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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: **Enterprise Field Services, LLC**	OGRID: **241602**
Contact Name: **Thomas Long**	Contact Telephone: **505-599-2286**
Contact email:**tjlong@eprod.com**	Incident # *(assigned by OCD)* **nAPP2307927327**
Contact mailing address: **614 Reilly Ave, Farmington, NM 87401**	

Location of Release Source

Latitude **36.557716** Longitude **-107.892107** *(NAD 83 in decimal degrees to 5 decimal places)*

Site Name **Lateral 2A-2**	Site Type **Natural Gas Gathering Pipeline**
Date Release Discovered: **03/20/2023**	Serial Number *(if applicable)*: **N/A**

Unit Letter	Section	Township	Range	County
I	**21**	**27N**	**10W**	**San Juan**

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☒ Condensate	Volume Released (bbls): **Estimated 5 BBLs**	Volume Recovered (bbls): **None**
☒ Natural Gas	Volume Released (Mcf): **8.23 MCF**	Volume Recovered (Mcf): **None**
☐ Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

Cause of Release: On March 20, 2023, Enterprise had a release of natural gas and natural gas liquids from the Lateral 2A-2 pipeline. The pipeline was isolated, depressurized, locked and tagged out. No fire nor injuries occurred. Release liquids flowed approximately 50 feet to the southwest entering an ephemeral wash. Repairs and remediation were completed on January 30, 2023. The final excavation dimensions measured approximately 12 feet long by seven feet wide by 4.5 feet deep. A total of 24 cubic yards of hydrocarbon impacted soil was excavated and transported to a New Mexico Oil Conservation Division (NMOCD) approved land farm. A third party closure report is included with this "Final" C-141.

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Thomas Long Title: Senior Environmental Scientist

Signature: Thomas Long Date: 06-12-2023

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

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: Nelson Velez Date: 06/13/2023

Printed Name: Nelson Velez Title: Environmental Specialist – Adv

ENSOLUM

CLOSURE REPORT

Property:

Lateral 2A-2 (03/20/23)
Unit Letter I, S21 T27N R10W
San Juan County, New Mexico

New Mexico EMNRD OCD Incident ID No. NAPP2307927327

June 8, 2023

Ensolum Project No. 05A1226232

Prepared for:

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

Prepared by:

Chad D'Aponti
Project Scientist

Kyle Summers
Senior Managing Geologist

TABLE OF CONTENTS

LIST OF APPENDICES

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Lateral 2A-2 (03/20/23) (Site)
NM EMNRD OCD Incident ID No.	NAPP2307927327
Location:	36.557716° North, 107.892107° West Unit Letter I, Section 21, Township 27 North, Range 10 West San Juan County, New Mexico
Property:	United States Bureau of Land Management (BLM)
Regulatory:	New Mexico (NM) Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On March 19, 2023, Enterprise identified a potential release of natural gas from the Lateral 2A-2 pipeline. Enterprise subsequently isolated and locked the pipeline out of service. On March 20, 2023, Enterprise determined the release was "reportable" due to the estimated volume of impacted soil. The NM EMNRD OCD was subsequently notified. On March 27, 2023, Enterprise initiated activities to repair the pipeline and remediate petroleum hydrocarbon impact.

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

1.2 Project Objective

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

2.0 CLOSURE CRITERIA

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

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

- Eleven cathodic protection wells (CPWs) were identified in the NM EMNRD OCD imaging database in the same PLSS section as the Site and in the adjacent PLSS sections. These CPWs are depicted on **Figure B** (**Appendix B**). Two of the closest CPWs are located less

than 0.25 miles from the Site. Documentation for the cathodic protection well located near the Johnson #2 well location indicates a depth to water of approximately 120 feet below grade surface (bgs). This cathodic protection well is located approximately 0.18 miles southwest of the Site and is approximately 20 feet lower in elevation than the Site. Documentation for the cathodic protection well located near the Gordon #5 well location indicates a depth to water of approximately 115 feet bgs. This cathodic protection well is located approximately 0.24 miles southeast of the Site and is approximately 10 feet higher in elevation than the Site.

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

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

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

[1] – Constituent concentrations are in milligrams per kilogram (mg/kg).
[2] – Total Petroleum Hydrocarbons (TPH). Gasoline Range Organics (GRO). Diesel Range Organics (DRO). Motor Oil/Lube Oil Range Organics (MRO).

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

3.0 SOIL REMEDIATION ACTIVITIES

On March 27, 2023, Enterprise initiated activities to repair the pipeline and remediate petroleum hydrocarbon impact resulting from the release. During the remediation and corrective action activities, Industrial Mechanical Inc (IMI), provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final excavation measured approximately 12 feet long and 7 feet wide at the maximum extent. The maximum depth of the excavation measured approximately 4.5 feet bgs. The flow path measured approximately 100 feet long and 1 foot wide. The lithology encountered during the completion of remediation activities consisted primarily of silty sandy clay.

Approximately 24 cubic yards (yd^3) of petroleum hydrocarbon-affected soils were transported to the Envirotech, Inc., (Envirotech) landfarm near Hilltop, NM for disposal/remediation. The executed C-138 solid waste acceptance form is provided in **Appendix C**. After acceptable analytical results were obtained, the excavation was backfilled with imported fill and then contoured to the surrounding topography.

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

4.0 SOIL SAMPLING PROGRAM

Ensolum field screened the soil samples from the excavation utilizing a photoionization detector (PID) fitted with a 10.6 eV lamp to guide excavation extents.

Ensolum's soil sampling program included the collection of five composite soil samples (S-1 through S-5) from the excavation and two flow path composite soil samples (FP-1 and FP-2) for laboratory analysis. The composite samples were comprised of five aliquots each and represent an estimated 200 square foot (ft^2) or less sample area per guidelines outlined in Section D of 19.15.29.12 NMAC. Hand tools were utilized to obtain fresh aliquots from each area of the excavation. Regulatory correspondence is provided in **Appendix E**.

Sampling Event

On March 28, 2023, sampling was performed at the Site. The NM EMNRD OCD was notified of the sampling event although no representative was present during sampling activities. Composite soil sample S-1 (4.5') was collected from the floor of the excavation. Composite soil samples S-2 (0'-4.5'), S-3 (0'-4.5'), S-4 (0'-4.5'), and S-5 (0'-4.5'), were collected from the walls of the excavation. Two composite soil samples (FP-1 (0.25') and FP-2 (0.25')) were collected from the flow path to confirm the soil did not exhibit petroleum hydrocarbon impact.

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

5.0 SOIL LABORATORY ANALYTICAL METHODS

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

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

6.0 SOIL DATA EVALUATION

Ensolum compared the benzene, BTEX, TPH, and chloride laboratory analytical results or laboratory practical quantitation limits (PQLs) / reporting limits (RLs) associated with the composite soil samples (S-1 through S-5, FP-1, and FP-2) to the applicable NM EMNRD OCD closure criteria. The laboratory analytical results are summarized in **Table 1** (**Appendix F**).

- The laboratory analytical results for the composite soil samples indicate benzene is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable NM EMNRD OCD criteria of 10 mg/kg.
- The laboratory analytical results for the composite soil samples indicate that total BTEX is not present in concentrations greater than the laboratory PQLs/RLs, which are less than the applicable NM EMNRD OCD closure criteria of 50 mg/kg.
- The laboratory analytical results for the composite soil samples indicate total combined TPH GRO/DRO/MRO is not present in concentrations greater than the laboratory PQLs/RLs, which are less than the applicable NM EMNRD OCD closure criteria of 100 mg/kg.
- The laboratory analytical results for the composite soil samples indicate chloride is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable NM EMNRD OCD criteria of 600 mg/kg.

7.0 RECLAMATION AND REVEGETATION

The excavation was backfilled with imported fill and then contoured to the surrounding topography.

8.0 FINDINGS AND RECOMMENDATION

- Seven composite soil samples were collected from the Site. Based on laboratory analytical results, no benzene, total BTEX, chloride, or combined TPH GRO/DRO/MRO exceedances were identified in the soils remaining at the Site.
- Approximately 24 yd^3 of petroleum hydrocarbon-affected soils were transported to the Envirotech landfarm for disposal/remediation. The excavation was backfilled with imported fill and then contoured to the surrounding topography.

