/2020</b>		SeqNo: <b>2601265</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	3.6	18.22	0	88.9	49.2	122	6.91	20	
Surr: BFB	400		364.4		109	70	130	0	0	

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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: **2012160**RcptNo: **1**Received By: **Sean Livingston**

12/3/2020 8:00:00 AM

*SL*Completed By: **Emily Mocho**

12/3/2020 8:17:23 AM

Reviewed By:

*JP 12/3/20*

### Chain of Custody

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

### Log In

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

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

Adjusted? \_\_\_\_\_

Checked by: *SL 12/3/20*

### 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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.7	Good	Yes			
2	0.3	Good	Yes			







## Chlorides

$$2.5 + 0.2 = 2.7^\circ\text{C}$$



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
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December 08, 2020

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: Trunk 10A

OrderNo.: 2012299

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 12/5/2020 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 2012299

Date Reported: 12/8/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-14

Project: Trunk 10A

Collection Date: 12/4/2020 10:30:00 AM

Lab ID: 2012299-001

Matrix: MEOH (SOIL)

Received Date: 12/5/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	210	60		mg/Kg	20	12/7/2020 12:44:43 PM	56826
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	12/5/2020 1:52:28 PM	G73810
Surr: BFB	103	70-130		%Rec	1	12/5/2020 1:52:28 PM	G73810
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	12/5/2020 3:33:45 PM	56811
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/5/2020 3:33:45 PM	56811
Surr: DNOP	88.6	30.4-154		%Rec	1	12/5/2020 3:33:45 PM	56811
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>DJF</b>
Benzene	ND	0.021		mg/Kg	1	12/5/2020 1:52:28 PM	S73810
Toluene	ND	0.041		mg/Kg	1	12/5/2020 1:52:28 PM	S73810
Ethylbenzene	ND	0.041		mg/Kg	1	12/5/2020 1:52:28 PM	S73810
Xylenes, Total	ND	0.083		mg/Kg	1	12/5/2020 1:52:28 PM	S73810
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	12/5/2020 1:52:28 PM	S73810
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	12/5/2020 1:52:28 PM	S73810
Surr: Dibromofluoromethane	113	70-130		%Rec	1	12/5/2020 1:52:28 PM	S73810
Surr: Toluene-d8	96.6	70-130		%Rec	1	12/5/2020 1:52:28 PM	S73810

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 2012299

Date Reported: 12/8/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-15

Project: Trunk 10A

Collection Date: 12/4/2020 10:35:00 AM

Lab ID: 2012299-002

Matrix: MEOH (SOIL)

Received Date: 12/5/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	310	60		mg/Kg	20	12/7/2020 12:57:08 PM	56826
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.3		mg/Kg	1	12/5/2020 2:21:18 PM	G73810
Surr: BFB	103	70-130		%Rec	1	12/5/2020 2:21:18 PM	G73810
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/5/2020 3:57:34 PM	56811
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/5/2020 3:57:34 PM	56811
Surr: DNOP	86.0	30.4-154		%Rec	1	12/5/2020 3:57:34 PM	56811
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>DJF</b>
Benzene	ND	0.021		mg/Kg	1	12/5/2020 2:21:18 PM	S73810
Toluene	ND	0.043		mg/Kg	1	12/5/2020 2:21:18 PM	S73810
Ethylbenzene	ND	0.043		mg/Kg	1	12/5/2020 2:21:18 PM	S73810
Xylenes, Total	ND	0.086		mg/Kg	1	12/5/2020 2:21:18 PM	S73810
Surr: 1,2-Dichloroethane-d4	112	70-130		%Rec	1	12/5/2020 2:21:18 PM	S73810
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	12/5/2020 2:21:18 PM	S73810
Surr: Dibromofluoromethane	118	70-130		%Rec	1	12/5/2020 2:21:18 PM	S73810
Surr: Toluene-d8	96.1	70-130		%Rec	1	12/5/2020 2:21:18 PM	S73810

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		

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## Analytical Report

Lab Order 2012299

Date Reported: 12/8/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-16

Project: Trunk 10A

Collection Date: 12/4/2020 10:40:00 AM

Lab ID: 2012299-003

Matrix: MEOH (SOIL)

Received Date: 12/5/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	260	60		mg/Kg	20	12/7/2020 1:09:33 PM	56826
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	12/5/2020 2:50:10 PM	G73810
Surr: BFB	106	70-130		%Rec	1	12/5/2020 2:50:10 PM	G73810
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	12/5/2020 4:21:21 PM	56811
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/5/2020 4:21:21 PM	56811
Surr: DNOP	89.7	30.4-154		%Rec	1	12/5/2020 4:21:21 PM	56811
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>DJF</b>
Benzene	ND	0.021		mg/Kg	1	12/5/2020 2:50:10 PM	S73810
Toluene	ND	0.041		mg/Kg	1	12/5/2020 2:50:10 PM	S73810
Ethylbenzene	ND	0.041		mg/Kg	1	12/5/2020 2:50:10 PM	S73810
Xylenes, Total	ND	0.083		mg/Kg	1	12/5/2020 2:50:10 PM	S73810
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	1	12/5/2020 2:50:10 PM	S73810
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	12/5/2020 2:50:10 PM	S73810
Surr: Dibromofluoromethane	113	70-130		%Rec	1	12/5/2020 2:50:10 PM	S73810
Surr: Toluene-d8	95.3	70-130		%Rec	1	12/5/2020 2:50:10 PM	S73810

