

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Enterprise Field Services, LLC	OGRID: 151618
Contact Name: Thomas Long	Contact Telephone: 505-599-2286
Contact email: tjlong@eprod.com	Incident # (assigned by OCD): NAPP2105454212
Contact mailing address: 614 Reilly Ave, Farmington, NM 87401	

Location of Release Source

Latitude **36.987093** Longitude **-107.875699** (NAD 83 in decimal degrees to 5 decimal places)

Site Name Lateral MD 7 Loop	Site Type Natural Gas Gathering Pipeline
Date Release Discovered: 01/16/2021	Serial Number (if applicable): N/A

Unit Letter	Section	Township	Range	County
E	15	32N	10W	San Juan

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: **Jubal and Monique Slayer**)

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 type="checkbox"/> Condensate	Volume Released (bbls):	Volume Recovered (bbls):
<input checked="" type="checkbox"/> Natural Gas	Volume Released (Mcf): 528 MCF	Volume Recovered (Mcf): None
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

Cause of Release: On January 16, 2021, Enterprise dispatched a technician to investigate a possible leak on the MD-7 Loop pipeline. The leak was confirmed and the pipeline was isolated, depressurized, locked out and tagged out. No fluids were released to the ground nor to the subsurface surface. No washes were affected. Enterprise determined this release reportable per NMOCD regulation on February 23, 2021 by the calculated volume of gas that was released. A calculated amount of 528 MCF was released to atmosphere. Initial subsurface investigation activities were performed on January 22, 2021. On March 29, 2021, Enterprise conducted and additional subsurface investigation. Five soil borings were advanced in the vicinity of the former release point. The soil borings were advanced up to eight feet below ground surface utilizing the combination of hydro excavation and a hand auger. No subsurface contaminants exceeding NMOCD Tier III remediation standards were identified. 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: 8/24/2021

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: 03/02/2022

Printed Name: Nelson Velez

Title: Environmental Specialist – Adv



CLOSURE REPORT

Property:

**Lateral MD 7 Loop (01/16/21)
NW ¼, S15 T32N R10W
San Juan County, New Mexico**

NM EMNRD OCD Incident ID No. NAPP2105454212

June 7, 2021
Ensolum Project No. 05A1226134

Prepared for:

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

Prepared by:

A blue ink signature of Chad D'Aponti, written in a cursive style.

Chad D'Aponti
Environmental Scientist

A blue ink signature of Kyle Summers, written in a cursive style.

Kyle Summers, CPG
Sr. Project Manager

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CLOSURE REPORT

**Lateral MD 7 Loop (01/16/21)
NW ¼, S15 T32N R10W
San Juan County, New Mexico**

Ensolum Project No. 05A1226134

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Lateral MD 7 Loop (01/16/21) (Site)
Incident ID:	NAPP2105454212
Location:	36.987093° North, 107.875699° West Northwest (NW) ¼ of Section 15, Township 32 North, Range 10 West San Juan County, New Mexico
Property:	Private
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On January 16, 2021, a release of natural gas occurred from the MD 7 Loop pipeline. On January 22, 2021, Enterprise initiated activities to facilitate the repair of the pipeline, and to remediate potential petroleum hydrocarbon impact resulting from the release. The pipeline was subsequently repaired and placed back into service.

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

1.2 Project Objective

The primary objective of the closure activities was to evaluate constituent of concern (COC) concentrations in the on-Site soils with respect to the applicable New Mexico EMNRD OCD closure criteria.

2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address activities related to exempt oil and gas releases, the New Mexico EMNRD OCD references New Mexico Administrative Code (NMAC) 19.15.29 *Releases*, which establishes investigation and abatement action requirements for sites subject to reporting and/or corrective action. Ensolum, LLC (Ensolum) utilized information provided by Enterprise, 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. The supporting documentation and figures 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). Numerous PODS were identified in the same Public Land Survey System (PLSS) section as the Site as well as in adjacent sections. The average depth to water for the PODs located in this PLSS section and in adjacent PLSS sections is approximately 49 feet below grade surface (bgs). The permit for the closest POD (SJ-01764) was approved by the OSE in 1983 but apparently the well was never installed, and no additional information was available (nor was a well identified at the property). The next nearby PODs (SJ-01153 and SJ-03527) appear to be located approximately 0.17 miles from the Site and approximately 100 feet lower in elevation than the Site (6,100 feet). The records for these PODs indicate depth to water at 47 feet bgs and 80 bgs, respectively (**Figure A, Appendix B**).

- One (1) cathodic protection well (Bonds #1A (Unit D, Sec15 T32N R10W)) was identified in the New Mexico EMNRD OCD imaging database. This cathodic well is located approximately 982 feet north of the Site at an elevation approximately 33 feet higher than the site. The records indicate a depth to water of 200 feet bgs.
- The Site is not located within 300 feet of a New Mexico EMNRD OCD-defined significant watercourse. (**Figure C, Appendix B**).
- The Site is not located within 200 feet of a lakebed, sinkhole, or playa lake.
- The Site is not located within 300 feet of a permanent residence, school, hospital, institution, or church. The nearest permanent residence is located approximately 350 feet northeast of the Site (**Figure D, Appendix B**).
- Based on information provided in the OSE WRRS, a permit was approved in 1983 to install a well to be potentially used by less than five (5) households for domestic purposes located near the Site. However, the well associated with this permit (for POD (SJ-01764)) was apparently never installed, and no well records were available (**Figure E, Appendix B**).
- Based on information provided in the OSE WRRS there are no fresh water wells 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 United States (US) 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 on 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 identified in the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) geospatial database, the Site is 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 100 feet bgs. Applicable closure criteria for soils (below four (4) feet) remaining in place at the Site include:

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Closure Criteria for Soils Impacted by a Release (Tier III)		
Constituent ¹	Method	Limit
Chloride	EPA 300.0 or SM4500 Cl B	20,000 mg/kg
TPH (GRO+DRO+MRO) ²	EPA SW-846 Method 8015	2,500 mg/kg
TPH (GRO+DRO) ³	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 g/kg

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		
Constituent ¹	Method	Limit
Chloride	EPA 300.0 or SM4500 Cl B	600 mg/kg
TPH (GRO+DRO+MRO) ²	EPA SW-846 Method 8015	100 mg/kg
BTEX ³	EPA SW-846 Method 8021 or 8260	50 mg/kg
Benzene	EPA SW-846 Method 8021 or 8260	10 mg/kg

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

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

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

3.0 SOIL REMEDIATION ACTIVITIES

On January 22, 2021, Enterprise initiated activities to facilitate the repair of the pipeline, and to remediate potential petroleum hydrocarbon impact resulting from the release. The pipeline was subsequently repaired and placed back into service. During the pipeline repair and corrective action activities OFT Construction Inc, provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The excavation measured approximately 19 feet long by 7.5 feet wide at the maximum extents. The maximum depth of the final excavation measured approximately seven (7) feet bgs.

Approximately 40 barrels (bbls) of hydro-excavation cuttings and water were transported to the Industrial Ecosystems, Inc., (IEI) landfarm on Crouch Mesa near Aztec, New Mexico for disposal/remediation. The executed C-138 solid waste acceptance forms are provided in **Appendix C**. The excavation was backfilled with imported fill and laboratory-confirmed stockpiled soil.

Figure 3 is a map that identifies the approximate soil sample/soil boring locations 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 and boreholes utilizing a calibrated Dexsil PetroFLAG[®] hydrocarbon analyzer system and a photoionization detector (PID) fitted with a 10.6 eV lamp.

Ensolum's soil sampling program included the collection of one (1) composite soil samples (S-1) from the excavation and one (1) composite sample (SP-1) collected from stockpiled soil that was segregated for potential reuse and to confirm the material was suitable to remain on Site. The composite sample consisted

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of five (5) aliquots and represent an estimated 200 square foot sample area in the immediate vicinity of the release. A clean shovel was utilized to obtain fresh aliquots from each area of the excavations. In addition, 10 discrete soil samples were collected from five (5) soil borings locations (HA-1 through HA-5) utilizing a hand auger. The New Mexico EMNRD OCD notification and documentation are provided in **Appendix E**.

First Sampling Event

On January 22, 2021, one (1) soil sample S-1 (0'-7") was collected from the sidewalls and the base of the pipeline repair excavation in the immediate vicinity of the release. In addition, one soil sample (SP-1) was collected from stockpiled soil to demonstrate that the soil did not exhibit BTEX or TPH impact and that they were suitable for reuse as backfill. At this time Enterprise considered this release "non-reportable" due to the limited environmental impact.

The subsequent analytical results did not indicate COC concentrations above the applicable New Mexico EMNRD OCD closure criteria. During March 2021, Enterprise discovered that the reported gas loss for the release caused this incident to be reportable. Enterprise requested a variance from the New Mexico EMNRD OCD to perform additional sampling at the Site.

Second Sampling Event

On March 29, 2021, five (5) soil borings (HA-1 through HA-5) were advanced in the vicinity of the former release point. The soil borings were advanced up to eight (8) feet bgs utilizing the combination of hydro-excavation and a hand auger. Soil boring samples HA-1 @ 4', HA-1 @ 8', HA-2 @ 4', HA-2 @ 7', HA-3 @ 4', HA-3 @ 8', HA-4 @ 4', HA-4 @ 8', HA-5 @ 4', and HA-5 @ 8' were collected from the soil borings for laboratory analysis. The New Mexico EMNRD OCD was notified of the sampling event, but a representative was not present during the sampling event. The Soil Boring Logs are provided in **Appendix F**.

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

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

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 and SP-1) and the hand auger samples (HA-1 @ 4', HA-1 @ 8', HA-2 @ 4', HA-2 @ 7', HA-3 @ 4', HA-3 @ 8', HA-4 @ 4', HA-4 @ 8', HA-5 @ 4', and HA-5 @ 8') to the New Mexico EMNRD OCD closure criteria.

- The laboratory analytical results for the soil samples indicate benzene is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 10 mg/kg.

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- The laboratory analytical results for the soil samples 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 soil samples HA-2 @ 7' and HA-5 @ 8' indicate combined TPH GRO/DRO concentration of 10 mg/kg and 17 mg/kg, respectively, which are less than the applicable New Mexico EMNRD OCD closure criteria of 1,000 mg/kg. The laboratory analytical results for the remaining soil samples 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 soil samples HA-2 @ 7' and HA-5 @ 8' indicate combined TPH GRO/DRO/MRO concentrations of 10 mg/kg and 170 mg/kg, respectively, which are less than the applicable New Mexico EMNRD OCD closure criteria of 2,500 mg/kg. The laboratory analytical results for the remaining soil samples 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 soil samples S-1, SP-1, HA-1 @ 8', HA-2 @ 4', and HA-2 @ 7', indicate chloride concentrations ranging from 69 mg/kg (HA-1 @ 8') to 200 mg/kg (HA-2 @ 4'), which are less than the applicable New Mexico EMNRD OCD closure criteria of 20,000 mg/kg. The laboratory analytical results for the remaining soil samples indicate chloride is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 20,000 mg/kg.

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

7.0 RECLAMATION AND REVEGETATION

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

8.0 FINDINGS AND RECOMMENDATION

- One (1) composite soil sample was collected from the excavation and one sample was collected from stockpiled soil. Additionally, 10 discrete soil samples were collected from soil borings subsequently advanced near the former release point. 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).
- Approximately 40 bbls of hydro-excavation soil cuttings and water were transported to the IEI landfill for disposal/remediation. The excavation was backfilled and contoured to the surrounding grade.

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

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Lateral MD 7 Loop (01/16/21)
June 7, 2021



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). This scope of services was performed in accordance with the scope of work agreed with the client, as detailed in our proposal.

9.2 Additional 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 recommendations are based solely upon data available to Ensolum at the time of these services.