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

9.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

9.1 Standard of Care

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

9.2 Limitations

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

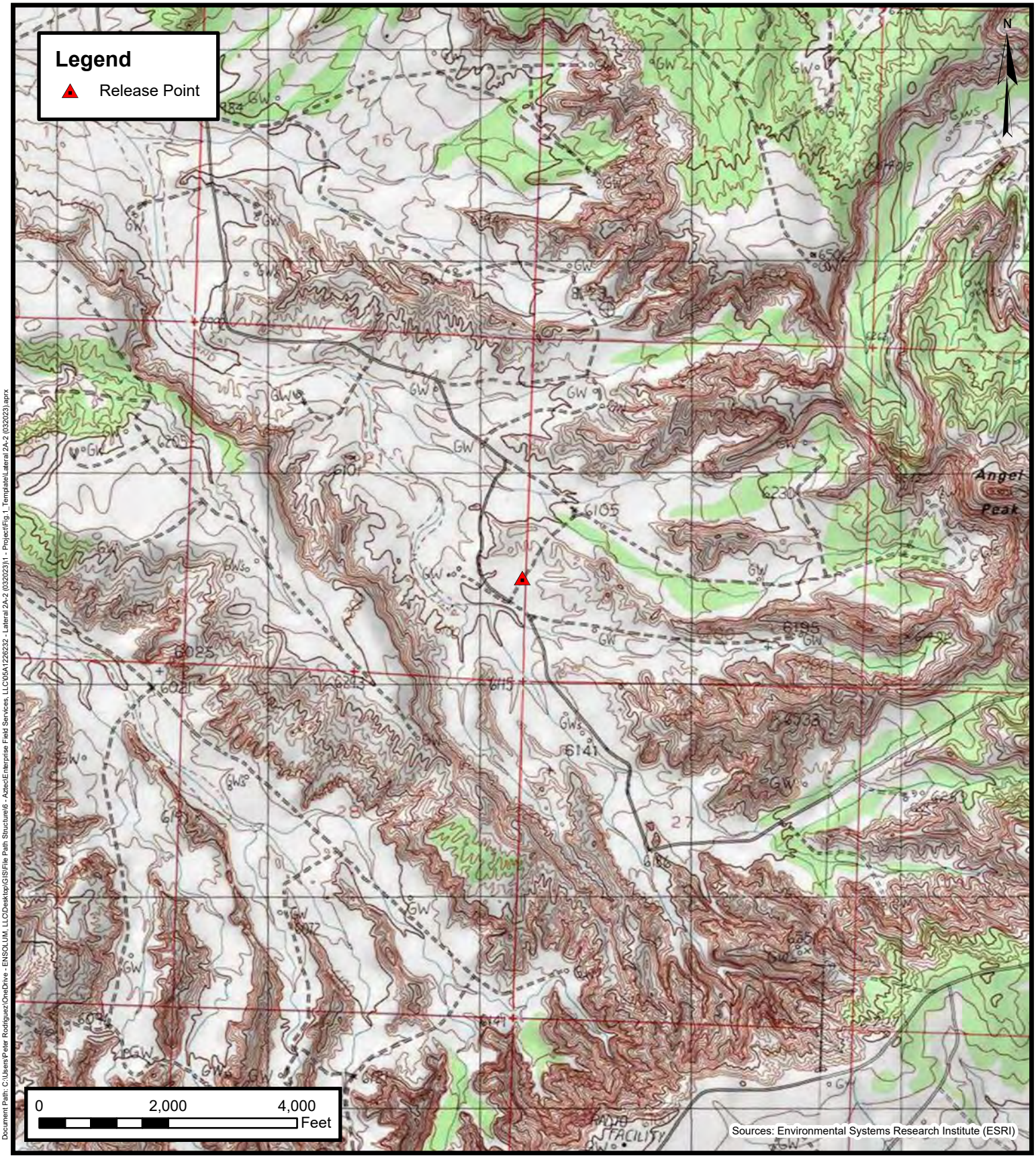
9.3 Reliance

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

ENSOLUM

APPENDIX A

Figures



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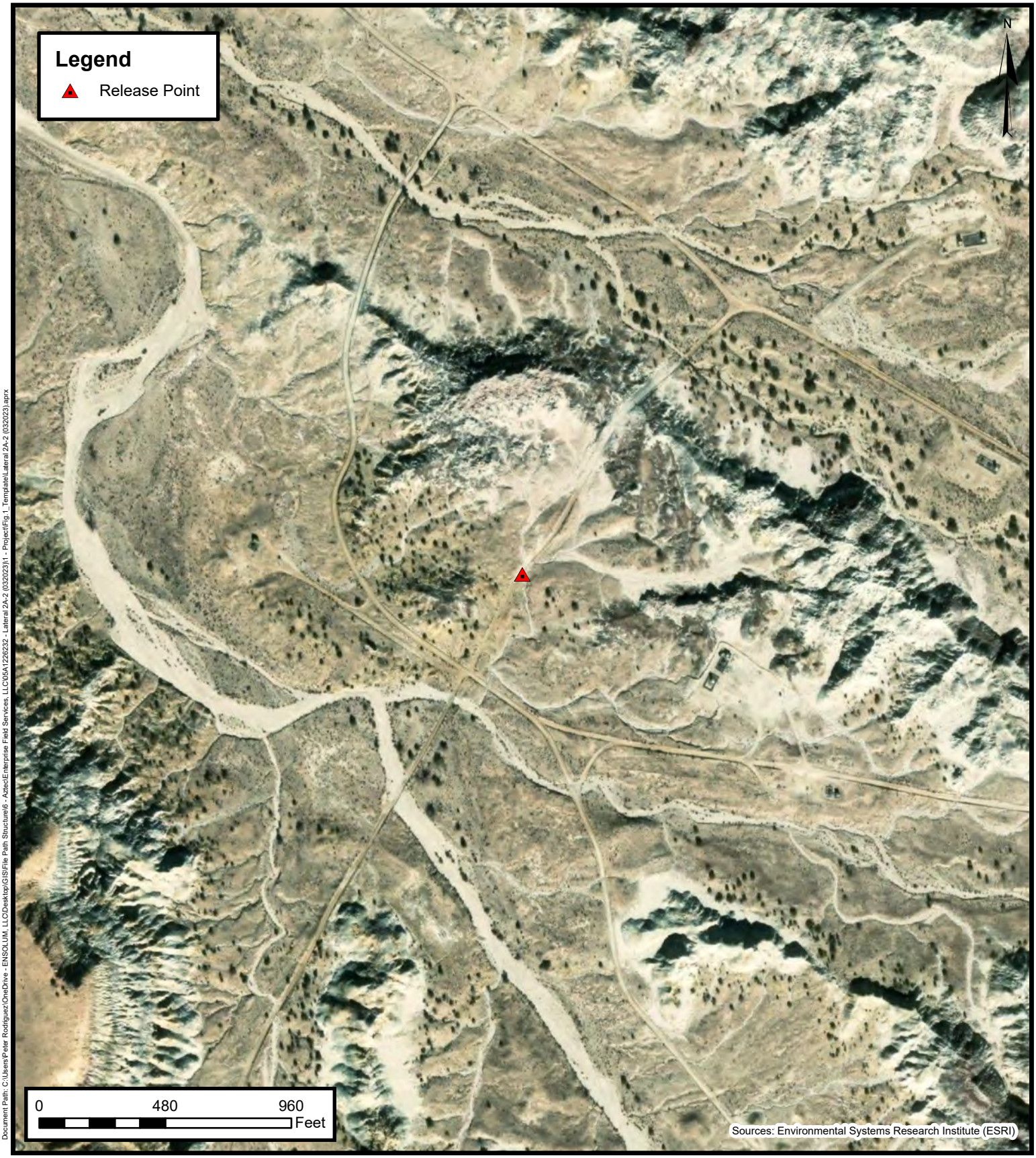
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Topographic Map

Enterprise Field Services, LLC
Lateral 2A-2 (03/20/23)
Project Number: 05A1226232
Unit Letter I, S21 T27N R10W, San Juan County, New Mexico
36.557716, -107.892107