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		

Page 3 of 8

## Analytical Report

Lab Order 2012299

Date Reported: 12/8/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: FP-2

Project: Trunk 10A

Collection Date: 12/4/2020 10:45:00 AM

Lab ID: 2012299-004

Matrix: MEOH (SOIL)

Received Date: 12/5/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	230	59		mg/Kg	20	12/7/2020 1:46:46 PM	56826
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	2.9		mg/Kg	1	12/5/2020 3:19:05 PM	G73810
Surr: BFB	104	70-130		%Rec	1	12/5/2020 3:19:05 PM	G73810
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/5/2020 4:45:04 PM	56811
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/5/2020 4:45:04 PM	56811
Surr: DNOP	87.6	30.4-154		%Rec	1	12/5/2020 4:45:04 PM	56811
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>DJF</b>
Benzene	ND	0.015		mg/Kg	1	12/5/2020 3:19:05 PM	S73810
Toluene	ND	0.029		mg/Kg	1	12/5/2020 3:19:05 PM	S73810
Ethylbenzene	ND	0.029		mg/Kg	1	12/5/2020 3:19:05 PM	S73810
Xylenes, Total	ND	0.058		mg/Kg	1	12/5/2020 3:19:05 PM	S73810
Surr: 1,2-Dichloroethane-d4	110	70-130		%Rec	1	12/5/2020 3:19:05 PM	S73810
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	12/5/2020 3:19:05 PM	S73810
Surr: Dibromofluoromethane	115	70-130		%Rec	1	12/5/2020 3:19:05 PM	S73810
Surr: Toluene-d8	93.6	70-130		%Rec	1	12/5/2020 3:19:05 PM	S73810

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		

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QC SUMMARY REPORT  
Hall Environmental Analysis Laboratory, Inc.

WO#: 2012299  
08-Dec-20

Client: ENSOLUM  
Project: Trunk 10A

Sample ID: MB-56826	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 56826	RunNo: 73830
Prep Date: 12/7/2020	Analysis Date: 12/7/2020	SeqNo: 2604047 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-56826	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 56826	RunNo: 73830
Prep Date: 12/7/2020	Analysis Date: 12/7/2020	SeqNo: 2604048 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 90.6 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#: 2012299

08-Dec-20

**Client:** ENSOLUM**Project:** Trunk 10A

Sample ID: <b>MB-56811</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>56811</b>	RunNo: <b>73818</b>								
Prep Date: <b>12/5/2020</b>	Analysis Date: <b>12/5/2020</b>	SeqNo: <b>2602395</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	7.3		10.00		73.1	30.4	154			

Sample ID: <b>LCS-56811</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>56811</b>	RunNo: <b>73818</b>								
Prep Date: <b>12/5/2020</b>	Analysis Date: <b>12/5/2020</b>	SeqNo: <b>2602396</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	85.5	70	130			
Surr: DNOP	3.3		5.000		65.2	30.4	154			

**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

Page 6 of 8

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012299

08-Dec-20

**Client:** ENSOLUM**Project:** Trunk 10A

Sample ID: <b>mb1</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>PBS</b>	Batch ID: <b>S73810</b>	RunNo: <b>73810</b>								
Prep Date:	Analysis Date: <b>12/5/2020</b>	SeqNo: <b>2601700</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: 1,2-Dichloroethane-d4	0.50		0.5000		100	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		106	70	130			
Surr: Toluene-d8	0.48		0.5000		96.6	70	130			

Sample ID: <b>100ng lcs</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>S73810</b>	RunNo: <b>73810</b>								
Prep Date:	Analysis Date: <b>12/5/2020</b>	SeqNo: <b>2601701</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	1.000	0	99.3	70	130			
Toluene	0.95	0.050	1.000	0	94.9	70	130			
Surr: 1,2-Dichloroethane-d4	0.52		0.5000		104	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		100	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		99.9	70	130			
Surr: Toluene-d8	0.48		0.5000		95.4	70	130			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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#: 2012299

08-Dec-20

**Client:** ENSOLUM**Project:** Trunk 10A

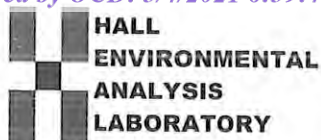
Sample ID: <b>mb1</b>	SampType: <b>MBLK</b>				TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>					
Client ID: <b>PBS</b>	Batch ID: <b>G73810</b>				RunNo: <b>73810</b>					
Prep Date:	Analysis Date: <b>12/5/2020</b>				SeqNo: <b>2601720</b>	Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	530		500.0		105	70	130			

Sample ID: <b>2.5ug gro lcs</b>	SampType: <b>LCS</b>				TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>					
Client ID: <b>LCSS</b>	Batch ID: <b>G73810</b>				RunNo: <b>73810</b>					
Prep Date:	Analysis Date: <b>12/5/2020</b>				SeqNo: <b>2601721</b>	Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.4	70	130			
Surr: BFB	530		500.0		106	70	130			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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](http://clients.hallenvironmental.com)*

## Sample Log-In Check List

Client Name: **ENSOLUM**

Work Order Number: 2012299

RcptNo: 1

Received By: Cheyenne Cason 12/5/2020 8:00:00 AM

Completed By: Cheyenne Cason 12/5/2020 8:43:10 AM

Reviewed By: Em 12/5/20

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐

2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐

4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$  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)

(~~<2~~ or >12 unless noted)

Adjusted?

Checked by: SGC 12/5/20

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	2.1	Good	Yes			



[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

[illegible]

If necessary, samples submitted to Hail 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 19647

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 19647
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	5/2/2022