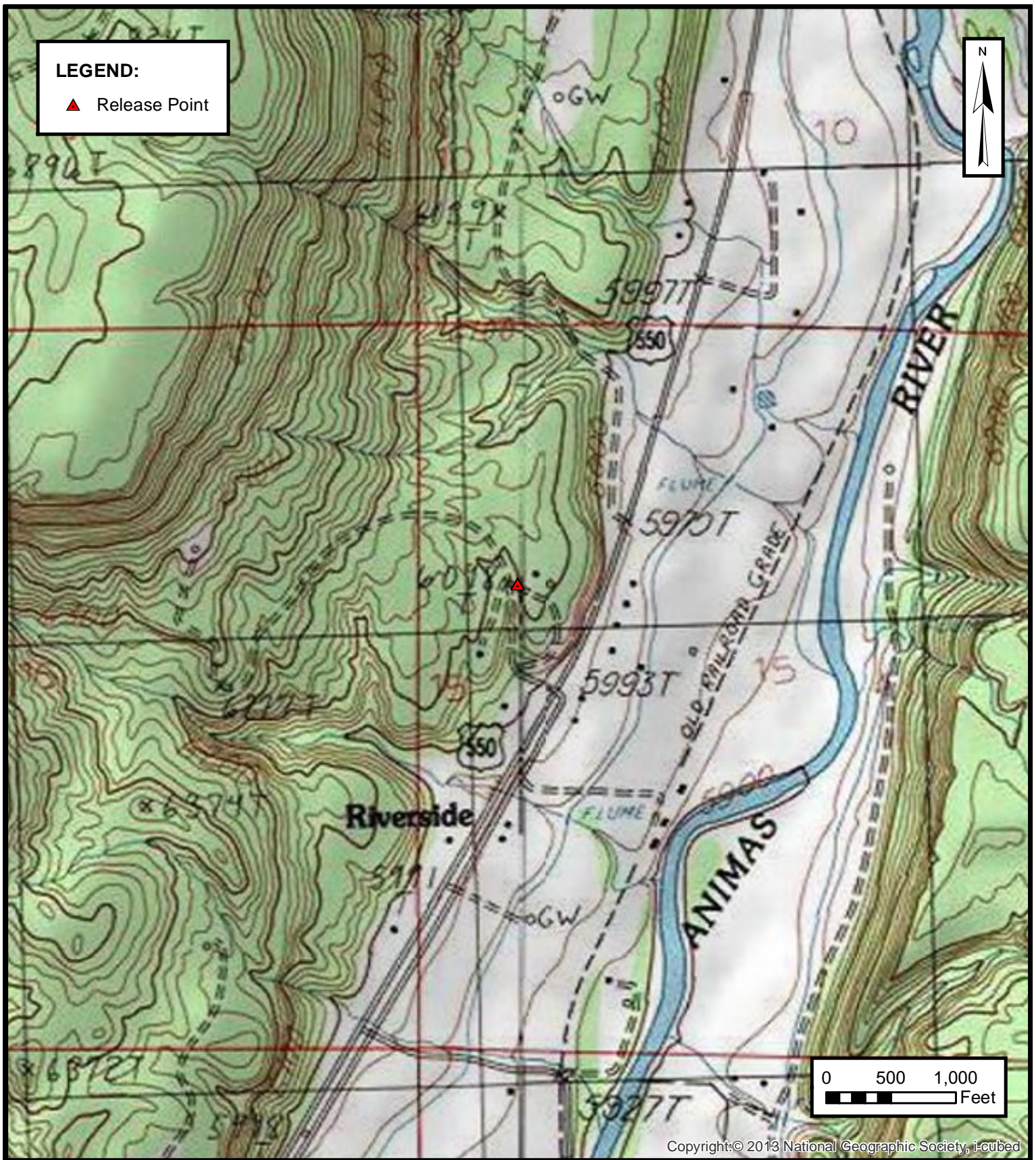
9.3 Reliance

This report has been prepared for the exclusive use of Enterprise Field Services LLC, 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 Enterprise Field Services LLC 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
LATERAL MD 7 LOOP (01/16/21)
NW ¼, S15 T32N R10W, San Juan County, New Mexico
36.987093° North, 107.875699° West

PROJECT NUMBER: 05A1226134

FIGURE

1



SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC
LATERAL MD 7 LOOP (01/16/21)
NW ¼, S15 T32N R10W, San Juan County, New Mexico
36.987093° North, 107.875699° West

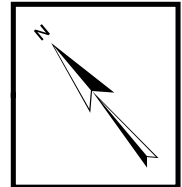
PROJECT NUMBER: 05A1226134

FIGURE

2

LEGEND:

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



HA-5 3/29/2021		
Depth	4'	8'
Benzene	<0.023	<0.020
Toluene	<0.046	<0.039
Ethylbenzene	<0.046	<0.039
Xylenes	<0.092	<0.078
Total BTEX	ND	ND
TPH GRO	<4.6	<3.9
TPH DRO	<9.4	17
TPH MRO	<47	150
TPH (GRO/DRO)	ND	17
TPH (GRO/DRO/MRO)	ND	170
Chloride	<60	<60

HA-3 3/29/2021		
Depth	4'	8'
Benzene	<0.021	<0.023
Toluene	<0.043	<0.046
Ethylbenzene	<0.043	<0.046
Xylenes	<0.085	<0.091
Total BTEX	ND	ND
TPH GRO	<4.3	<4.6
TPH DRO	<9.1	<9.4
TPH MRO	<45	<47
TPH (GRO/DRO)	ND	ND
TPH (GRO/DRO/MRO)	ND	ND
Chloride	<59	<61

S-1 1/22/2021		
Depth	0-7'	
Benzene	<0.019	
Toluene	<0.038	
Ethylbenzene	<0.038	
Xylenes	<0.076	
Total BTEX	ND	
TPH GRO	<3.8	
TPH DRO	<9.8	
TPH MRO	<49	
TPH (GRO/DRO)	ND	
TPH (GRO/DRO/MRO)	ND	
Chloride	120	

HA-2 3/29/2021		
Depth	4'	7'
Benzene	<0.021	<0.022
Toluene	<0.041	<0.044
Ethylbenzene	<0.041	<0.044
Xylenes	<0.082	<0.087
Total BTEX	ND	ND
TPH GRO	<4.1	<4.4
TPH DRO	<9.8	10
TPH MRO	<49	<49
TPH (GRO/DRO)	ND	10
TPH (GRO/DRO/MRO)	ND	10
Chloride	200	180

HA-4 3/29/2021		
Depth	4'	8'
Benzene	<0.020	<0.019
Toluene	<0.040	<0.037
Ethylbenzene	<0.040	<0.037
Xylenes	<0.080	<0.075
Total BTEX	ND	ND
TPH GRO	<4.0	<3.7
TPH DRO	<9.1	<9.1
TPH MRO	<45	<45
TPH (GRO/DRO)	ND	ND
TPH (GRO/DRO/MRO)	ND	ND
Chloride	<61	<60

HA-1 3/29/2021		
Depth	4'	8'
Benzene	<0.019	<0.020
Toluene	<0.038	<0.039
Ethylbenzene	<0.038	<0.039
Xylenes	<0.076	<0.078
Total BTEX	ND	ND
TPH GRO	<3.8	<3.9
TPH DRO	<9.2	<9.6
TPH MRO	<46	<48
TPH (GRO/DRO)	ND	ND
TPH (GRO/DRO/MRO)	ND	ND
Chloride	<60	69

Notes:
All concentrations are in mg/kg.
All depths are listed in feet bgs

Private Road

0 2.5 5
Feet

SITE MAP

ENTERPRISE FIELD SERVICES, LLC
LATERAL MD 7 LOOP (01/16/21)
NW ¼, S15 T32N R10W, San Juan County, New Mexico
36.987093° North, 107.875699° West

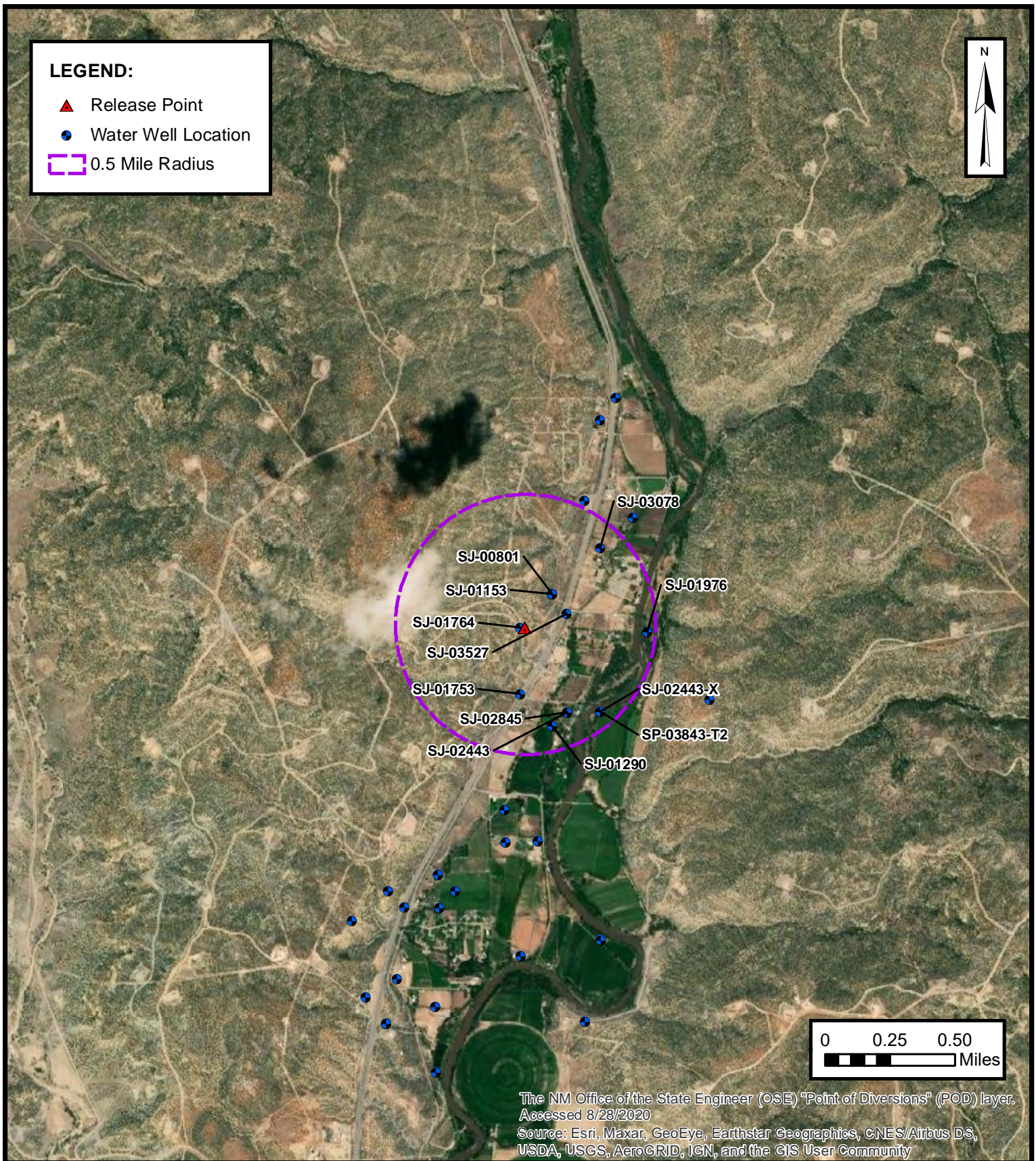
PROJECT NUMBER: 05A1226134

FIGURE
3



APPENDIX B

Siting Figures and Documentation

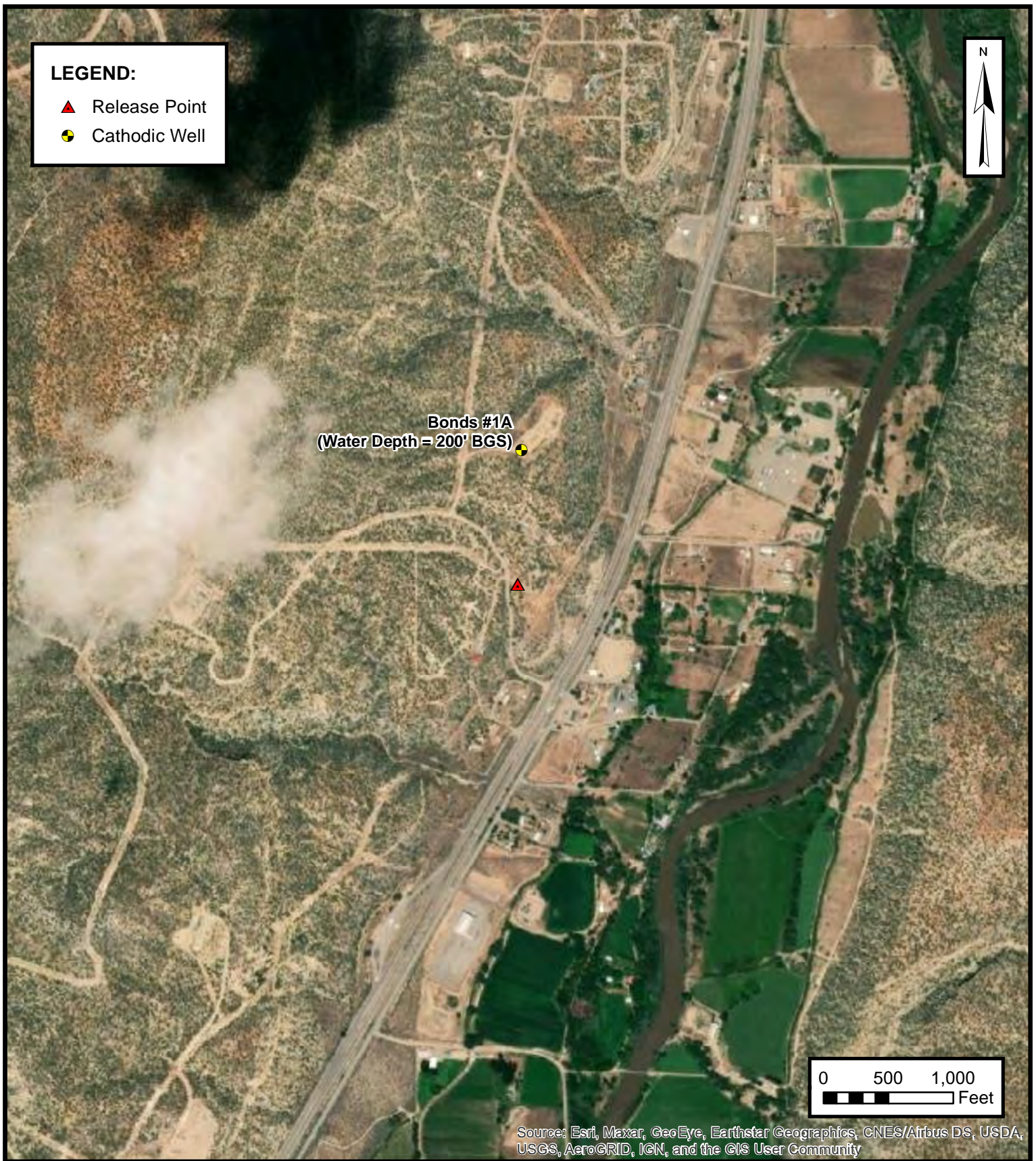


0.5 MILE RADIUS WATER WELL MAP

ENTERPRISE FIELD SERVICES, LLC
 LATERAL MD 7 LOOP (01/16/21)
 NW ¼, S15 T32N R10W, San Juan County, New Mexico
 36.987093° North, 107.875699° West