FIGURE

1



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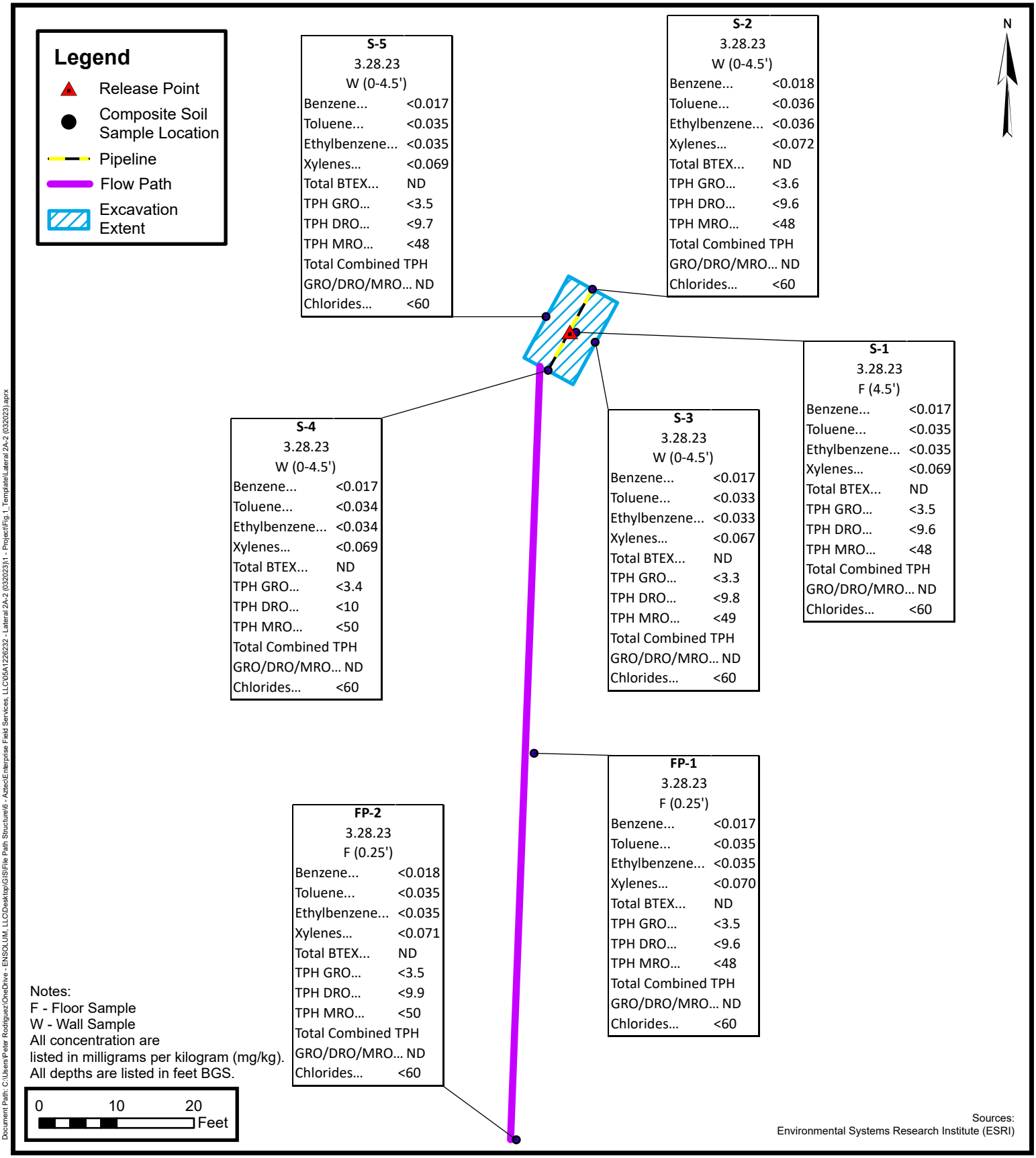
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Site Vicinity Map

Enterprise Field Services, LLC
Lateral 2A-2 (03/20/23)
Project Number: 05A1226232
Unit Letter I, S21 T27N R10W, San Juan County, New Mexico
36.557716, -107.892107

FIGURE
1



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Environmental, Engineering and Hydrogeologic Consultants

Site Map with Soil Analytical Results

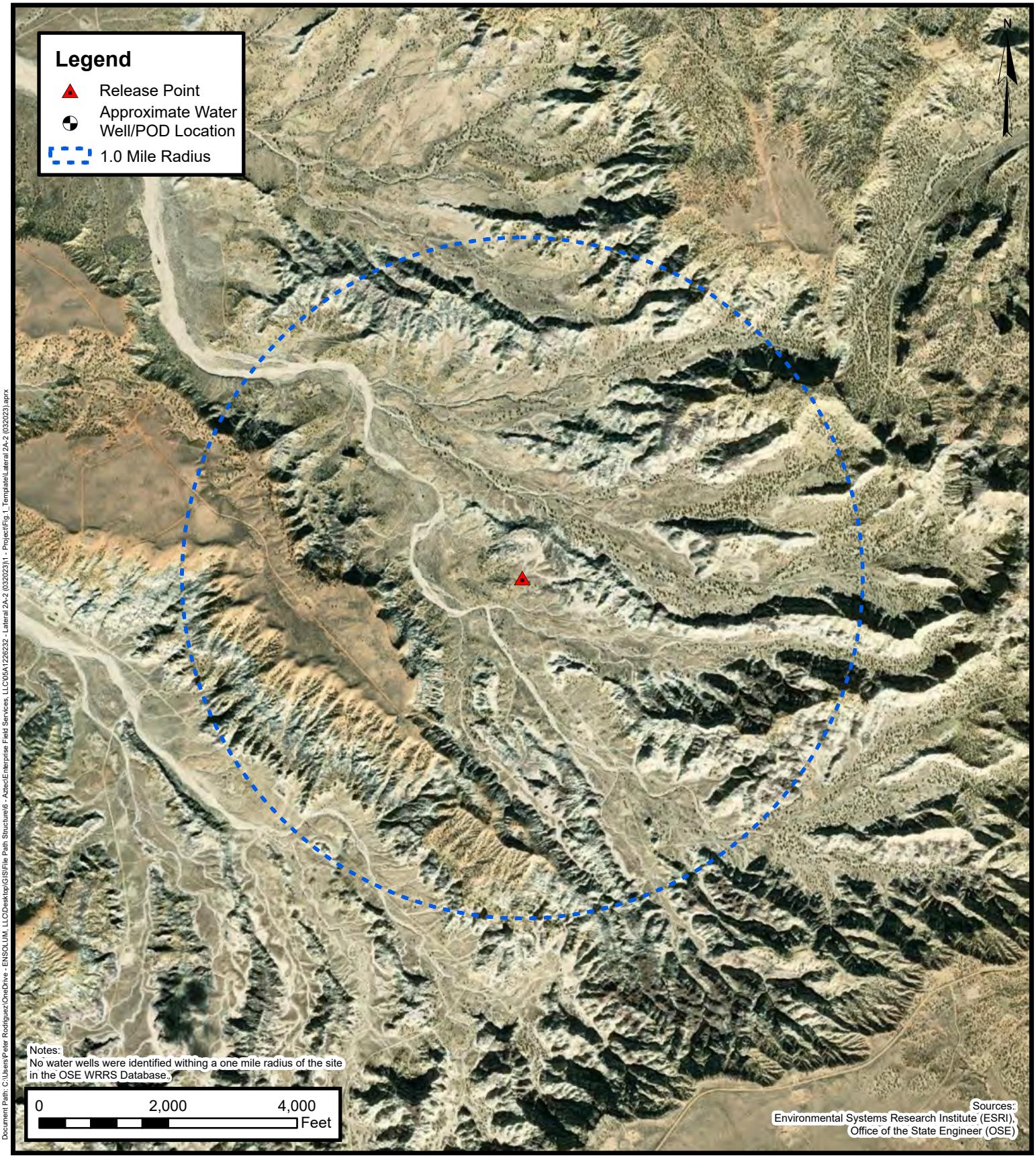
Enterprise Field Services, LLC
Lateral 2A-2 (03/20/23)
Project Number: 05A1226232
Unit Letter I, S21 T27N R10W, San Juan County, New Mexico
36.557716, -107.892107

FIGURE
3

ENSOLUM

APPENDIX B

Siting Figures and Documentation



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1.0 Mile Radius Water Well/ POD Location Map

Enterprise Field Services, LLC
Lateral 2A-2 (03/20/23)
Project Number: 05A1226232
Unit Letter I, S21 T27N R10W, San Juan County, New Mexico
36.557716, -107.892107

FIGURE
A

Document Path: C:\Users\Peter Rodriguez\OneDrive - ENSOLUM, LLC\Desktop\GIS\File Path Structure\6 - Aztec\Enterprise Field Services, LLC\05A1226232 - Lateral 2A-2 (03\2023)\1 - Project\Fig 1_Template\Lateral 2A-2 (032023).aprx

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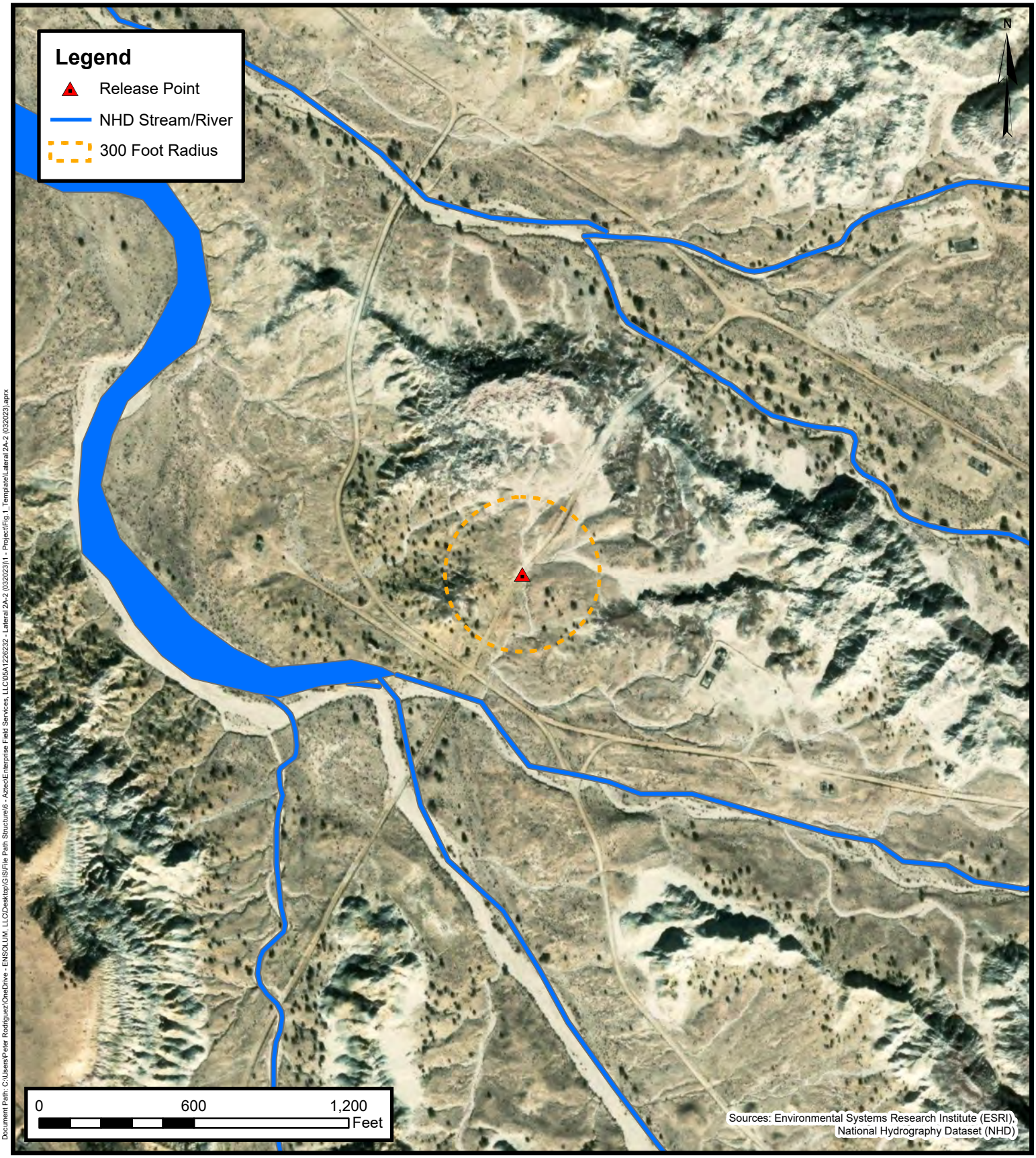
Cathodic Protection Well Recorded Depth to Water

Enterprise Field Services, LLC
Lateral 2A-2 (03/20/23)
Project Number: 05A1226232
Unit Letter I, S21 T27N R10W, San Juan County, New Mexico
36.557716, -107.892107

FIGURE

B



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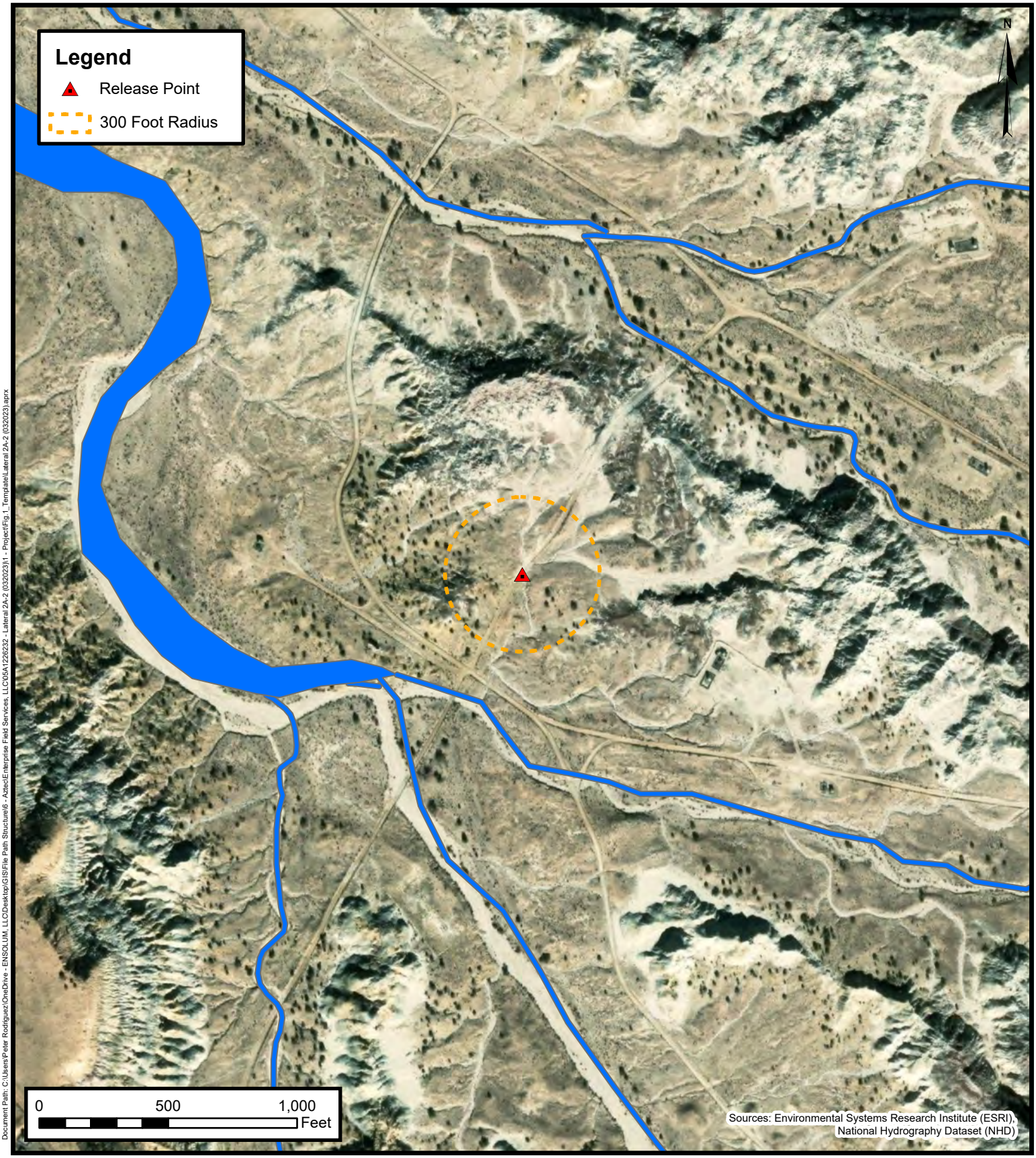
Environmental, Engineering and Hydrogeologic Consultants

300 Foot Radius Watercourse and Drainage Identification

Enterprise Field Services, LLC
Lateral 2A-2 (03/20/23)
Project Number: 05A1226232
Unit Letter I, S21 T27N R10W, San Juan County, New Mexico
36.557716, -107.892107

FIGURE
C



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300 Foot Radius Occupied Structure Identification

Enterprise Field Services, LLC
Lateral 2A-2 (03/20/23)
Project Number: 05A1226232
Unit Letter I, S21 T27N R10W, San Juan County, New Mexico
36.557716, -107.892107