PROJECT NUMBER: 05A1226134

FIGURE
A

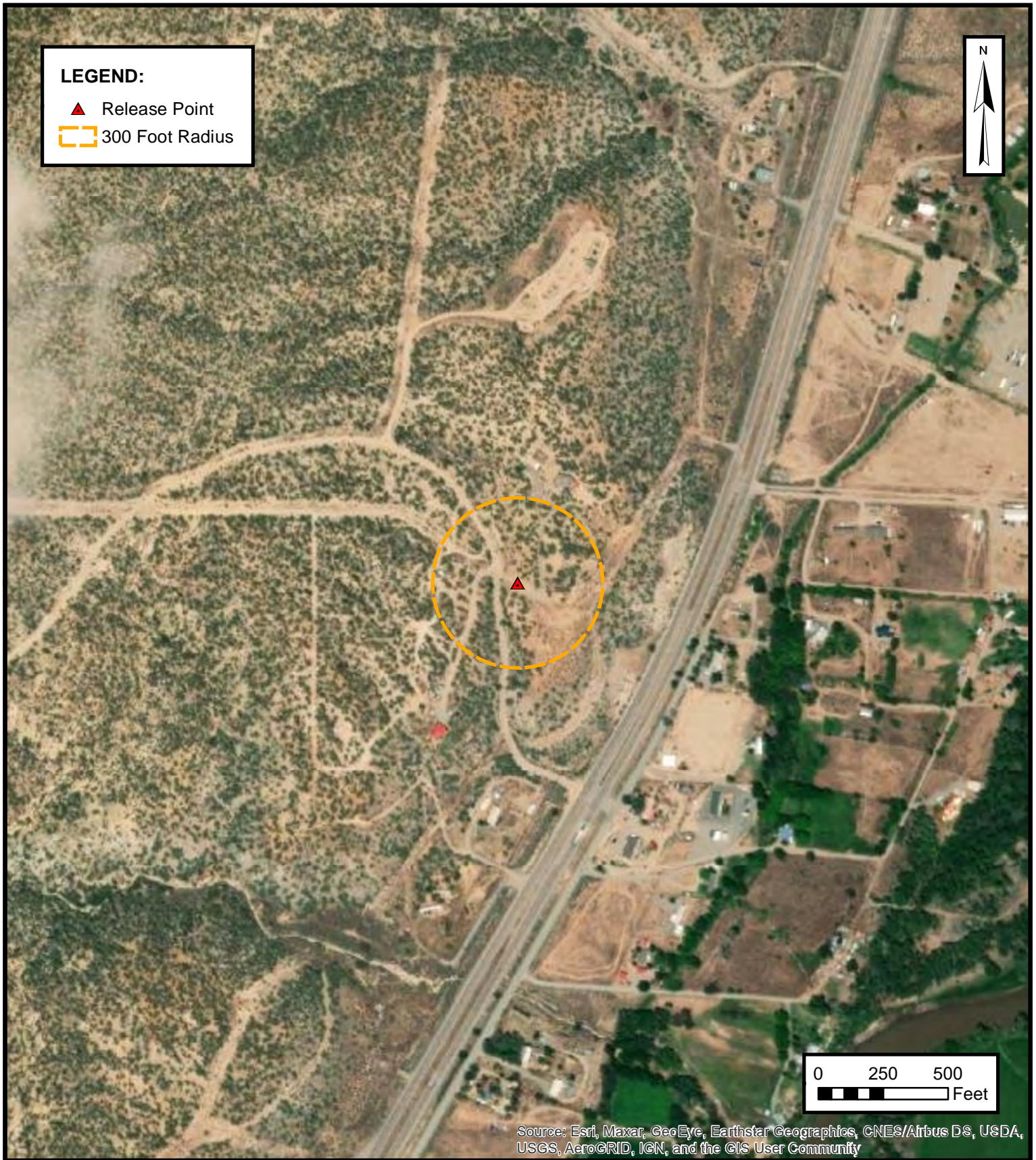


**CATHODIC PROTECTION WELL RECORDED
DEPTH TO WATER**

ENTERPRISE FIELD SERVICES, LLC
LATERAL MD 7 LOOP (01/16/21)
NW ¼, S15 T32N R10W, San Juan County, New Mexico
36.987093° North, 107.875699° West

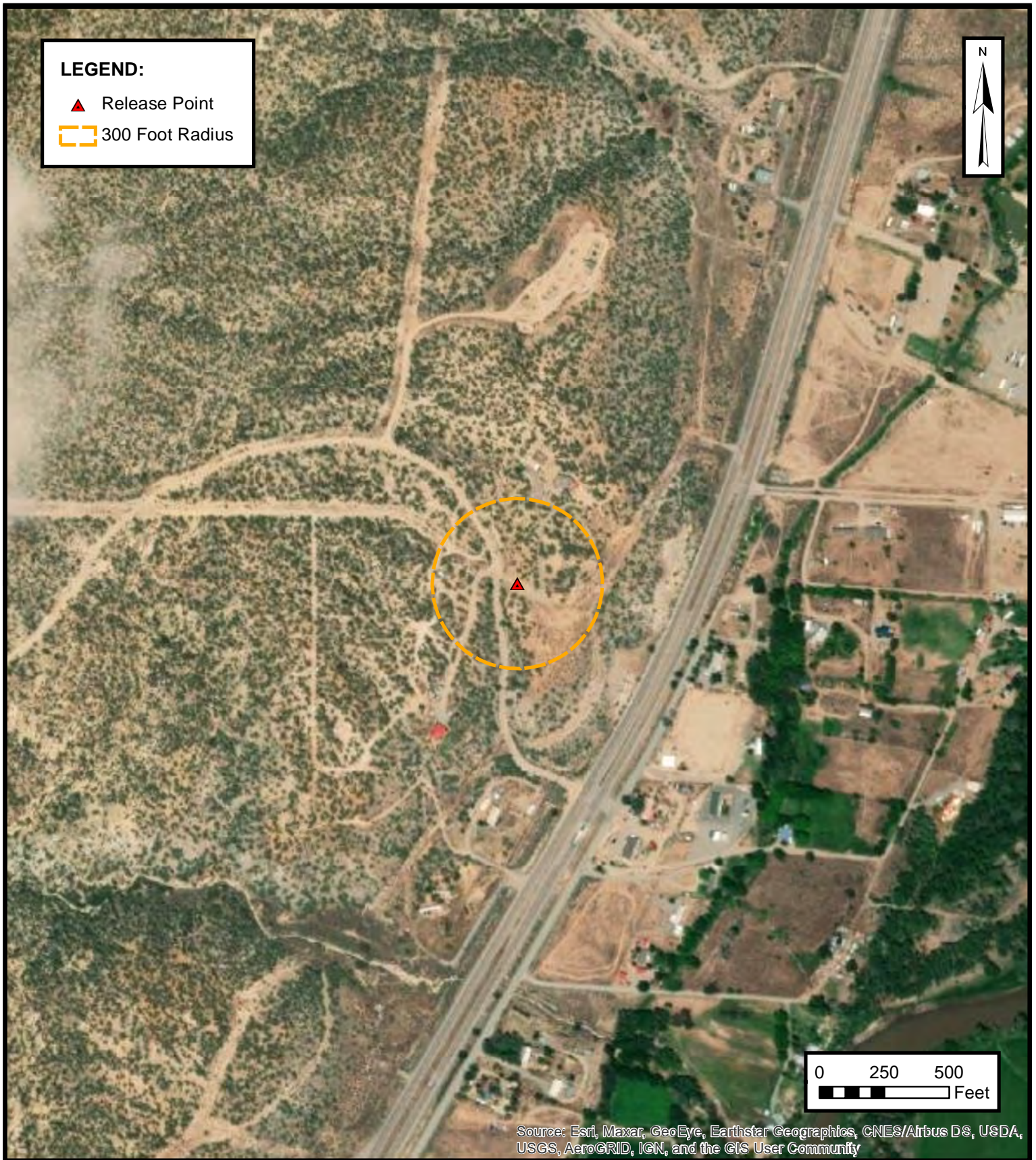
PROJECT NUMBER: 05A1226134

**FIGURE
B**



**300 FOOT RADIUS
WATERCOURSE AND DRAINAGE IDENTIFICATION**
ENTERPRISE FIELD SERVICES, LLC
LATERAL MD 7 LOOP (01/16/21)
NW ¼, S15 T32N R10W, San Juan County, New Mexico
36.987093° North, 107.875699° West
PROJECT NUMBER: 05A1226134

**FIGURE
C**

**ENSOLUM**

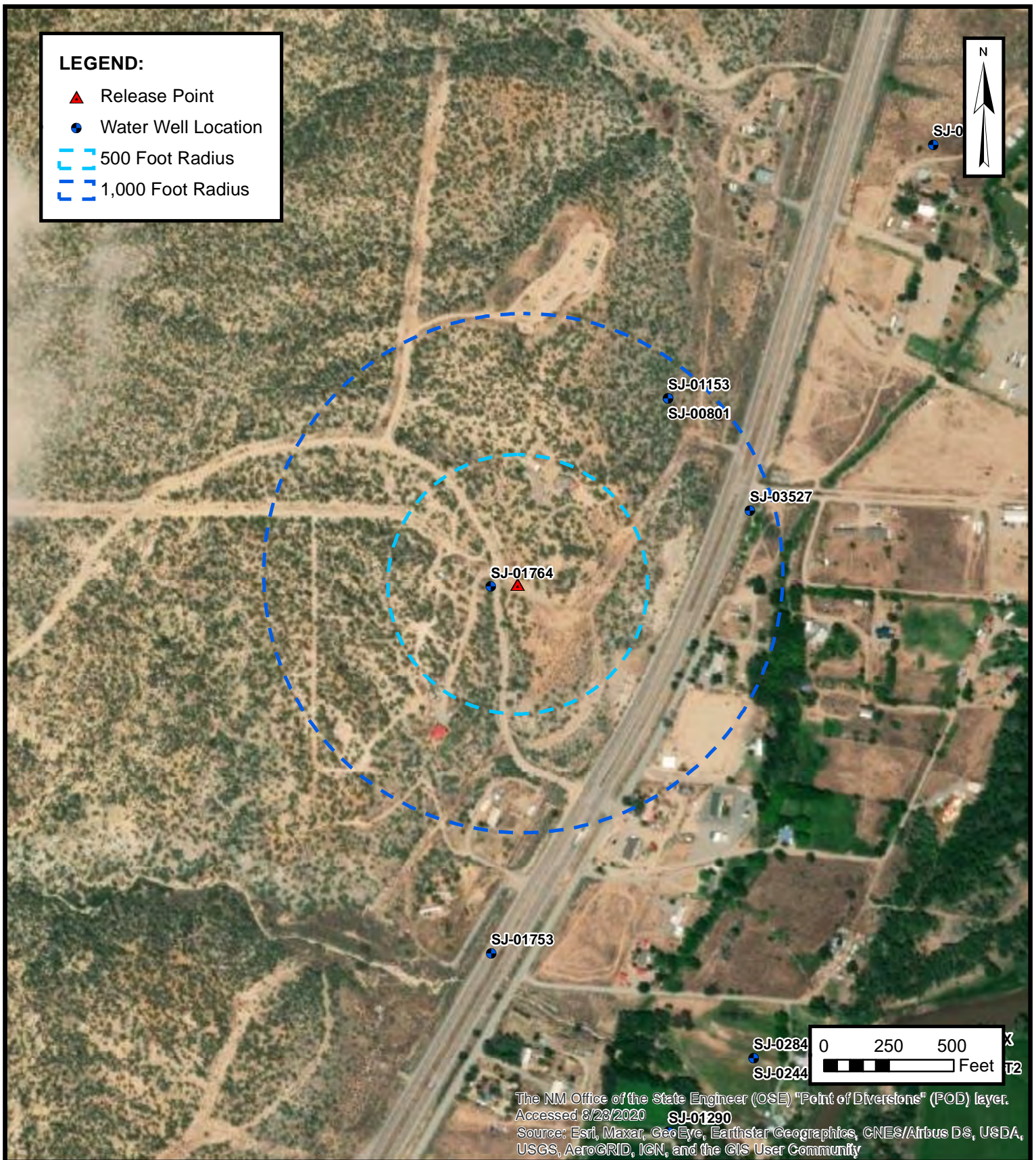
Environmental & Hydrogeologic Consultants

**300 FOOT RADIUS
OCCUPIED STRUCTURE IDENTIFICATION**

ENTERPRISE FIELD SERVICES, LLC
LATERAL MD 7 LOOP (01/16/21)
NW ¼, S15 T32N R10W, San Juan County, New Mexico
36.987093° North, 107.875699° West

PROJECT NUMBER: 05A1226134

FIGURE**D**

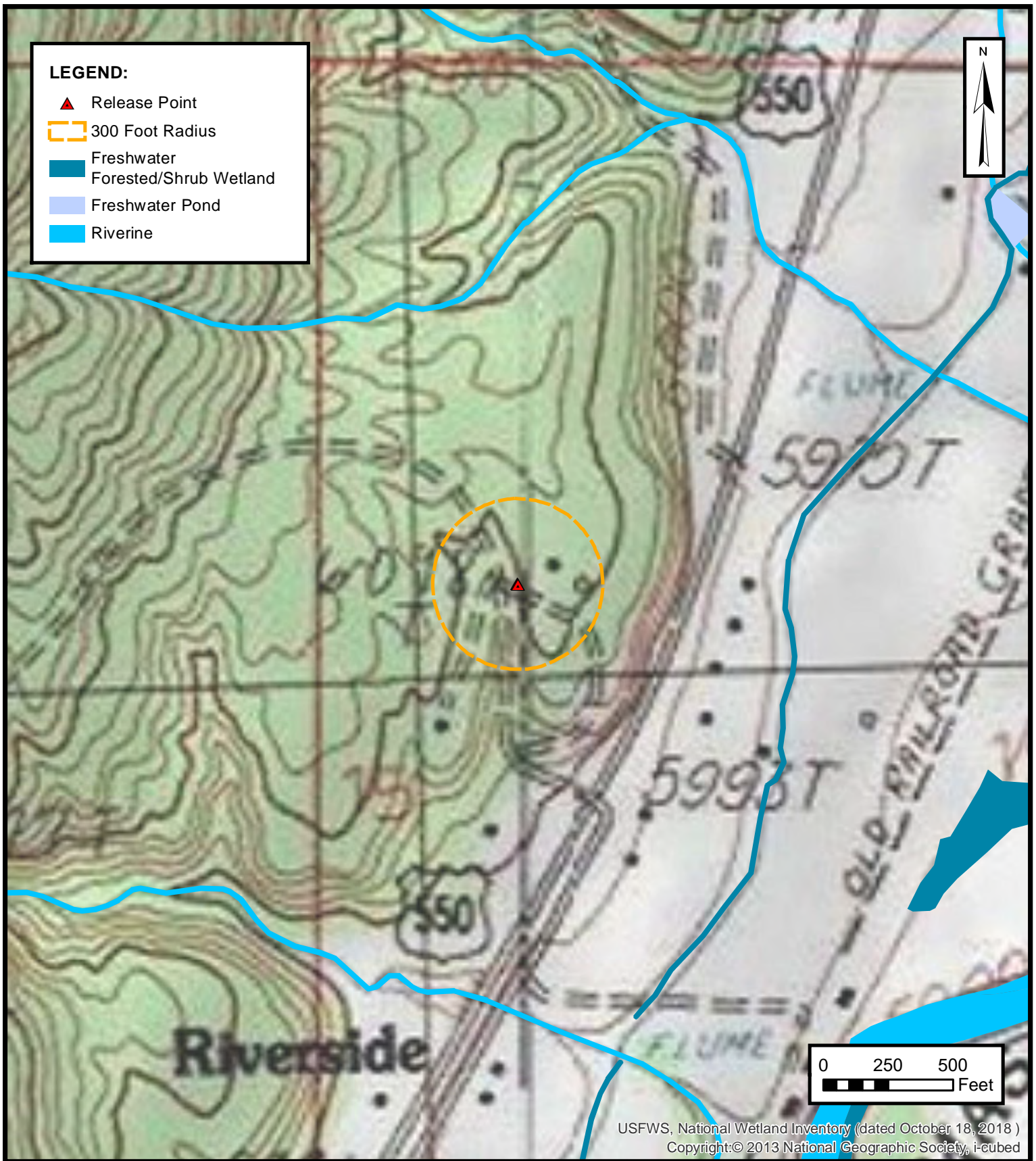


WATER WELL AND NATURAL SPRING LOCATION

ENTERPRISE FIELD SERVICES, LLC
 LATERAL MD 7 LOOP (01/16/21)
 NW ¼, S15 T32N R10W, San Juan County, New Mexico
 36.987093° North, 107.875699° West

PROJECT NUMBER: 05A1226134

FIGURE
E



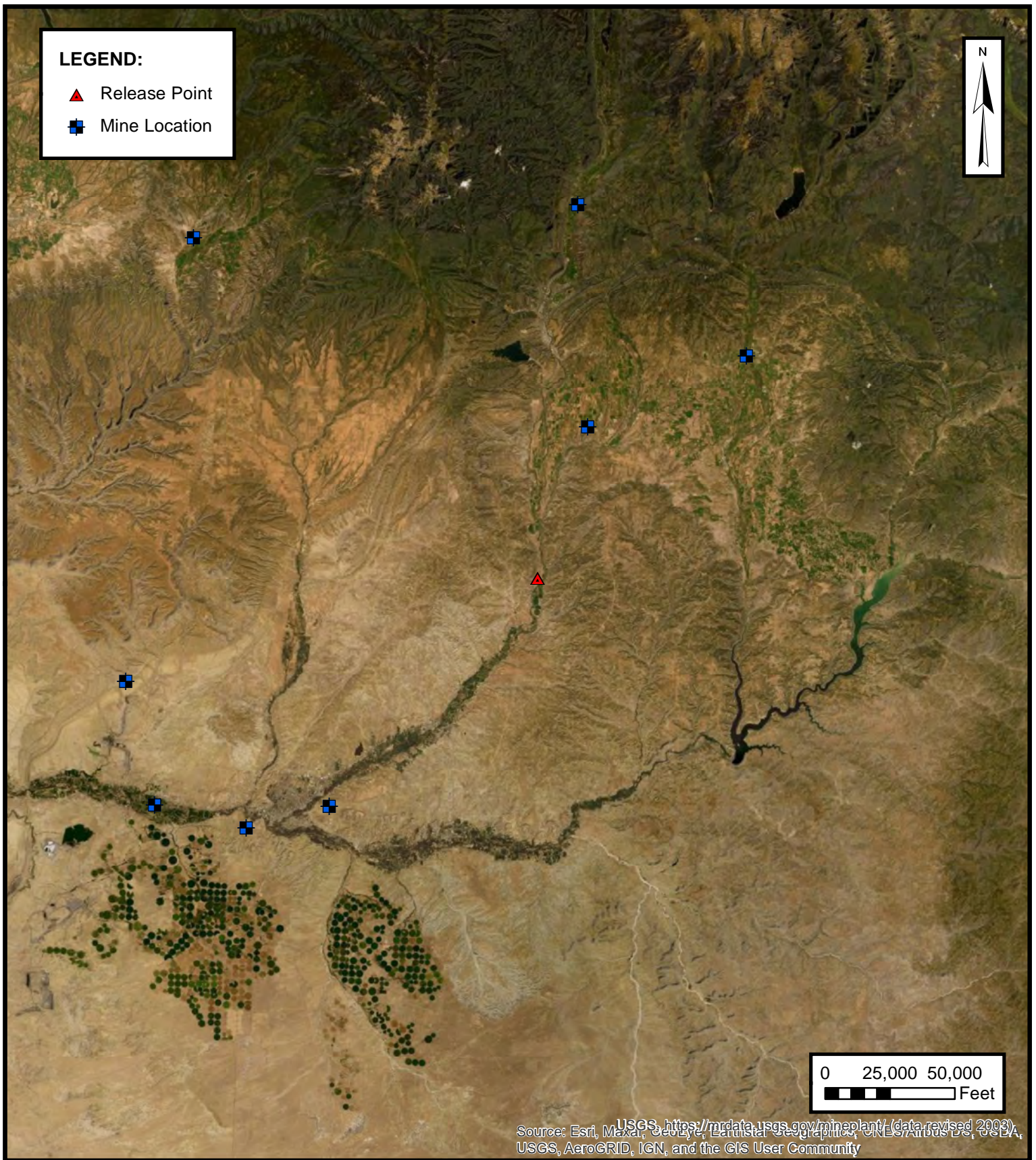
ENSOLUM
Environmental & Hydrogeologic Consultants

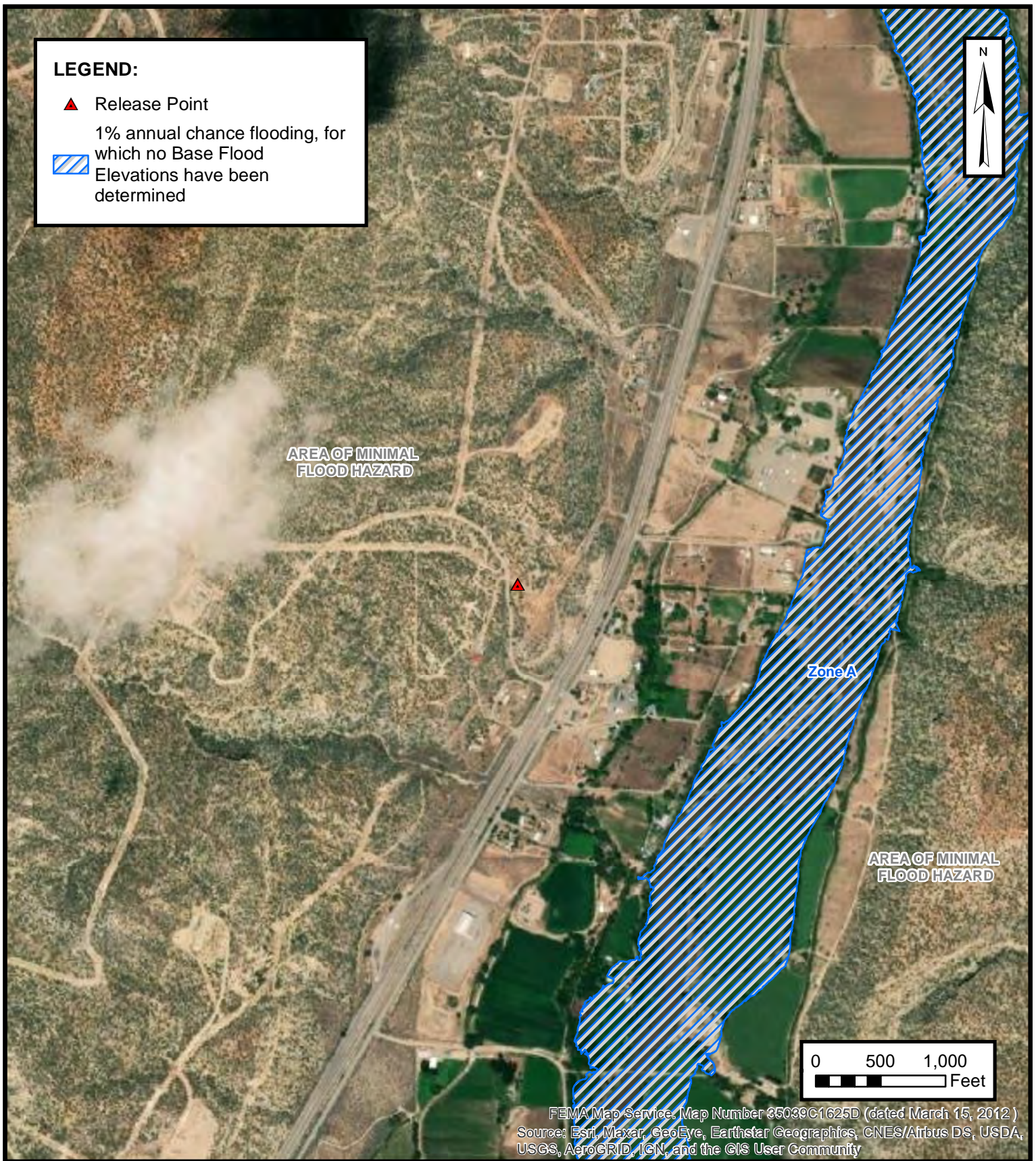
WETLANDS

ENTERPRISE FIELD SERVICES, LLC
LATERAL MD 7 LOOP (01/16/21)
NW ¼, S15 T32N R10W, San Juan County, New Mexico
36.987093° North, 107.875699° West

PROJECT NUMBER: 05A1226134

FIGURE
F







New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 00263		SJAR	SJ	2	2	3	10	32N	10W	244553	4098557*	108	50	58
SJ 00446		SJAR	SJ	4	3	2	21	32N	10W	243272	4095620*	76	60	16
SJ 00489		SJAR	SJ	1	4	4	21	32N	10W	243441	4095005*	65	30	35
SJ 00528			SJ	2	1	1	10	32N	10W			240	100	140
SJ 01153		SJAR	SJ			1	15	32N	10W	244230	4097506*	100	47	53
SJ 01157		SJAR	SJ	2	4		15	32N	10W	245172	4096833*			
SJ 01177		SJAR	SJ	4	3		10	32N	10W	244444	4098072*	83	38	45
SJ 01290		SJAR	SJ			3	15	32N	10W	244206	4096700*	105	20	85
SJ 01424		SJAR	SJ				10	32N	10W	244655	4098691*	164	94	70
SJ 01435		SJAR	SJ	3	4		21	32N	10W	243137	4094912*	70	40	30
SJ 01512		SJAR	SJ	3	2		21	32N	10W	243173	4095721*	77	67	10
SJ 01688		SJAR	SJ	3	3	4	10	32N	10W	244736	4097956*	23	6	17
SJ 02144		SJAR	SJ				21	32N	10W	242948	4095545*	87	62	25
SJ 02381		SJAR	SJ	3	4	2	21	32N	10W	243482	4095610*	65		
SJ 02845		SJAR	SJ	3	2	3	15	32N	10W	244302	4096778*	11	5	6
SJ 02980		SJAR	SJ	3	1	1	22	32N	10W	243899	4095999*	65	36	29
SJ 03000		SJAR	SJ	4	1	1	22	32N	10W	244099	4095999*	105	19	86
SJ 03072		SJAR	SJ	1	1	1	22	32N	10W	243899	4096199*	80	62	18
SJ 03078		SJAR	SJ	2	2	1	15	32N	10W	244530	4097776*	21	18	3
SJ 03307		SJAR	SJ	4	1	1	22	32N	10W	244099	4095999*	60	20	40
SJ 03483		SJAR	SJ	1	4	2	21	32N	10W	243482	4095810*	90		
SJ 03527		SJAR	SJ	1	4	1	15	32N	10W	244316	4097380*	80		
SJ 03973 POD1		SJAR	SJ	4	1	4	21	32N	10W	243211	4095180	43		
SJ 04148 POD1		SJAR	SJ		3	4	21	32N	10W	243017	4095074	280	160	120
SJ 04418 POD1		SJAR	SJ	3	4	2	21	32N	10W	243401	4095682	100		