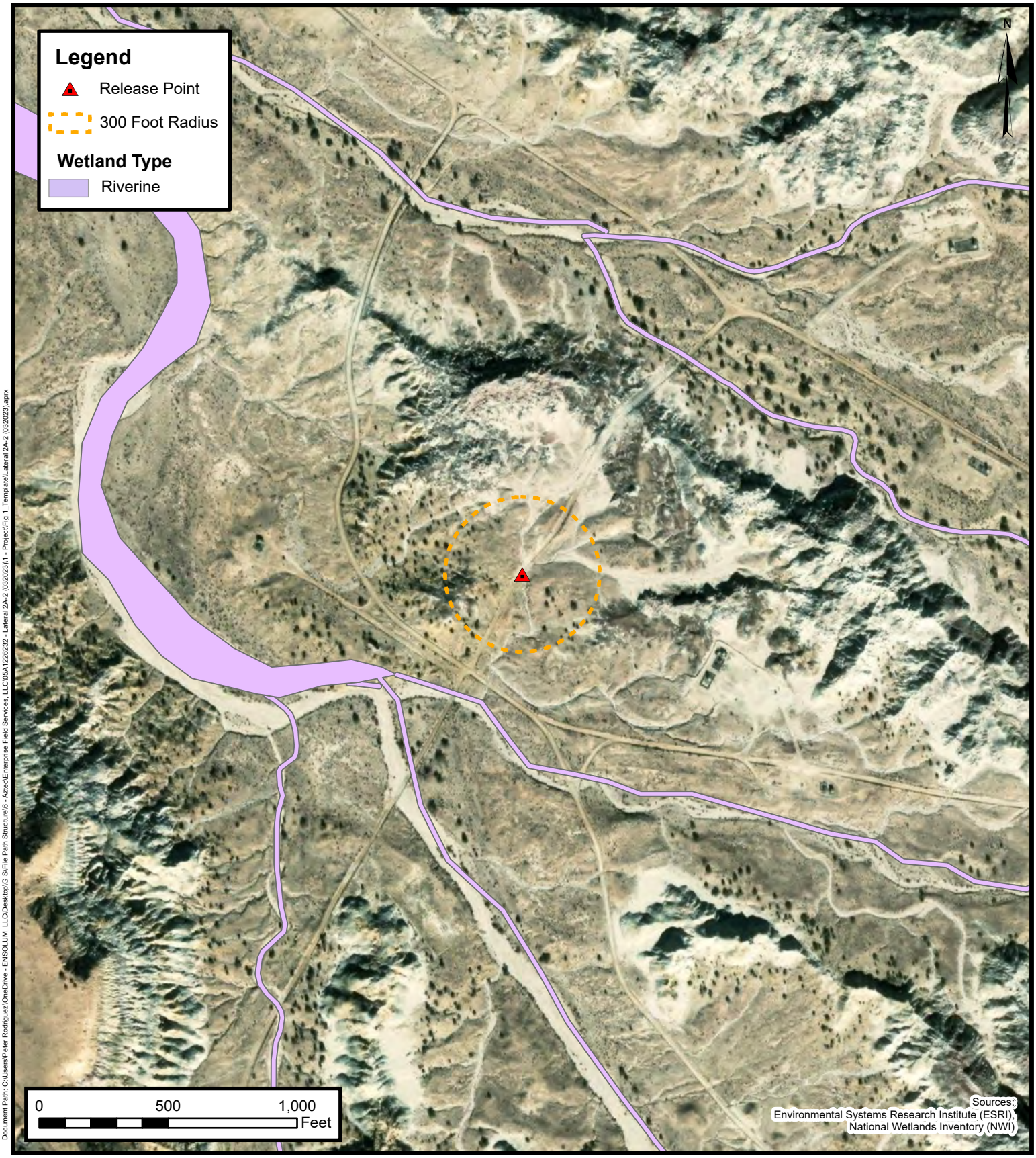
FIGURE
D

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Water Well and Natural Spring Location

Enterprise Field Services, LLC
Lateral 2A-2 (03/20/23)
Project Number: 05A1226232
Unit Letter I, S21 T27N R10W, San Juan County, New Mexico
36.557716, -107.892107

FIGURE
E

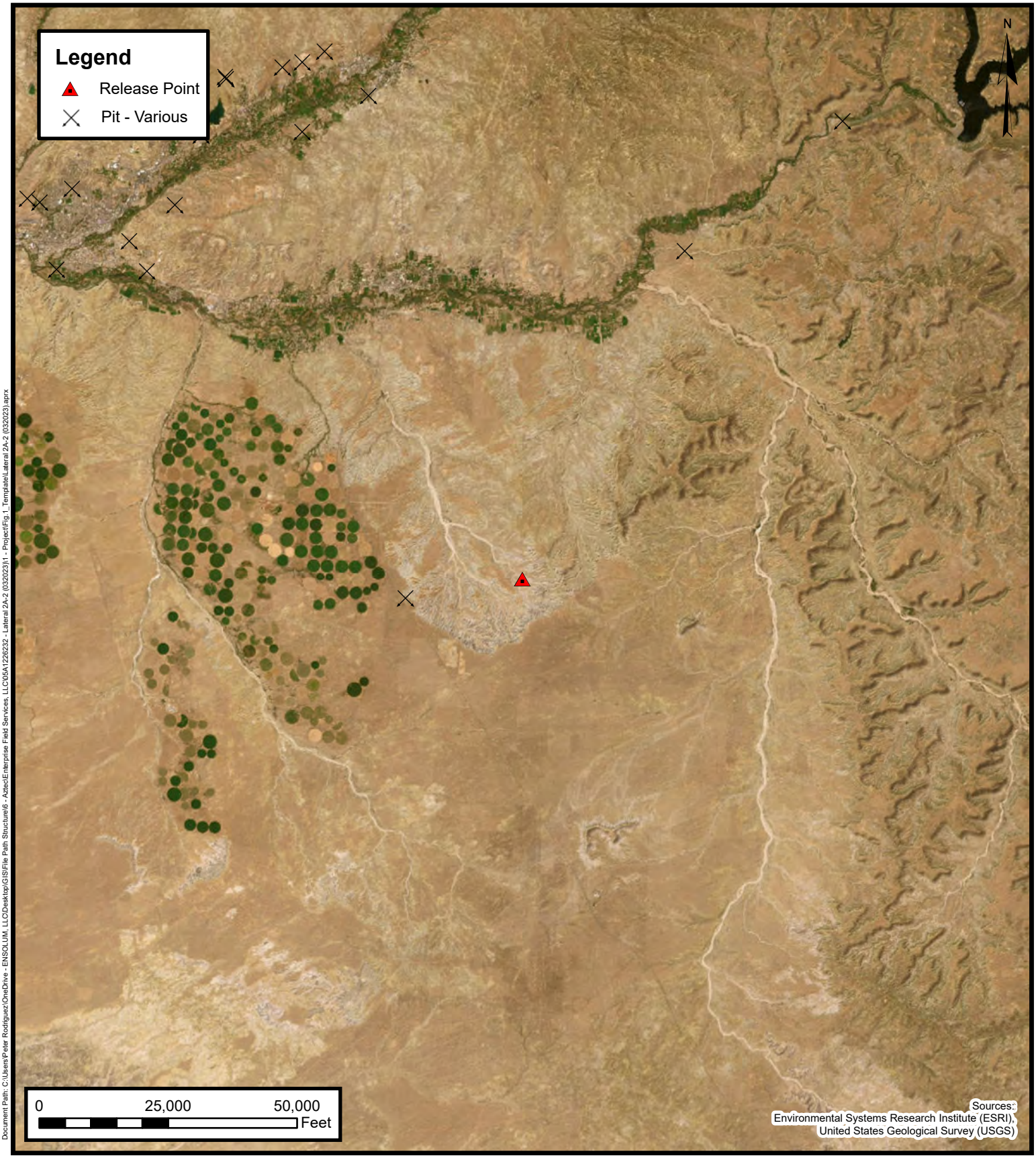


ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Wetlands

Enterprise Field Services, LLC
Lateral 2A-2 (03/20/23)
Project Number: 05A1226232
Unit Letter I, S21 T27N R10W, San Juan County, New Mexico
36.557716, -107.892107

FIGURE
F



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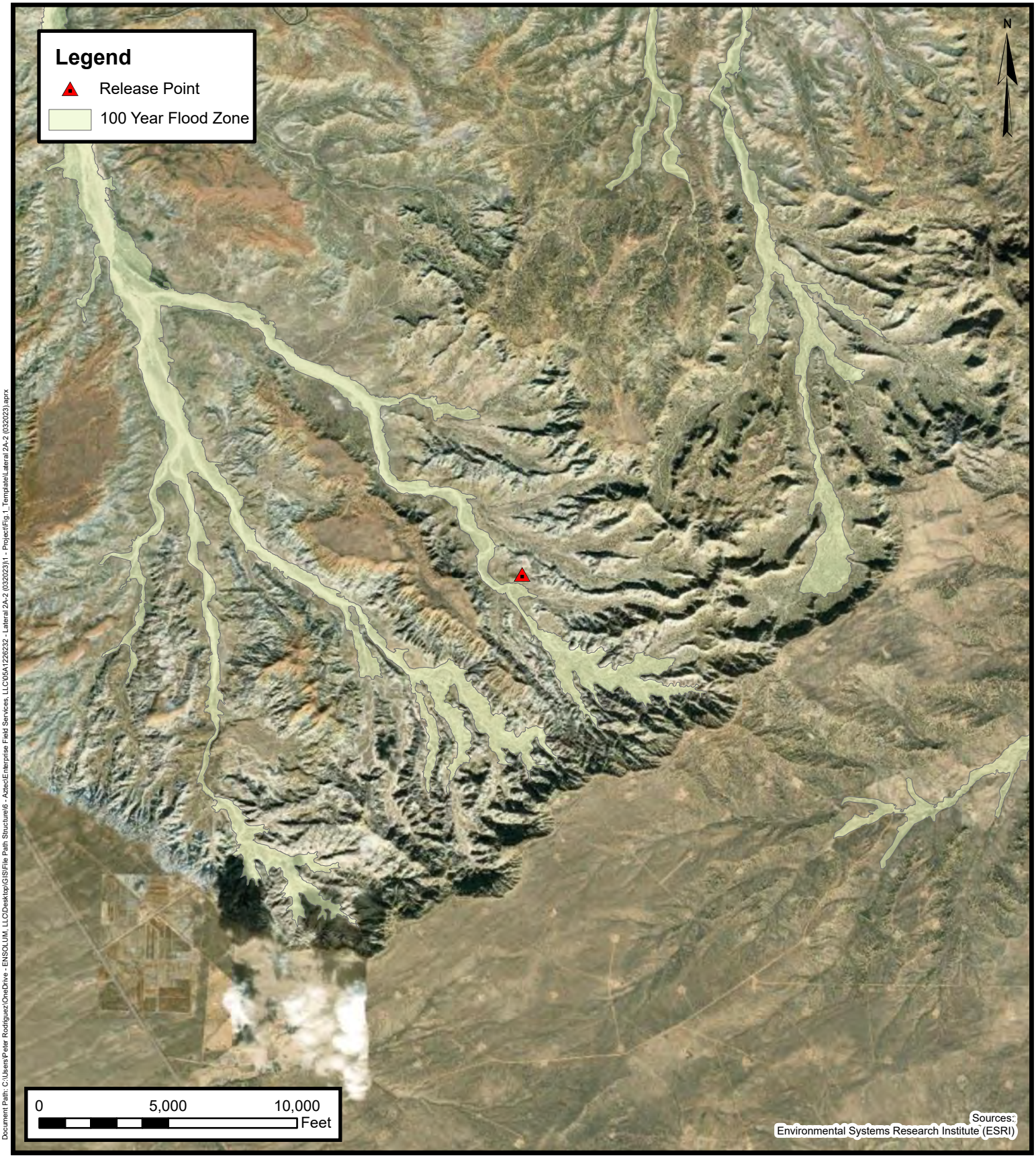
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Mines, Mills, and Quarries

Enterprise Field Services, LLC
Lateral 2A-2 (03/20/23)
Project Number: 05A1226232
Unit Letter I, S21 T27N R10W, San Juan County, New Mexico
36.557716, -107.892107

FIGURE
G



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ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

100-Year Flood Plain Map

Enterprise Field Services, LLC
Lateral 2A-2 (03/20/23)
Project Number: 05A1226232
Unit Letter I, S21 T27N R10W, San Juan County, New Mexico
36.557716, -107.892107

FIGURE
H

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

No records found.