*UTM location was derived from PLSS - see Help

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

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

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

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
------------	--------------	-------	--------	------	------	-----	-----	-----	-----	---	---	------------	-------------	--------------

Average Depth to Water: **49 feet**

Minimum Depth: **5 feet**

Maximum Depth: **160 feet**

Record Count: 25

PLSS Search:

Section(s): 15, 9, 10, 11,
14, 16, 21, 22,
23

Township: 32N

Range: 10W

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

4/13/21 1:05 PM

Page 2 of 2

WATER COLUMN/ AVERAGE
DEPTH TO WATER



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)				(NAD83 UTM in meters)	
		(quarters are smallest to largest)				X	Y
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tw	Rng
SJ	01764	3	1	15	32N	10W	244029 4097305*

Driller License:

Driller Company:

Driller Name:

Drill Start Date:

Drill Finish Date:

Plug Date:

Log File Date:

PCW Rev Date:

Source:

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size:

Depth Well:

Depth Water:

*UTM location was derived from PLSS - see Help

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

5/27/21 10:46 AM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Transaction Summary

72121 All Applications Under Statute 72-12-1

Transaction Number: 228011

Transaction Desc: SJ 01764

File Date: 08/22/1983

Primary Status: PMT Permit

Secondary Status: APR Approved

Person Assigned: *****

Applicant: MICHAEL RAY & JANA L. SMITH

X

Events

Date	Type	Description	Comment	Processed By
08/22/1983	APP	Application Received	*	*****
08/23/1983	FIN	Final Action on application		*****
08/23/1983	WAP	General Approval Letter		*****
01/03/2003	ARV	Rec & Arch - file location	SJ 01764 Box: 95	*****

X

Change To:

WR File Nbr	Acres	Diversion	Consumptive	Purpose of Use
SJ 01764		3		DOM 72-12-1 DOMESTIC ONE HOUSEHOLD

**Point of Diversion

SJ 01764 244029 4097305*

An () after northing value indicates UTM location was derived from PLSS - see Help

X

Conditions

- 4 Use shall be limited to household, non-commercial trees, lawn and garden not to exceed one acre and/or stock use.

X

Action of the State Engineer

**** See Image For Any Additional Conditions of Approval ****

Approval Code: A - Approved

Action Date: 08/23/1983

Log Due Date: 08/31/1984

State Engineer:

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

5/27/21 10:45 AM

TRANSACTION SUMMARY

READ INSTRUCTIONS ON BACK

Revised March 1979

APPLICATION TO APPROPRIATE UNDERGROUND WATERS IN ACCORDANCE WITH SECTION 72-12-1 NEW MEXICO STATUTES

SD-1764

1. Name and Address of Applicant:

'83 AUG 22 AM 10 02 No. SJ-1764

MICHAEL RAY & JANA L. SMITHP.O. Box 1004Artes N.M. 87410STATE ENGINEER
SANTA FE, N.M.

2. Describe well location under one of the following subheadings:

a. 1/4 SW 1/4 NW 1/4 of Sec. 15 Twp. 32N Rge. 10W N.M.P.M., in _____ County.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____
Subdivision, recorded in _____ County.d. X = _____ feet, Y = _____ feet, N.M. Coordinate System _____ Zone _____
in the _____ Grant.e. Give street address or route and box No. of property upon which well is to be located, or location by direction and distance from known landmarks 1 mile south of state line on Highway 550
S. 38 ALPS3. Approximate depth (if known) Shallow feet; outside diameter of casing 2 inches.Name of driller (if known) UNKNOWN

4. Use of water (check appropriate box or boxes):

- ☒ One household, non-commercial trees, lawn and garden not to exceed 1 acre.
- ☐ Livestock watering.
- ☐ More than one household, non-commercial trees, lawns and gardens not to exceed a total of 1 acre.
- ☐ Drinking and sanitary purposes and the irrigation of non-commercial trees, shrubs and lawns in conjunction with a commercial operation.
- ☐ Prospecting, mining or drilling operations to discover or develop natural resources.
- ☐ Construction of public works, highways and roads.

If any of the last four were marked, give name and nature of business under Remarks. (Item 5)

5. Remarks: _____

I, Michael Ray Smith, affirm that the foregoing statements are true to the best of my knowledge and belief and that development shall not commence until approval of the permit has been obtained.Michael Ray Smith, Applicant

By: _____

Date: 8/19/83

ACTION OF STATE ENGINEER

This application is approved for the use indicated, subject to all general conditions and to the specific conditions numbered 4 on the reverse side hereof. This permit will automatically expire unless this well is drilled or driven and the well record filed on or before August 31, 1984.

S.E. Reynolds, State Engineer

By: E. C. Barry, Water Resources Spec I, Water Rights DivisionDate: August 23, 1983File No. SJ-1764

GENERAL CONDITIONS OF APPROVAL

- A. The maximum amount of water that may be appropriated under this permit is 3 acre feet in any year.
- B. The well shall be drilled only by a driller licensed in the State of New Mexico in accordance with Section 72-12-12 New Mexico Statutes Annotated. A licensed driller shall not be required for the construction of a driven well; provided, that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter (Section 72-12-12).
- C. Driller's log must be filed with the State Engineer within 10 days after the well is drilled or driven. Failure to file the log within that time shall result in automatic cancellation of the permit. Log forms will be provided by the State Engineer upon request.
- D. The casing shall not exceed 7 inches outside diameter except under specific conditions in which reasons satisfactory to the State Engineer are shown.
- E. If the well under this permit is used at any time to serve more than one household, livestock in a commercial feed lot operation, the permittee shall comply with Specific Condition of Approval number 5(b).
- F. In the event this well is combined with other wells permitted under Section 72-12-1 New Mexico Statutes Annotated, the total outdoor use shall not exceed the irrigation of one acre of non-commercial trees, lawn, and garden, or the equivalent outside consumptive use, and the total appropriation for household and outdoor use from the entire water distribution system shall not exceed 3 acre feet per annum.

SPECIFIC CONDITIONS OF APPROVAL

(Applicable only when so indicated on the other side of this form.)

1. Depth of the well shall not exceed the thickness of the (a) the valley fill or (b) Ogallala formation.
2. The well shall be constructed to artesian well specifications and the State Engineer shall be notified before casing is landed or cemented.
3. Appropriation and use of water under this permit shall not exceed a period of one year from the date of approval.
4. Use shall be limited to household, non-commercial trees, lawn and garden not to exceed one acre and/or stock use.
5. A totalizing meter shall be installed before the first branch of the discharge line from the well and the installation shall be acceptable to the State Engineer; the Engineer shall be advised of the make, model, serial number, date of installation, and initial reading of the meter prior to appropriation of water and pumping records shall be submitted to the District Supervisor; (a) for each calendar month, on or before the 30th day of the following month (b) on or before the 10th of January, April, July and October of each year for the three preceding calendar months (c) for each calendar year on or before the 30th day of January of the following year.
6. The well shall be plugged upon completion of the permitted use and a plugging report shall be filed with the State Engineer within 10 days.
7. Final approval for the use of the well shall be dependent upon a leakage test made by the State Engineer.
8. Use shall be limited strictly to household and/or drinking and sanitary purposes; water shall be conveyed from the well to the place of use in closed conduit and the effluent returned to the underground so that it will not appear on the surface. No irrigation of lawns, gardens, trees or use in any type of pool or pond is authorized under this permit.

INSTRUCTIONS

The application shall be made in the name of the actual user of the well for the purpose specified in the application.

The application shall be executed in triplicate and forwarded with a \$1.00 filing fee to the State Engineer.

A separate application must be filed for each well to be drilled or used.

If well to be used is an existing well, an explanation (and file number, if possible) should be given under Remarks. (Item 5.)

Applications for appropriation, well logs and request for information in the following basins should be addressed to the State Engineer at the location indicated:

Bluewater, Estancia, Rio Grande, Sandia and San Juan Basins
 District No. 1, 2340 Menaul NE, Room 206, Albuquerque, New Mexico 87107
 Capitan, Carlsbad, Fort Sumner, Hondo, Jal, Lea, Penasco, Portales, Roswell, and
 Upper Pecos Basins
 District No. 2, Box 1717, Roswell, New Mexico 88201
 Animas, Gila-San Francisco, Hot Springs, Las Animas Creek, Lordsburg, Mimbres,
 Nutt-Hockett, Playas, San Simon, and Virden Valley Basins
 District No. 3, Box 844, Deming, New Mexico 88030
 Canadian River Basin
 State Engineer, State Capitol, Bataan Memorial Bldg., Santa Fe, New Mexico 87503



STATE OF NEW MEXICO
STATE ENGINEER OFFICE
SANTA FE

S. E. REYNOLDS
STATE ENGINEER

August 23, 1983

BATAAN MEMORIAL BUILDING
STATE CAPITOL
SANTA FE, NEW MEXICO 87503

SJ-1764

Michael Ray & Jana Smith
Post Office Box 1004
Aztec, New Mexico 87410

Dear Mr. & Mrs. Smith:

Enclosed is your copy of the above-numbered permit which has been approved subject to all the general conditions of the approval stated on the reverse side of the permit and the specific conditions of the approval numbered 4 stated on the reverse side of the permit.

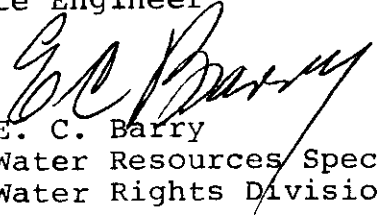
Well may only be drilled by a licensed driller and a well log must be filed within 10 days of completion of the well.

Also enclosed is Receipt No. 103554 covering the \$1.00 filing fee.

Sincerely,

S. E. Reynolds
State Engineer

By:


E. C. Barry
Water Resources Spec I
Water Rights Division

rav
encl.
cc: J.T. Smith

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICOOperator Burlington Resources Location: Unit D Sec. 15 Twp 32 Rng 10Name of Well/Wells or Pipeline Serviced Bonds #1A 30-045-29457Elevation _____ Completion Date 3-13-98 Total Depth 380 Land Type _____Casing Strings, Sizes, Types & Depths 8" PVC X 20'If Casing Strings are cemented, show amounts & types used 4 Bags Portland CementIf Cement or Bentonite Plugs have been placed, show depths & amounts used
NONEDepths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc. 200' SeepDepths gas encountered: NONEGround bed depth with type & amount of coke breeze used: 380', 2000 lbs
Lorisco SW coke breezeDepths anodes placed: 355', 345', 335', 325', 315', 305', 295', 285', 275', 265'Depths vent pipes placed: 380'Vent pipe perforations: Bottom 180'

Remarks: _____

RECEIVED
MAR - 9 1999OIL CON. DIV.
DIST. 3

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

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

TIERRA DYNAMIC COMPANY			DEEP WELL GROUNDED LOG DATA SHEET								
COMPANY NAME: <u>Burlington Resources</u>											
WELL NAME: <u>Bonds #1A</u>											
LEGAL LOCATION: <u>15-32-10</u>			COUNTY: <u>San Juan</u>								
DATE: <u>3-13-98</u>			TYPE OF COKE: <u>Leirico SW</u>								
DEPTH: <u>320'</u>			AMT. OF COKE BACKFILL: <u>2000 lbs</u>								
BIT SIZE: <u>6 3/4</u>			VENT PIPE: <u>320'</u>								
DRILLER NAME: <u>Jack Ledbetter</u>			PERF. PIPE: <u>Bottom 180'</u>								
SIZE AND TYPE OF CASING: <u>8" PVC X 20'</u>			ANODE AMT. & TYPE: <u>Anotec - Duriron</u>								
			BOULDER DRILLING: <u>16'</u>								
DEPTH			DEPTH			COMPLETION INFORMATION:					
FT.	LOG	ANODE	FT.	LOG	ANODE	FT.	LOG	ANODE	WATER DEPTHS: <u>200 Seep</u>		
									ISOLATION PLUGS:		
100			265	1.9	10	430					
105			270	2.1		435			OUTPUT	OUTPUT	
110			275	2.3	9	440			ANODE#	DEPTH	
115			280	2.1		445			1	355	
120			285	2.3	8	450			2	345	
125			290	1.7		455			3	335	
130			295	1.9	7	460			4	325	
135			300	1.9		465			5	315	
140			305	1.9	6	470			6	305	
145			310	1.9		475			7	295	
150			315	2.1	5	480			8	285	
155			320	1.7		485			9	275	
160			325	1.8	4	490			10	265	
165			330	2.1		495			11		
170			335	2.2	3	500			12		
175			340	2.2		505			13		
180			345	2.0	2	510			14		
185			350	1.8		515			15		
190			355	1.8	1	520			16		
195			360	1.7		525			17		
200	1.1		365	1.0		530			18		
205	1.1		370	.8		535			19		
210	1.7		375	.8		540			20		
215	2.1		380	T.D.		545			21		
220	2.10		385			550			22		
225	2.10		390			555			23		
230	2.5		395			560			24		
235	2.1		400			565			25		
240	2.10		405			570			26		
245	2.10		410			575			27		
250	2.10		415			580			28		
255	2.7		420			585			29		
260	2.5		425			590			30		
						595					
LOGGING VOLTS: <u>11.85</u>						VOLTAGE SOURCE: <u>Auto</u>					
TOTAL AMPS: <u>14.2</u>						TOTAL G/B RESISTANCE: <u>.83</u>					
REMARKS:											



APPENDIX C

Executed C-138 Solid Waste Acceptance Forms

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
220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-138
Revised 08/01/11

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

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:

Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. Originating Site:

MD-7 Loop

3. Location of Material (Street Address, City, State or ULSTR):

Unit E Section 15 T 32 N R 10 W, San Juan County, NM; 36.987093, -107.875699

4. Source and Description of Waste:

Source: Hydro excavation Spoils from a Leak from a Natural Gas Gathering Line

Description: Soil impacted with Natural Gas Liquids (Condensate and Water)

Estimated Volume 100 yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 25 yd³ / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long *Thomas Long*, representative or authorized agent for Enterprise Products Operating do hereby

Generator Signature

certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

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

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

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

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long *Thomas Long* 12-5-18, representative for Enterprise Products Operating authorizes IEI, Inc. to complete

Generator Signature

the required testing/sign the Generator Waste Testing Certification.