PLSS Search:

Section(s): 21, 15, 16, 17, 20, 22, 27, 28, 29 **Township:** 27N **Range:** 10W

#2 30-045-06366

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

Operator Meridian Oil Co. Location: Unit I Sec. 21 Twp 27 Rng 10

Name of Well/Wells or Pipeline Serviced
JOHNSON #2

Elevation 6091 Completion Date 2-2093 Total Depth 367' Land Type F

Casing Strings, Sizes, Types & Depths 2/12 Set 98 of 8" PVC Casing.
No Gas, Water, or Boulders were Encountered During Casing.

If Casing Strings are cemented, show amounts & types used Cemented
WITH 21 SACK's.

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

Depths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc. 120' Fresh water

Depths gas encountered: None

Ground bed depth with type & amount of coke breeze used: 367', 50 Sacks
of Loresco Type SW

Depths anodes placed: ① 335 ② 320 ③ 310 ④ 300 ⑤ 290 ⑥ 280 ⑦ 270 ⑧ 225 ⑨ 215
⑩ 205 ⑪ 195 ⑫ 185 ⑬ 175 ⑭ 165 ⑮ 145

Depths vent pipes placed: 367'

Vent pipe perforations: Bottom 260'

Remarks:

RECEIVED
JAN 31 1994
OIL CON. DIV.
DIST. 3

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

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

API WATER ANALYSIS REPORT FORM

Laboratory No. 25-930315-4

Company	Sample No	Date Sampled
MERIDIAN OIL		2-20-93

Field	Legal Description	County or Parish	State
2405W	I-21-27-10	San Juan	NM

Lease or Unit	Well	Depth	Formation	Water, B/D
	JOHNSON #2			

Type of Water (Produced, Supply, etc.)	Sampling Point	Sampled By
	Ground Bed	K. Bishop

DISSOLVED SOLIDS

CATIONS	mg/l	me/l
Sodium, Na (calc.)	400	17
Calcium, Ca	6	0.3
Magnesium, Mg	-	-
Barium, Ba		

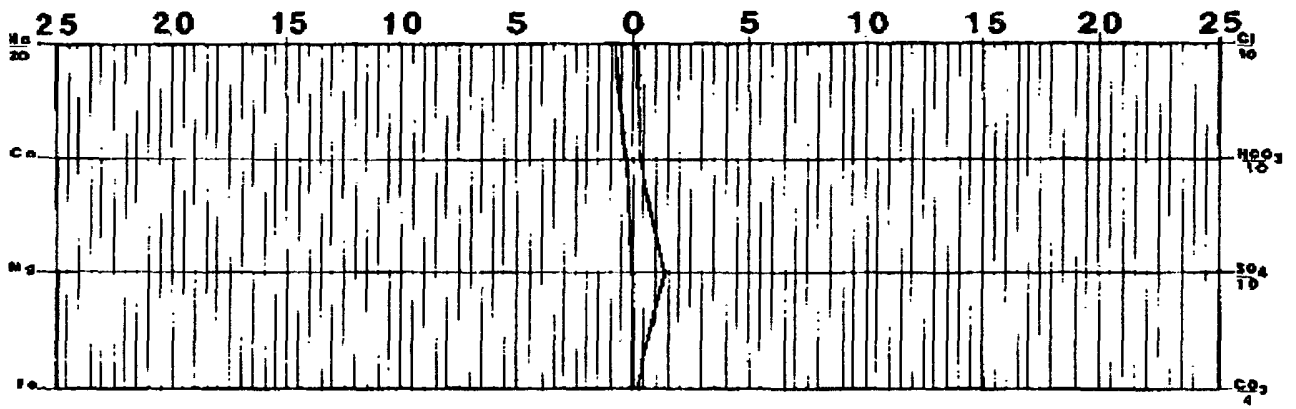
ANIONS		
Chloride, Cl	25	0.7
Sulfate, So_4	643	13.4
Carbonate, CO_3	24	0.6
Bicarbonate, HCO_3	170	2.8

OTHER PROPERTIES

pH	9.35
Specific Gravity, 60/60 F.	1.0033
Resistivity (ohm-meters) 72 F.	7.0
Total Dissolved Solids (calc.)	1,270
Iron, Fe (total)	
Sulfide, as H_2S	

REMARKS & RECOMMENDATIONS:

ATTN: BILL DONATTUE



Date Received	Preserved	Date Analyzed	Analyzed By
March 15th, 1993		March 17th, 1993.	R.H.

TECH, Inc.
333 East Main
Farmington
New Mexico
87401
505/327-3311

#5 → 30-045-06491
#155 → 30-045-27278

3777

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

Operator Meridian Oil Co Location: Unit K Sec. 17 Twp 27 Rng 10

Name of Well/Wells or Pipeline Serviced
Rowley #155 And #5

Elevation ____ Completion Date 2-17-93 Total Depth 412' Land Type F

Casing Strings, Sizes, Types & Depths 2/6 Set 99' of 8" PVC Casing.
No Gas, Water, or Boulders were Encountered During Casing.

If Casing Strings are cemented, show amounts & types used Cemented
With 22 Sacks.

If Cement or Bentonite Plugs have been placed, show depths & amounts used
No plugs

Depths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc. 180' and 260' both zones were
clear.

Depths gas encountered: No gas

Ground bed depth with type & amount of coke breeze used: 415' w. 46
60 (100 lb) sacks of Lorescco S W.

Depths anodes placed: #1 at 380' and #15 at 180'

Depths vent pipes placed: Bottom to Surface

Vent pipe perforations: Up to 180'

Remarks:

RECEIVED
JAN 31 1994
OIL CON. DIV.
DIST. 3

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

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

TECH, Inc.
333 East Main
Farmington
New Mexico
87401
505/327-3311

LABORATORY REPORT

OIL-FIELD WATER ANALYSIS

2447W

Lab Number: 25930315-01
Client: Meridian Oil
Sample ID: Rowley #155 Groundbed
Location: K17-27-10

Date Sampled: 02-17-93
Date Received: 03-15-93
Date Analyzed: 03-15-93
Date Reported: 03-18-93

DISSOLVED SOLIDS:

	me/L	mg/L	Detection Limit, mg/L
Calcium, Ca++	4.7	95	1.0
Magnesium, Mg++	0.2	2	1.0
Sodium, Na+ (calc)	ND	ND	10.0
Chloride, Cl-	0.4	13	2.0
Sulfate, SO4--	1.4	68	5.0
Bicarbonate, HCO3-	1.0	61	5.0
Carbonate, CO3--	2.0	60	1.0
Hydroxide, OH-	ND	ND	1.0
Total Dissolved Solids (calculated):		295	10.0

OTHER PROPERTIES:

pH (units):	8.3
resistivity (ohm-meters):	6.2
specific gravity at 60F:	1.0052
room temperature (F):	72

ND = Not Detected at the stated dectection limit

Comments: Fruitland Coal
San Juan County, New Mexico
Sampled by R. Smith

Methods: American Petroleum Institute, "Recommended Practice for Analysis of Oil-Field Waters;" 2nd edition.

Leith Leblon
analyst

TECH, Inc.
333 East Main
Farmington
New Mexico
87401
505/327-3311

LABORATORY REPORT

OIL-FIELD WATER ANALYSIS

Lab Number:	25930315-01	Date Sampled:	02-17-93
Client:	Meridian Oil	Date Received:	03-15-93
Sample ID:	Rowley #155 Groundbed	Date Analyzed:	03-15-93
Location:	K17-27-10	Date Reported:	03-18-93

DISSOLVED SOLIDS:

	me/L	mg/L	Detection Limit, mg/L
Calcium, Ca++	4.7	95	1.0
Magnesium, Mg++	0.2	2	1.0
Sodium, Na+ (calc)	ND	ND	10.0
Chloride, Cl-	0.4	13	2.0
Sulfate, SO4--	1.4	68	5.0
Bicarbonate, HCO3-	1.0	61	5.0
Carbonate,CO3--	2.0	60	1.0
Hydroxide, OH-	ND	ND	1.0
Total Dissolved Solids (calculated):		295	10.0

OTHER PROPERTIES:

pH (units):	8.3
reisistivity (ohm-meters):	6.2
specific gravity at 60F:	1.0052
room temperature (F):	72

ND = Not Detected at the stated dectection limit

Comments: Fruitland Coal
San Juan County, New Mexico
Sampled by R. Smith

Methods: American Petroleum Institute, "Recommended Practice for Analysis of Oil-Field Waters;" 2nd edition.

Leila Lebsack
analyst

30-045-13472

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

Operator Meridian Oil Inc. Location: Unit I Sec. 17 Twp 27 Rng 10

Name of Well/Wells or Pipeline Serviced
Pipkin #7

Elevation 5965' Completion Date 9/23/93 Total Depth 436' Land Type F

Casing Strings, Sizes, Types & Depths 6/29 Set 60' of 8" PVC Casing.
No Gas, Water, or Boulders were Encountered During Casing.

If Casing Strings are cemented, show amounts & types used Cemented
With 19 Sacks.

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

Depths & thickness of water zones with description of water: Fresh, Clear, Salty, Sulphur, Etc. Hit Fresh Water at 65'. A Water Sample was Taken.

Depths gas encountered: None

Ground bed depth with type & amount of coke breeze used: 436' Depth
Used 123 Sacks of Asbury 218R (6150#)

Depths anodes placed: 405', 373', 363', 355', 348', 341', 333', 326', 205', 195', 183', 175', 165', 155', +145'

Depths vent pipes placed: Surface To 436'

Vent pipe perforations: Bottom 320'

Remarks:

RECEIVED
JAN 31 1994
OIL CON. DIV.
DIST. 3

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

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

3717

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

30-045-06368

Operator Meridian Oil Co Location: Unit I Sec. 20 Twp 27 Rng 10

Name of Well/Wells or Pipeline Serviced

McAdams #4

Elevation 6242 Completion Date 2-8-93 Total Depth 395 Land Type F

Casing Strings, Sizes, Types & Depths 2/6 Set 100 of 8" PVC Casing.
No Gas, Water, or Boulders were Encountered During Casing.

If Casing Strings are cemented, show amounts & types used Cemented
With 21 Sacks.

If Cement or Bentonite Plugs have been placed, show depths & amounts used
No plugs

Depths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc. 180 and 275' both zones clear

Depths gas encountered: No gas

Ground bed depth with type & amount of coke breeze used: 395' with
57 (1001b) sacks of Loresco S.W.

Depths anodes placed: #1 at 375' and #5 at 205'

Depths vent pipes placed: Bottom to surface

Vent pipe perforations: up to 160'.

Remarks:

RECEIVED
JAN 31 1994
OIL CON. DIV.
DIST. 3

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

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

TECH, Inc.
333 East Main
Farmington
New Mexico
87401
505/327-3311

LABORATORY REPORT

OIL-FIELD WATER ANALYSIS

Lab Number: 25930315-03 246W
Client: Meridian Oil
Sample ID: McAdams #4 groundbed
Location: F20-27-10

Date Sampled: 02-18-93
Date Received: 03-15-93
Date Analyzed: 03-15-93
Date Reported: 03-18-93

DISSOLVED SOLIDS:	me/L	mg/L	Detection Limit, mg/L
Calcium, Ca++	5.8	116	1.0
Magnesium, Mg++	0.2	2	1.0
Sodium, Na+ (calc)	15.7	360	5.0
Chloride, Cl-	0.4	14	2.0
Sulfate, SO4--	18.0	866	5.0
Bicarbonate, HCO3-	2.8	171	5.0
Carbonate, CO3--	0.4	12	1.0
Hydroxide, OH-	0.0	0	1.0
Total Dissolved Solids (calculated):		1,540	10.0

OTHER PROPERTIES:

pH (units):	8.2
resistivity (ohm-meters):	4.8
specific gravity at 60F:	1.0059
room temperature (F):	72

ND = Not Detected at the stated dectection limit

Comments: Fruitland Coal
San Juan County, New Mexico
Sampled by R. Smith

Methods: American Petroleum Institute, "Recommended Practice for Analysis of Oil-Field Waters;" 2nd edition.

analyst

TECH, Inc.
333 East Main
Farmington
New Mexico
87401
505/327-3311

LABORATORY REPORT

OIL-FIELD WATER ANALYSIS

Lab Number: 25930315-03 2461 W
Client: Meridian Oil
Sample ID: McAdams #4 groundbed
Location: F20-27-10

Date Sampled: 02-18-93
Date Received: 03-15-93
Date Analyzed: 03-15-93
Date Reported: 03-18-93

DISSOLVED SOLIDS:

	me/L	mg/L	Detection Limit, mg/L
Calcium, Ca++	5.8	116	1.0
Magnesium, Mg++	0.2	2	1.0
Sodium, Na+ (calc)	15.7	360	5.0
Chloride, Cl-	0.4	14	2.0
Sulfate, SO4--	18.0	866	5.0
Bicarbonate, HCO3-	2.8	171	5.0
Carbonate,CO3--	0.4	12	1.0
Hydroxide, OH-	0.0	0	1.0
Total Dissolved Solids (calculated):		1,540	10.0

OTHER PROPERTIES:

pH (units):	8.2
reisistivity (ohm-meters):	4.8
specific gravity at 60F:	1.0059
room temperature (F):	72

ND = Not Detected at the stated dectection limit

Comments: Fruitland Coal
San Juan County, New Mexico
Sampled by R. Smith

Methods: American Petroleum Institute, "Recommended Practice for Analysis of Oil-Field Waters;" 2nd edition.

Steve Fellman
analyst

#501 30-045-28518

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

Operator Meridian Oil Co Location: Unit N Sec. 20 Twp 27 Rng 10

Name of Well/Wells or Pipeline Serviced Rowley #501

Elevation ____ Completion Date 2-18-93 Total Depth 373' Land Type F

Casing Strings, Sizes, Types & Depths 2/5 Set 99 of 8" PVC Casing. No Gas, Water, or Boulders were Encountered During Casing.

If Casing Strings are cemented, show amounts & types used Cemented with 21 Sacks.

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

Depths & thickness of water zones with description of water: Fresh, Clear, Salty, Sulphur, Etc. 130' fresh

Depths gas encountered: None

Ground bed depth with type & amount of coke breeze used: 373', 51 Sacks of Loresco

Depths anodes placed: ① 350 ② 343 ③ 335 ④ 327 ⑤ 320 ⑥ 314 ⑦ 305 ⑧ 275 ⑨ 180 ⑩ 170 ⑪ 150 ⑫ 140 ⑬ 133 ⑭ 125 ⑮ 118

Depths vent pipes placed: 373'

Vent pipe perforations: Bottom 25'

Remarks:

RECEIVED
JAN 31 1994
OIL CON. DIV.
DIST. 3

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

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

TECH, Inc
333 East Main
Farmington
New Mexico
87401
505/327-3311

LABORATORY REPORT

OIL-FIELD WATER ANALYSIS

Lab Number:	930220-4	Date Sampled:	02-18-93
Client:	Meridian Oil	Date Received:	02-20-93
Sample ID:	Rowley #501	Date Analysed:	02-20-93
Location:	N20-27-10	Date Reported:	02-21-93

DISSOLVED SOLIDS:	me/L	mg/L	Detection Limit, mg/L
Calcium, Ca++	2.2	43.3	1.0
Magnesium, Mg++	0.2	2.0	1.0
Sodium, Na+ (calc)	86.[illegible]	2,000	5.0
Chloride, Cl-	0.2	7.8	2.0
Sulfate, SO4--	87.8	4,220	5.0
Bicarbonate, HCO3-	0.8	48.8	5.0
Carbonate, CO3--	0.4	12.0	1.0
Hydroxide, OH-	ND	ND	1.0
Total Dissolved Solids (calculated):		6,330	10.0

OTHER PROPERTIES:

pH (units):	8.7
reisistivity (ohm-meters):	6.2
specific gravity at 60F:	1.0039
room temperature (F):	72

ND = Not Detected at the stated dectection limit

Methods: American Petrolium Institute, "Recommended Practice for Analysis of Oil-Field Waters;" 2nd edition.

Comments: DK, DK, PC; SJ, NM; Groundbed
Sampled by K. Bishop

analyst

3725

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

Operator Meridian Oil Inc. Location: Unit A Sec. 28 Twp 27 Rng 10

Name of Well/Wells or Pipeline Serviced

Mc Adams #500 30-045-28932

Elevation ____ Completion Date ____ Total Depth ____ Land Type F

Casing Strings, Sizes, Types & Depths 8/19 Set 58' of 8" PVC Casing. NO GAS, WATER, or Boulders Were Encountered During Casing.

If Casing Strings are cemented, show amounts & types used Cemented WITH 14 SACKS.