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

5. Transporter: Riley Industrial

CL = 268 PH = 7

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: JFJ Landfarm/Industrial Ecosystems, Inc. * Permit #: NM 01-0010B

Address of Facility: #49 CR 2150 Aztec, New Mexico

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:

Roger Tingley

TITLE:

Trans Coord

DATE:

1/21/21

SIGNATURE:

Roger Tingley
Surface Waste Management Facility Authorized Agent

TELEPHONE NO.: 505-632-1782

1/18

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
220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-138
Revised 08/01/11

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

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401
2. Originating Site: MD-7 Loop
3. Location of Material (Street Address, City, State or ULSTR): Unit E Section 15 T 32 N R 10 W, San Juan County, NM; 36.987093, -107.875699
4. Source and Description of Waste: Source: Hydro excavation Spoils from a Leak from a Natural Gas Gathering Line Description: Soil impacted with Natural Gas Liquids (Condensate and Water) Estimated Volume <u>100</u> yd ³ <u>0</u> bbls Known Volume (to be entered by the operator at the end of the haul) <u>15</u> yd ³ <u>0</u> bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

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

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

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

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

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long *Thomas Long* 3-29-2021, representative for Enterprise Products Operating authorizes IEI, Inc. to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

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

5. Transporter: Riley Industrial

OCD Permitted Surface Waste Management Facility
Name and Facility Permit #: JFJ Landfarm/Industrial Ecosystems, Inc. * Permit #: NM 01-0010B
Address of Facility: #49 CR 2150 Aztec, New Mexico

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: Betty Pruden TITLE: Clerk DATE: 3/29
SIGNATURE: Betty Pruden TELEPHONE NO.: 505-632-1782
Surface Waste Management Facility Authorized Agent

CL-128
PH-7



APPENDIX D

Photographic Documentation

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Lateral MD 7 Loop (01/16/21)
Ensolum Project No. 05A1226134

**Photograph 1**

Photograph Description: View of the pipeline repair excavation activities (January 2021).

**Photograph 2**

Photograph Description: View of the pipeline repair excavation (January 2021; first sampling event).

**Photograph 3**

Photograph Description: View of the stockpiled soil (January 2021; first sampling event).



SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Lateral MD 7 Loop (01/16/21)
Ensolum Project No. 05A1226134

**Photograph 4**

Photograph Description: View of the soil boring locations (March 2021; second sampling event).

**Photograph 5**

Photograph Description: View of the soil boring locations (March 2021; second sampling event).





APPENDIX E

Regulatory Correspondence

Long, Thomas

From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Wednesday, March 31, 2021 9:13 AM
To: Long, Thomas
Cc: Stone, Brian
Subject: [EXTERNAL] RE: Lateral MD-7 Loop - Unit E Section 15 T 32 N R 10 W, San Juan County, NM; 36.987093, -107.875699; Incident #NAPP2105454212

[Use caution with links/attachments]

Tom,

Thank you for the update, if all the samples meet the closure requirements of 19.15.29 NMAC. Enterprise may continue with the closure of the incident.

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

From: Long, Thomas <tjlong@eprod.com>
Sent: Wednesday, March 31, 2021 8:44 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXT] RE: Lateral MD-7 Loop - Unit E Section 15 T 32 N R 10 W, San Juan County, NM; 36.987093, -107.875699; Incident #NAPP2105454212

Cory,

The previous property owner removed the mobile home prior to the sale in September 2019.

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



From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Wednesday, March 31, 2021 8:12 AM

To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXTERNAL] RE: Lateral MD-7 Loop - Unit E Section 15 T 32 N R 10 W, San Juan County, NM; 36.987093, -107.875699; Incident #NAPP2105454212

[Use caution with links/attachments]

Tom,

Why was the trailer moved? Does the land owner intend to put the trailer back?

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

From: Long, Thomas <tjlong@eprod.com>
Sent: Wednesday, March 31, 2021 7:47 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXT] FW: Lateral MD-7 Loop - Unit E Section 15 T 32 N R 10 W, San Juan County, NM; 36.987093, -107.875699; Incident #NAPP2105454212

Cory,

Please find the site sketch and lab report for the Lateral MB-7 Loop soil boring investigation. Since the mobile home to the east has been removed, this site falls with the NMOCD Tier III soil remediation standards. All soil sample results are below the NMOCD Tier III standards. Enterprise requests to proceed with closure with this release site. If you have any questions, please call or email.

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



From: Long, Thomas
Sent: Monday, March 29, 2021 7:16 AM
To: 'Smith, Cory, EMNRD' (Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>

Subject: FW: Lateral MD-7 Loop - Unit E Section 15 T 32 N R 10 W, San Juan County, NM; 36.987093, -107.875699;
Incident #NAPP2105454212

Cory,

We will begin the hydro-excavating today at the Lateral MD-7 Loop site. In addition, soil samples will be collected throughout the day. If you have any questions, please call or email.

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



From: Long, Thomas
Sent: Wednesday, March 24, 2021 9:09 AM
To: 'Smith, Cory, EMNRD' <Cory.Smith@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: RE: Lateral MD-7 Loop - Unit E Section 15 T 32 N R 10 W, San Juan County, NM; 36.987093, -107.875699;
Incident #NAPP2105454212

Cory,

This is an update. We have postponed remediation/sampling activities to Monday, March 19, 2021 due to the snowy and muddy conditions. I will keep you informed as to when we resume. If you have any questions, please call or email.

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



From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Tuesday, March 23, 2021 1:16 PM
To: Long, Thomas <tjlong@eprod.com>

Cc: Stone, Brian <bmstone@eprod.com>

Subject: [EXTERNAL] RE: Lateral MD-7 Loop - Unit E Section 15 T 32 N R 10 W, San Juan County, NM; 36.987093, -107.875699; Incident #NAPP2105454212

[Use caution with links/attachments]

Tom,

Ok so long is your are able to confirm that the soils coming up in the Augur are not mixed from through out the borehole I do not have any issues.

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

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

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

Sent: Tuesday, March 23, 2021 12:39 PM

To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>

Cc: Stone, Brian <bmstone@eprod.com>

Subject: [EXT] RE: Lateral MD-7 Loop - Unit E Section 15 T 32 N R 10 W, San Juan County, NM; 36.987093, -107.875699; Incident #NAPP2105454212

Cory,

We will be utilizing a hand auger from within the hydro-excavated soil boring.

Thomas J. Long

Senior Environmental Scientist

Enterprise Products Company

614 Reilly Ave.

Farmington, New Mexico 87401

505-599-2286 (office)

505-215-4727 (Cell)

tjlong@eprod.com



From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>

Sent: Tuesday, March 23, 2021 12:37 PM

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

Cc: Stone, Brian <bmstone@eprod.com>

Subject: [EXTERNAL] RE: Lateral MD-7 Loop - Unit E Section 15 T 32 N R 10 W, San Juan County, NM; 36.987093, -107.875699; Incident #NAPP2105454212

[Use caution with links/attachments]

Tom,

How is Enterprise going to collect the sample?

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

From: Long, Thomas <tjlong@eprod.com>
Sent: Tuesday, March 23, 2021 12:35 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXT] RE: Lateral MD-7 Loop - Unit E Section 15 T 32 N R 10 W, San Juan County, NM; 36.987093, -107.875699; Incident #NAPP2105454212

Cory,

We were going to measure depths with a measuring tape. Total depths will be approximately seven feet below ground surface. We will collect a sample at the highest observed impact and one sample at the bottom. Please acknowledge acceptance of this sampling technique. If you have any questions, please call or email.

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



From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Tuesday, March 23, 2021 12:22 PM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXTERNAL] RE: Lateral MD-7 Loop - Unit E Section 15 T 32 N R 10 W, San Juan County, NM; 36.987093, -107.875699; Incident #NAPP2105454212

[Use caution with links/attachments]

Tom,

If these are going to be used as confirmation samples, how do we know the soils are from the exact depth since we are using a hydro excavator?

Also how deep are they going? Is 5 aliquots and only 1 sample enough to cover the entire depth?

When doing borehole samples I would recommend following the NMAC Guidelines as at a minimum do Bottom hole and highest observed impacts.

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

From: Long, Thomas <tjlong@eprod.com>
Sent: Tuesday, March 23, 2021 9:16 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXT] FW: Lateral MD-7 Loop - Unit E Section 15 T 32 N R 10 W, San Juan County, NM; 36.987093, -107.875699; Incident #NAPP2105454212

Cory,

This email is a notification and variance request that Enterprise will be collecting soil sample for laboratory analysis at the Lateral MD-7 Loop release site beginning at 0800. Soil sampling will continue throughout the day until all soil borings are completed. Soil samples will be collected as vertical composites, which included five aliquots from ground surface to total depth from each soil boring. Please acknowledge acceptance this variance request. If you have any questions, please call or email.

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



From: Long, Thomas
Sent: Friday, March 19, 2021 8:20 AM
To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: Lateral MD-7 Loop - Unit E Section 15 T 32 N R 10 W, San Juan County, NM; 36.987093, -107.875699; Incident #NAPP2105454212

Cory,

Please find the attached for the Lateral MD-7 Loop. We will begin installing soil borings and collecting soil samples on Wednesday March 24, 2021. The soil borings will be installed utilizing a hydro-excavator as the pipeline is in service. I have attached a map illustrating to proposed soil boring locations. The excavation during the repairs was very small and there was no subsurface impacts according to the initial sampling results. If you have any questions, please call or email.

Thomas J. Long
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tjlong@eprod.com



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



APPENDIX F
Soil Boring Logs



HA-1 BORING LOG

PROJECT NUMBER 05A1226134	DRILLING DATE 3/29/21	NORTH COORDINATE NA
PROJECT NAME Lateral MD 7 Loop (01/16/21)	DRILLING COMPANY Ensolum / Riley	WEST COORDINATE NA
CLIENT Enterprise Field Services, LLC	BORING METHOD Hand Auger / Hydrovac	SURFACE COMPLETION NA
LOCATION San Juan County, NM	TOTAL DEPTH 8 ft	LOGGED BY L. Daniell
		SAMPLER L. Daniell / C. D'Apointi

Notes: Hand Auger (HA) samples were collected at intervals during hydro-excavation.

Depth (ft)	PID (ppm)	Samples	Recovery (%)	Water	Graphic Log	Material Description	Staining
0.5						Sand: Brown, medium- to gravel-grained, angular, poorly sorted, dry, loose, no hydrocarbon odor	
1							
1.5							
2	0.0						
2.5							
3							
3.5							
4		HA-1 @ 4'					
4.5	0.0					TD at 8 ft bgs	
5							
5.5							
6	0.0						
6.5							
7							
7.5		HA-1 @ 8'					
8	0.0						
8.5						TD at 8 ft bgs	
9							
9.5							

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

Page 1 of 1



HA-2 BORING LOG

PROJECT NUMBER 05A1226134	DRILLING DATE 3/29/21	NORTH COORDINATE NA
PROJECT NAME Lateral MD 7 Loop (01/16/21)	DRILLING COMPANY Ensolum / Riley	WEST COORDINATE NA
CLIENT Enterprise Field Services, LLC	BORING METHOD Hand Auger / Hydrovac	SURFACE COMPLETION NA
LOCATION San Juan County, NM	TOTAL DEPTH 7 ft	LOGGED BY L. Daniell
		SAMPLER L. Daniell / C. D'Aponi

Notes: Hand Auger (HA) samples were collected at intervals during hydro-excavation.

Depth (ft)	PID (ppm)	Samples	Recovery (%)	Water	Graphic Log	Material Description	Staining
0.5						Sand: Brown, medium- to gravel-grained, angular, poorly sorted, dry, loose, no hydrocarbon odor	
1							
1.5							
2	0.0						
2.5						Sandy Silty Clay: Brown, very fine to medium sand, dry, hard, no hydrocarbon odor	
3							
3.5							
4		HA-2 @ 4'					
4.5	0.0					Refusal at 7 ft bgs	
5							
5.5							
6	0.0						
6.5		HA-2 @ 7'				Refusal at 7 ft bgs	
7							
7.5							
8							
8.5						Refusal at 7 ft bgs	
9							
9.5							

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

Page 1 of 1



HA-3 BORING LOG

PROJECT NUMBER 05A1226134	DRILLING DATE 3/29/21	NORTH COORDINATE NA
PROJECT NAME Lateral MD 7 Loop (01/16/21)	DRILLING COMPANY Ensolum / Riley	WEST COORDINATE NA
CLIENT Enterprise Field Services, LLC	BORING METHOD Hand Auger / Hydrovac	SURFACE COMPLETION NA
LOCATION San Juan County, NM	TOTAL DEPTH 8 ft	LOGGED BY L. Daniell
		SAMPLER L. Daniell / C. D'Apointi

Notes: Hand Auger (HA) samples were collected at intervals during hydro-excavation.

Depth (ft)	PID (ppm)	Samples	Recovery (%)	Water	Graphic Log	Material Description	Staining
0.5						Sand: Brown, medium- to gravel-grained, angular, poorly sorted, dry, loose, no hydrocarbon odor	
1							
1.5							
2	0.0						
2.5							
3							
3.5							
4							
4.5	0.0	HA-3 @ 4'					
5							
5.5							
6	0.0						
6.5							
7							
7.5							
7.5	0.0	HA-3 @ 8'					
8							
8.5						TD at 8 ft bgs	
9							
9.5							

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

Page 1 of 1



HA-4 BORING LOG

PROJECT NUMBER 05A1226134	DRILLING DATE 3/29/21	NORTH COORDINATE NA
PROJECT NAME Lateral MD 7 Loop (01/16/21)	DRILLING COMPANY Ensolum / Riley	WEST COORDINATE NA
CLIENT Enterprise Field Services, LLC	BORING METHOD Hand Auger / Hydrovac	SURFACE COMPLETION NA
LOCATION San Juan County, NM	TOTAL DEPTH 8 ft	LOGGED BY L. Daniell
		SAMPLER L. Daniell / C. D'Apointi

Notes: Hand Auger (HA) samples were collected at intervals during hydro-excavation.

Depth (ft)	PID (ppm)	Samples	Recovery (%)	Water	Graphic Log	Material Description	Staining
0.5						Sand: Brown, medium- to gravel-grained, angular, poorly sorted, dry, loose, no hydrocarbon odor	
1							
1.5							
2	0.0						
2.5							
3							
3.5							
4							
4.5	0.0	HA-4 @ 4'					
5							
5.5							
6	0.0						
6.5							
7							
7.5							
7.5	0.0	HA-4 @ 8'					
8							
8.5						TD at 8 ft bgs	
9							
9.5							

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

Page 1 of 1



HA-5 BORING LOG

PROJECT NUMBER 05A1226134	DRILLING DATE 3/29/21	NORTH COORDINATE NA
PROJECT NAME Lateral MD 7 Loop (01/16/21)	DRILLING COMPANY Ensolum / Riley	WEST COORDINATE NA
CLIENT Enterprise Field Services, LLC	BORING METHOD Hand Auger / Hydrovac	SURFACE COMPLETION NA
LOCATION San Juan County, NM	TOTAL DEPTH 8 ft	LOGGED BY L. Daniell
		SAMPLER L. Daniell / C. D'Aponi

Notes: Hand Auger (HA) samples were collected at intervals during hydro-excavation.

Depth (ft)	PID (ppm)	Samples	Recovery (%)	Water	Graphic Log	Material Description	Staining
0.5						Sand: Brown, medium- to gravel-grained, angular, poorly sorted, dry, loose, no hydrocarbon odor	
1							
1.5							
2	0.0						
2.5							
3							
3.5							
4							
4.5	0.0	HA-5 @ 4'					
5							
5.5							
6	0.0						
6.5							
7							
7.5	0.0	HA-5 @ 8'					
8							
8.5						TD at 8 ft bgs	
9							
9.5							

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

Page 1 of 1



APPENDIX G

Tables



TABLE 1A Lateral MD 7 Loop (01/16/21) SOIL ANALYTICAL SUMMARY (SOIL ZONE: CONTAINS SAMPLES 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/MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria (Tier III)				10	NE	NE	NE	50				100	600
Composite Soil Sample Collected from Stockpiled Soil (January 2021)													
SP-1	1.22.21	C	Stockpile	<0.022	<0.043	<0.043	<0.086	ND	<4.3	<9.6	<48	ND	86
Hand Auger Soil Samples (March 2021)													
HA-1 @ 4'	3.29.21	G	4	<0.019	<0.038	<0.038	<0.076	ND	<3.8	<9.2	<46	ND	<60
HA-2 @ 4'	3.29.21	G	4	<0.021	<0.041	<0.041	<0.082	ND	<4.1	<9.8	<49	ND	200
HA-3 @ 4'	3.29.21	G	4	<0.021	<0.043	<0.043	<0.085	ND	<4.3	<9.1	<45	ND	<59
HA-4 @ 4'	3.29.21	G	4	<0.020	<0.040	<0.040	<0.080	ND	<4.0	<9.1	<45	ND	<61
HA-5 @ 4'	3.29.21	G	4	<0.023	<0.046	<0.046	<0.092	ND	<4.6	<9.4	<47	ND	<60

Note:

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 Hydrocarbons

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics

TABLE 1B

Lateral MD 7 Loop (01/16/21)

SOIL ANALYTICAL SUMMARY (CONTAINS SAMPLES 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) ¹ (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria (Tier III)				10	NE	NE	NE	50				1,000	2,500	20,000
Excavation Composite Soil Sample (January 2021)														
S-1	1.22.21	C	0 to 7	<0.019	<0.038	<0.038	<0.076	ND	<3.8	<9.8	<49	ND	ND	120
Hand Auger Soil Samples (March 2021)														
HA-1 @ 8'	3.29.21	G	8	<0.020	<0.039	<0.039	<0.078	ND	<3.9	<9.6	<48	ND	ND	69
HA-2 @ 7'	3.29.21	G	7	<0.022	<0.044	<0.044	<0.087	ND	<4.4	10	<49	10	10	180
HA-3 @ 8'	3.29.21	G	8	<0.023	<0.046	<0.046	<0.091	ND	<4.6	<9.4	<47	ND	ND	<61
HA-4 @ 8'	3.29.21	G	8	<0.019	<0.037	<0.037	<0.075	ND	<3.7	<9.1	<45	ND	ND	<60
HA-5 @ 8'	3.29.21	G	8	<0.020	<0.039	<0.039	<0.078	ND	<3.9	17	150	17	170	<60

Note:

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

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

NA = Not Analyzed

NE = Not Established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPH = Total Petroleum Hydrocarbons

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics



APPENDIX H

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

January 28, 2021

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: MD 7 Loop Jan 2021

OrderNo.: 2101893

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 2 sample(s) on 1/23/2021 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com 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 horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2101893

Date Reported: 1/28/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-1

Project: MD 7 Loop Jan 2021

Collection Date: 1/22/2021 2:00:00 PM

Lab ID: 2101893-001

Matrix: MEOH (SOIL)

Received Date: 1/23/2021 9:28:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	120	61		mg/Kg	20	1/25/2021 9:52:34 AM	57703
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	1/25/2021 8:04:11 AM	57700
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/25/2021 8:04:11 AM	57700
Surr: DNOP	96.9	30.4-154		%Rec	1	1/25/2021 8:04:11 AM	57700
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	1/24/2021 10:53:45 AM	57694
Surr: BFB	96.0	75.3-105		%Rec	1	1/24/2021 10:53:45 AM	57694
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.019		mg/Kg	1	1/24/2021 10:53:45 AM	57694
Toluene	ND	0.038		mg/Kg	1	1/24/2021 10:53:45 AM	57694
Ethylbenzene	ND	0.038		mg/Kg	1	1/24/2021 10:53:45 AM	57694
Xylenes, Total	ND	0.076		mg/Kg	1	1/24/2021 10:53:45 AM	57694
Surr: 4-Bromofluorobenzene	97.7	80-120		%Rec	1	1/24/2021 10:53:45 AM	57694

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	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 6

Analytical Report

Lab Order 2101893

Date Reported: 1/28/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: SP-1

Project: MD 7 Loop Jan 2021

Collection Date: 1/22/2021 2:05:00 PM

Lab ID: 2101893-002

Matrix: MEOH (SOIL)

Received Date: 1/23/2021 9:28:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	86	60		mg/Kg	20	1/25/2021 10:04:58 AM	57703
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/25/2021 8:27:40 AM	57700
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/25/2021 8:27:40 AM	57700
Surr: DNOP	97.8	30.4-154		%Rec	1	1/25/2021 8:27:40 AM	57700
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.3		mg/Kg	1	1/24/2021 11:17:30 AM	57694
Surr: BFB	94.9	75.3-105		%Rec	1	1/24/2021 11:17:30 AM	57694
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.022		mg/Kg	1	1/24/2021 11:17:30 AM	57694
Toluene	ND	0.043		mg/Kg	1	1/24/2021 11:17:30 AM	57694
Ethylbenzene	ND	0.043		mg/Kg	1	1/24/2021 11:17:30 AM	57694
Xylenes, Total	ND	0.086		mg/Kg	1	1/24/2021 11:17:30 AM	57694
Surr: 4-Bromofluorobenzene	96.3	80-120		%Rec	1	1/24/2021 11:17:30 AM	57694

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	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 2 of 6

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

WO#: 2101893

28-Jan-21

Client: ENSOLUM
Project: MD 7 Loop Jan 2021

Sample ID: MB-57703	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57703	RunNo: 74822								
Prep Date: 1/25/2021	Analysis Date: 1/25/2021	SeqNo: 2641404	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57703	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57703	RunNo: 74822								
Prep Date: 1/25/2021	Analysis Date: 1/25/2021	SeqNo: 2641405	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.4	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical 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#: 2101893

28-Jan-21

Client: ENSOLUM
Project: MD 7 Loop Jan 2021

Sample ID: MB-57700	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 57700	RunNo: 74844								
Prep Date: 1/23/2021	Analysis Date: 1/25/2021	SeqNo: 2641559 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		101	30.4	154			

Sample ID: LCS-57700	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 57700	RunNo: 74844								
Prep Date: 1/23/2021	Analysis Date: 1/25/2021	SeqNo: 2641560 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.6	68.9	141			
Surr: DNOP	4.4		5.000		88.4	30.4	154			

Sample ID: LCS-57717	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 57717	RunNo: 74840								
Prep Date: 1/25/2021	Analysis Date: 1/26/2021	SeqNo: 2641647 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.0		5.000		101	30.4	154			

Sample ID: MB-57717	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 57717	RunNo: 74840								
Prep Date: 1/25/2021	Analysis Date: 1/26/2021	SeqNo: 2641649 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		110	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#: 2101893

28-Jan-21

Client: ENSOLUM
Project: MD 7 Loop Jan 2021

Sample ID: mb-57694	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 57694	RunNo: 74814								
Prep Date: 1/22/2021	Analysis Date: 1/24/2021	SeqNo: 2640378	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		94.5	75.3	105			

Sample ID: lcs-57694	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 57694	RunNo: 74814								
Prep Date: 1/22/2021	Analysis Date: 1/24/2021	SeqNo: 2640379	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.7	80	120			
Surr: BFB	1100		1000		107	75.3	105			S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical 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#: 2101893

28-Jan-21

Client: ENSOLUM
Project: MD 7 Loop Jan 2021

Sample ID: mb-57694	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 57694	RunNo: 74814								
Prep Date: 1/22/2021	Analysis Date: 1/24/2021	SeqNo: 2640429	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.97		1.000		97.1	80	120			

Sample ID: LCS-57694	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 57694	RunNo: 74814								
Prep Date: 1/22/2021	Analysis Date: 1/24/2021	SeqNo: 2640430	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.0	80	120			
Toluene	0.96	0.050	1.000	0	95.6	80	120			
Ethylbenzene	0.95	0.050	1.000	0	94.6	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.8	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		100	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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Sample Log-In Check List

Client Name: **ENSOLUM**

Work Order Number: 2101893

RcptNo: 1

Received By: **Desiree Dominguez**

1/23/2021 9:28:00 AM

Dr

Completed By: **Desiree Dominguez**

1/23/2021 9:34:11 AM

10

Reviewed By: DT 1/23/21

Chain of Custody

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

Log In

- | | | | |
|--|---|--|--|
| 3. Was an attempt made to cool the samples? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| 4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| 5. Sample(s) in proper container(s)? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 6. Sufficient sample volume for indicated test(s)? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 7. Are samples (except VOA and ONG) properly preserved? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 8. Was preservative added to bottles? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | NA <input type="checkbox"/> |
| 9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |
| 10. Were any sample containers received broken? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| 11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 12. Are matrices correctly identified on Chain of Custody? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 13. Is it clear what analyses were requested? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 14. Were all holding times able to be met?
(If no, notify customer for authorization.) | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
- # of preserved bottles checked for pH: (2)

Adjusted? _____

Checked by: _____

of preserved bottles checked for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: DAD 01/23/2

Special Handling (if applicable)

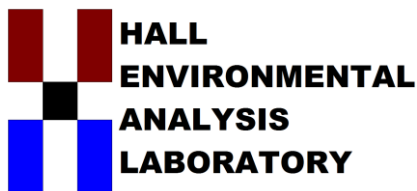
15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

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

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.4	Good				



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

April 01, 2021

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: MD 7 Loop 2021

OrderNo.: 2103D37

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 10 sample(s) on 3/30/2021 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com 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 horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2103D37

Date Reported: 4/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: HA-1 @ 4

Project: MD 7 Loop 2021

Collection Date: 3/29/2021 9:05:00 AM

Lab ID: 2103D37-001

Matrix: MEOH (SOIL)

Received Date: 3/30/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	3/30/2021 10:17:22 AM	59055
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	3/30/2021 11:46:45 AM	59052
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/30/2021 11:46:45 AM	59052
Surr: DNOP	103	70-130		%Rec	1	3/30/2021 11:46:45 AM	59052
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	3/30/2021 9:01:33 AM	G76321
Surr: BFB	97.6	75.3-105		%Rec	1	3/30/2021 9:01:33 AM	G76321
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.019		mg/Kg	1	3/30/2021 9:01:33 AM	B76321
Toluene	ND	0.038		mg/Kg	1	3/30/2021 9:01:33 AM	B76321
Ethylbenzene	ND	0.038		mg/Kg	1	3/30/2021 9:01:33 AM	B76321
Xylenes, Total	ND	0.076		mg/Kg	1	3/30/2021 9:01:33 AM	B76321
Surr: 4-Bromofluorobenzene	97.0	80-120		%Rec	1	3/30/2021 9:01:33 AM	B76321

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	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 14

Analytical Report

Lab Order 2103D37

Date Reported: 4/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: HA-1 @ 8

Project: MD 7 Loop 2021

Collection Date: 3/29/2021 9:20:00 AM

Lab ID: 2103D37-002

Matrix: MEOH (SOIL)

Received Date: 3/30/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	69	61		mg/Kg	20	3/30/2021 10:29:46 AM	59055
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/30/2021 11:56:22 AM	59052
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/30/2021 11:56:22 AM	59052
Surr: DNOP	103	70-130		%Rec	1	3/30/2021 11:56:22 AM	59052
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	3/30/2021 9:25:15 AM	G76321
Surr: BFB	98.0	75.3-105		%Rec	1	3/30/2021 9:25:15 AM	G76321
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.020		mg/Kg	1	3/30/2021 9:25:15 AM	B76321
Toluene	ND	0.039		mg/Kg	1	3/30/2021 9:25:15 AM	B76321
Ethylbenzene	ND	0.039		mg/Kg	1	3/30/2021 9:25:15 AM	B76321
Xylenes, Total	ND	0.078		mg/Kg	1	3/30/2021 9:25:15 AM	B76321
Surr: 4-Bromofluorobenzene	97.6	80-120		%Rec	1	3/30/2021 9:25:15 AM	B76321

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	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 2103D37

Date Reported: 4/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: HA-2 @ 4

Project: MD 7 Loop 2021

Collection Date: 3/29/2021 9:30:00 AM

Lab ID: 2103D37-003

Matrix: MEOH (SOIL)

Received Date: 3/30/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	200	60		mg/Kg	20	3/30/2021 10:42:10 AM	59055
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/30/2021 12:06:00 PM	59052
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/30/2021 12:06:00 PM	59052
Surr: DNOP	100	70-130		%Rec	1	3/30/2021 12:06:00 PM	59052
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	3/30/2021 9:48:55 AM	G76321
Surr: BFB	100	75.3-105		%Rec	1	3/30/2021 9:48:55 AM	G76321
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.021		mg/Kg	1	3/30/2021 9:48:55 AM	B76321
Toluene	ND	0.041		mg/Kg	1	3/30/2021 9:48:55 AM	B76321
Ethylbenzene	ND	0.041		mg/Kg	1	3/30/2021 9:48:55 AM	B76321
Xylenes, Total	ND	0.082		mg/Kg	1	3/30/2021 9:48:55 AM	B76321
Surr: 4-Bromofluorobenzene	98.2	80-120		%Rec	1	3/30/2021 9:48:55 AM	B76321

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	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 2103D37

Date Reported: 4/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: HA-2 @ 7

Project: MD 7 Loop 2021

Collection Date: 3/29/2021 10:00:00 AM

Lab ID: 2103D37-004

Matrix: MEOH (SOIL)

Received Date: 3/30/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	180	60		mg/Kg	20	3/30/2021 10:54:35 AM	59055
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	10	9.8		mg/Kg	1	3/30/2021 12:15:39 PM	59052
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/30/2021 12:15:39 PM	59052
Surr: DNOP	103	70-130		%Rec	1	3/30/2021 12:15:39 PM	59052
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	3/30/2021 10:12:32 AM	G76321
Surr: BFB	98.3	75.3-105		%Rec	1	3/30/2021 10:12:32 AM	G76321
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.022		mg/Kg	1	3/30/2021 10:12:32 AM	B76321
Toluene	ND	0.044		mg/Kg	1	3/30/2021 10:12:32 AM	B76321
Ethylbenzene	ND	0.044		mg/Kg	1	3/30/2021 10:12:32 AM	B76321
Xylenes, Total	ND	0.087		mg/Kg	1	3/30/2021 10:12:32 AM	B76321
Surr: 4-Bromofluorobenzene	97.5	80-120		%Rec	1	3/30/2021 10:12:32 AM	B76321

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	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 2103D37

Date Reported: 4/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: HA-3 @ 4

Project: MD 7 Loop 2021

Collection Date: 3/29/2021 10:15:00 AM

Lab ID: 2103D37-005

Matrix: MEOH (SOIL)

Received Date: 3/30/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	59		mg/Kg	20	3/30/2021 11:06:59 AM	59055
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	3/30/2021 12:25:20 PM	59052
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	3/30/2021 12:25:20 PM	59052
Surr: DNOP	101	70-130		%Rec	1	3/30/2021 12:25:20 PM	59052
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.3		mg/Kg	1	3/30/2021 10:36:12 AM	G76321
Surr: BFB	98.0	75.3-105		%Rec	1	3/30/2021 10:36:12 AM	G76321
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.021		mg/Kg	1	3/30/2021 10:36:12 AM	B76321
Toluene	ND	0.043		mg/Kg	1	3/30/2021 10:36:12 AM	B76321
Ethylbenzene	ND	0.043		mg/Kg	1	3/30/2021 10:36:12 AM	B76321
Xylenes, Total	ND	0.085		mg/Kg	1	3/30/2021 10:36:12 AM	B76321
Surr: 4-Bromofluorobenzene	98.4	80-120		%Rec	1	3/30/2021 10:36:12 AM	B76321

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	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 2103D37

Date Reported: 4/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: HA-3 @ 8

Project: MD 7 Loop 2021

Collection Date: 3/29/2021 10:30:00 AM

Lab ID: 2103D37-006

Matrix: MEOH (SOIL)

Received Date: 3/30/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	61		mg/Kg	20	3/30/2021 11:19:24 AM	59055
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/30/2021 12:34:57 PM	59052
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/30/2021 12:34:57 PM	59052
Surr: DNOP	117	70-130		%Rec	1	3/30/2021 12:34:57 PM	59052
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/30/2021 11:00:01 AM	G76321
Surr: BFB	97.0	75.3-105		%Rec	1	3/30/2021 11:00:01 AM	G76321
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/30/2021 11:00:01 AM	B76321
Toluene	ND	0.046		mg/Kg	1	3/30/2021 11:00:01 AM	B76321
Ethylbenzene	ND	0.046		mg/Kg	1	3/30/2021 11:00:01 AM	B76321
Xylenes, Total	ND	0.091		mg/Kg	1	3/30/2021 11:00:01 AM	B76321
Surr: 4-Bromofluorobenzene	97.8	80-120		%Rec	1	3/30/2021 11:00:01 AM	B76321

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	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 2103D37

Date Reported: 4/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: HA-4 @ 4

Project: MD 7 Loop 2021

Collection Date: 3/29/2021 10:40:00 AM

Lab ID: 2103D37-007

Matrix: MEOH (SOIL)

Received Date: 3/30/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	61		mg/Kg	20	3/30/2021 11:56:38 AM	59055
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	3/30/2021 12:44:39 PM	59052
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	3/30/2021 12:44:39 PM	59052
Surr: DNOP	98.3	70-130		%Rec	1	3/30/2021 12:44:39 PM	59052
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	3/30/2021 11:23:42 AM	G76321
Surr: BFB	100	75.3-105		%Rec	1	3/30/2021 11:23:42 AM	G76321
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.020		mg/Kg	1	3/30/2021 11:23:42 AM	B76321
Toluene	ND	0.040		mg/Kg	1	3/30/2021 11:23:42 AM	B76321
Ethylbenzene	ND	0.040		mg/Kg	1	3/30/2021 11:23:42 AM	B76321
Xylenes, Total	ND	0.080		mg/Kg	1	3/30/2021 11:23:42 AM	B76321
Surr: 4-Bromofluorobenzene	98.6	80-120		%Rec	1	3/30/2021 11:23:42 AM	B76321

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	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 2103D37

Date Reported: 4/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: HA-4 @ 8

Project: MD 7 Loop 2021

Collection Date: 3/29/2021 10:50:00 AM

Lab ID: 2103D37-008

Matrix: MEOH (SOIL)

Received Date: 3/30/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	3/30/2021 12:09:03 PM	59055
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	3/30/2021 12:54:18 PM	59052
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	3/30/2021 12:54:18 PM	59052
Surr: DNOP	98.8	70-130		%Rec	1	3/30/2021 12:54:18 PM	59052
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	3/30/2021 11:47:18 AM	G76321
Surr: BFB	96.6	75.3-105		%Rec	1	3/30/2021 11:47:18 AM	G76321
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.019		mg/Kg	1	3/30/2021 11:47:18 AM	B76321
Toluene	ND	0.037		mg/Kg	1	3/30/2021 11:47:18 AM	B76321
Ethylbenzene	ND	0.037		mg/Kg	1	3/30/2021 11:47:18 AM	B76321
Xylenes, Total	ND	0.075		mg/Kg	1	3/30/2021 11:47:18 AM	B76321
Surr: 4-Bromofluorobenzene	97.8	80-120		%Rec	1	3/30/2021 11:47:18 AM	B76321

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	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 2103D37

Date Reported: 4/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: HA-5 @ 4

Project: MD 7 Loop 2021

Collection Date: 3/29/2021 11:00:00 AM

Lab ID: 2103D37-009

Matrix: MEOH (SOIL)

Received Date: 3/30/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	3/30/2021 12:21:28 PM	59055
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/30/2021 1:03:59 PM	59052
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/30/2021 1:03:59 PM	59052
Surr: DNOP	97.3	70-130		%Rec	1	3/30/2021 1:03:59 PM	59052
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/30/2021 12:34:17 PM	G76321
Surr: BFB	100	75.3-105		%Rec	1	3/30/2021 12:34:17 PM	G76321
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/30/2021 12:34:17 PM	B76321
Toluene	ND	0.046		mg/Kg	1	3/30/2021 12:34:17 PM	B76321
Ethylbenzene	ND	0.046		mg/Kg	1	3/30/2021 12:34:17 PM	B76321
Xylenes, Total	ND	0.092		mg/Kg	1	3/30/2021 12:34:17 PM	B76321
Surr: 4-Bromofluorobenzene	98.4	80-120		%Rec	1	3/30/2021 12:34:17 PM	B76321

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	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 2103D37

Date Reported: 4/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: HA-5 @ 8

Project: MD 7 Loop 2021

Collection Date: 3/29/2021 11:10:00 AM

Lab ID: 2103D37-010

Matrix: MEOH (SOIL)

Received Date: 3/30/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	3/30/2021 12:33:52 PM	59055
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	17	9.4		mg/Kg	1	3/30/2021 1:13:41 PM	59052
Motor Oil Range Organics (MRO)	150	47		mg/Kg	1	3/30/2021 1:13:41 PM	59052
Surr: DNOP	120	70-130		%Rec	1	3/30/2021 1:13:41 PM	59052
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	3/30/2021 12:58:12 PM	G76321
Surr: BFB	98.5	75.3-105		%Rec	1	3/30/2021 12:58:12 PM	G76321
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.020		mg/Kg	1	3/30/2021 12:58:12 PM	B76321
Toluene	ND	0.039		mg/Kg	1	3/30/2021 12:58:12 PM	B76321
Ethylbenzene	ND	0.039		mg/Kg	1	3/30/2021 12:58:12 PM	B76321
Xylenes, Total	ND	0.078		mg/Kg	1	3/30/2021 12:58:12 PM	B76321
Surr: 4-Bromofluorobenzene	96.2	80-120		%Rec	1	3/30/2021 12:58:12 PM	B76321

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	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#: 2103D37

01-Apr-21

Client: ENSOLUM**Project:** MD 7 Loop 2021

Sample ID: MB-59055	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 59055	RunNo: 76305								
Prep Date: 3/30/2021	Analysis Date: 3/30/2021	SeqNo: 2703352	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-59055	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 59055	RunNo: 76305								
Prep Date: 3/30/2021	Analysis Date: 3/30/2021	SeqNo: 2703353	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.3	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#: 2103D37

01-Apr-21

Client: ENSOLUM**Project:** MD 7 Loop 2021

Sample ID: MB-59052	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59052	RunNo: 76317								
Prep Date: 3/30/2021	Analysis Date: 3/30/2021	SeqNo: 2702193	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Diesel Range Organics (DRO)

ND

10

Motor Oil Range Organics (MRO)

ND

50

Surr: DNOP

9.7

10.00

97.0

70

130

Sample ID: LCS-59052	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 59052	RunNo: 76317								
Prep Date: 3/30/2021	Analysis Date: 3/30/2021	SeqNo: 2702194	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Diesel Range Organics (DRO)

45

10

50.00

0

90.4

68.9

141

Surr: DNOP

4.9

5.000

98.2

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

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

WO#: 2103D37

01-Apr-21

Client: ENSOLUM
Project: MD 7 Loop 2021

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: G76321		RunNo: 76321							
Prep Date:	Analysis Date: 3/30/2021		SeqNo: 2702617		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		104	75.3	105			

Sample ID: 2.5ug gro lcs	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: G76321		RunNo: 76321							
Prep Date:	Analysis Date: 3/30/2021		SeqNo: 2702618		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.4	80	120			
Surr: BFB	1100		1000		110	75.3	105			S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical 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#: 2103D37

01-Apr-21

Client: ENSOLUM
Project: MD 7 Loop 2021

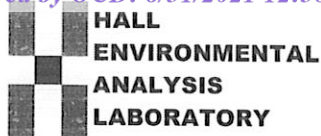
Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: B76321	RunNo: 76321								
Prep Date:	Analysis Date: 3/30/2021	SeqNo: 2702649	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		99.8	80	120			

Sample ID: 100ng btex lcs	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: B76321	RunNo: 76321								
Prep Date:	Analysis Date: 3/30/2021	SeqNo: 2702650	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	96.6	80	120			
Toluene	0.98	0.050	1.000	0	98.5	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.1	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.6	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		100	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



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: 2103D37

RcptNo: 1

Received By: Juan Rojas

3/30/2021 8:00:00 AM

Completed By: Sean Livingston

3/30/2021 8:16:31 AM

Reviewed By: ENM

3/30/21

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: JR 3/30/21

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	0.8	Good				

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 45555

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 45555
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	3/2/2022