If Cement or Bentonite Plugs have been placed, show depths & amounts used NO

Depths & thickness of water zones with description of water: Fresh, Clear, Salty, Sulphur, Etc. Fresh WATER 100'

Depths gas encountered: NO

Ground bed depth with type & amount of coke breeze used: 362' deep with 5300 lbs Ashury 218 R Flo Coke

Depths anodes placed: 310, 300, 290, 278, 269, 260, 251, 242, 233, 224, 200, 191, 182, 173, 115

Depths vent pipes placed: 362'

Vent pipe perforations: bottom 28'

Remarks:

RECEIVED
JAN 31 1994
OIL CON. DIV.
DIST. 3

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

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

1055

105-30-045-06210

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

Operator MERIDIAN OIL Location: Unit SE Sec. 29 Twp 27 Rng 10

Name of Well/Wells or Pipeline Serviced HUERFANO UNIT #105

cps 1736w

Elevation 6054' Completion Date 11/14/84 Total Depth 200' Land Type* N/A

Casing, Sizes, Types & Depths N/A

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

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

N/A

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

Fresh, Clear, Salty, Sulphur, Etc. 40' SAMPLE TAKEN

Depths gas encountered: N/A

Type & amount of coke breeze used: 1970 lbs.

Depths anodes placed: 185', 170', 155', 140', 125', 110', 100', 90', 80', 58'

Depths vent pipes placed: 200'

Vent pipe perforations: 180'

Remarks: gb #1

RECEIVED
MAY 31 1991
OIL CON. DIV.
DIST. 3

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

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

FM-07-0238 (Rev. 10-82)

WELL CASING

CATHODIC PROTECTION CONSTRUCTION REPORT

DAILY LOG

Drilling Log (Attach Hereto) ☑

Completion Date 11-14

CPS #	Well Name, Line or Plant:	Work Order #	Static	Ins. Union Check
1736-W	Huerfano # 105	53658-19-50-20	RP = .82 600'N	☑ Good ☐ Bad 528 mv+

Location:	Anode Size:	Anode Type:	Size Bit:
SE29-27-10	2" X 60"	Duriron	6 3/4

Depth Drilled	Depth Logged	Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used
200	197		1,970		

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Anode Depth	185	170	155	140	125	110	100	90	80	58
Anode Output (Amps)	4.44	4.93	4.75	4.95	5.15	5.06	5.42	5.00	4.45	4.80

	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20
Anode Depth										
Anode Output (Amps)										

Total Circuit Resistance			No. 8 C.P. Cable Used	No. 2 C.P. Cable Used
Volts 12.1	Amps 20.0	Ohms .60		

Remarks: Drilled to 40'+ found water. Blew water from hole next morning found good shale from 40' to bottom of hole. Estimated to make 2 gpm. Installed 200' of 1" P.V.C vent Pipe, 280' with perforations slurried approx. 1,970 lbs Coke Down hole.
Caught water sample.

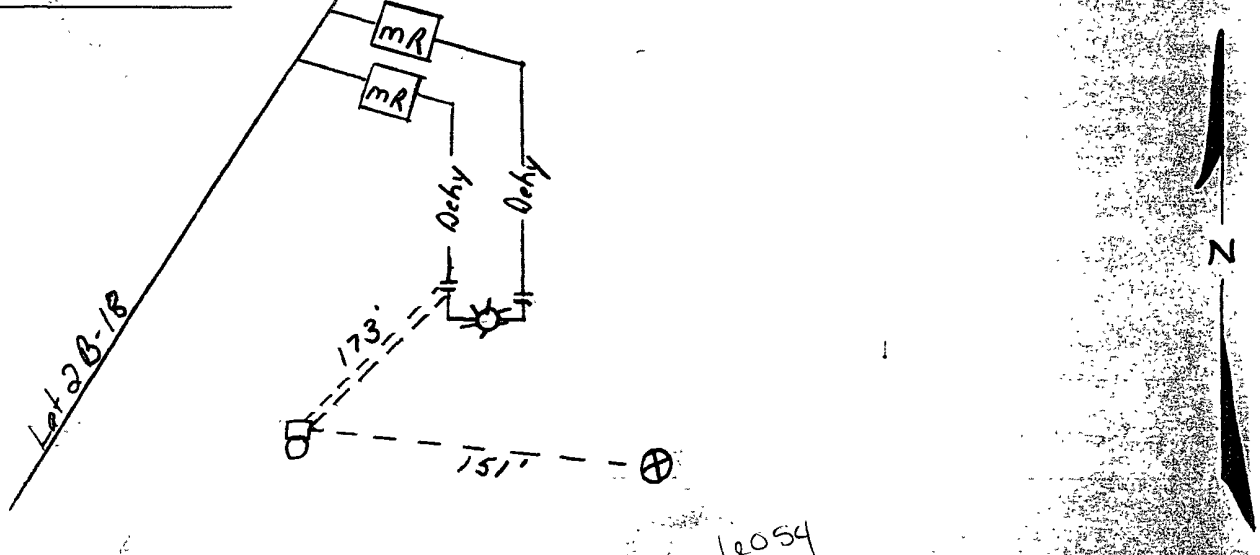
Rectifier Size: 40 V 16 A
Addn'l Depth:
Depth Credit: 303 ✓
Extra Cable: 193 ✓
Ditch & 1 Cable: 324 ✓
25' Meter Pole:
20' Meter Pole: 1
10' Stub Pole:

Req T.me = 8
D.T = 0

All Construction Completed

C. W. Donahue
(Signature)

GROUND BED LAYOUT SKETCH



1054

EL PASO NATURAL GAS COMPANY
SAN JUAN DIVISION
FARMINGTON, NEW MEXICO
PRODUCTION DEPARTMENT WATER ANALYSES

ANALYSIS NO.: 1-11504
OPERATOR: EL PASO NATURAL GAS
LOCATION: 29-27-17
FIELD: ANGEL PEAK
SAMPLED FROM: 40 FEET
DATE SAMPLED: NOVEMEMBER 14,1984
TUBING PRESSURE:
SURFACE CASING PRESSURE:

DATE: DECEMBER 5,1984
WELL NAME: HUERFANO #105 CPS [redacted]
COUNTY SAN JUAN STATE: NEW MEXICO
FORMATION:

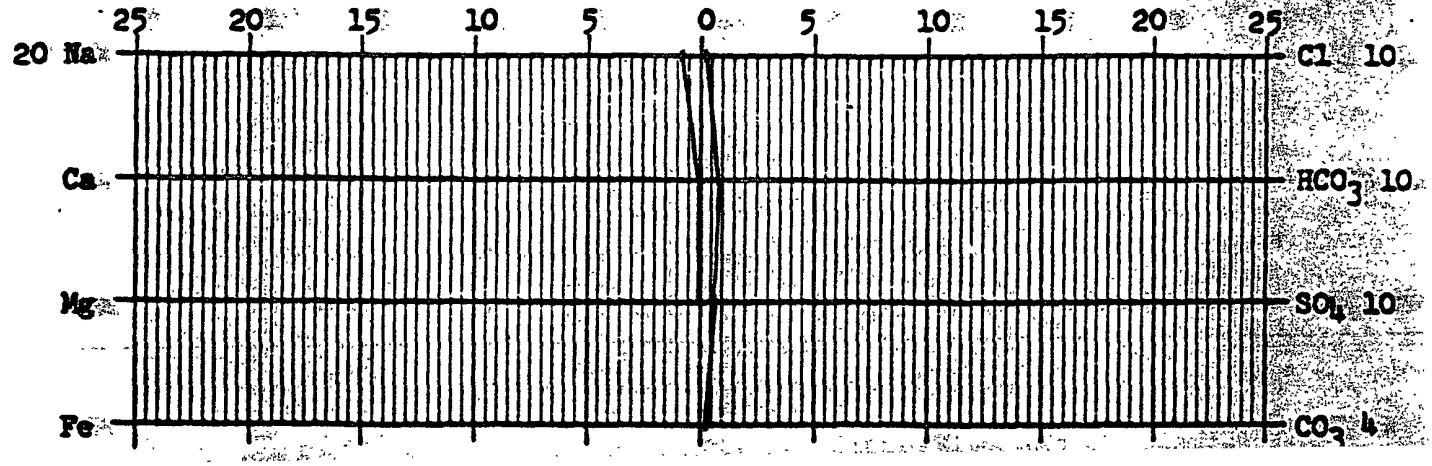
SECURED BY: BILL DONOHUE
CASING PRESSURE:

	SAMPLE SIZE	ml. TIT	AS CaCO3	AS ION	ep
TOTAL ALKALINITY	10	10.5	525		
P ALKALINITY	20	.8	40		
BICARBONATE	30	8.9	445	543	8.
CARBONATE	20	1.6	80	48	1.
CHLORIDE	25	1.2		48	1.
SULFATE				320	6
TOTAL HARDNESS	25	0	0		
CALCIUM	25	0	0	0	0.
MAGNESIUM	25	0	0	0	0.
IRON					
SODIUM (CALCULATED)				426	18.
H2S					
HYDROCARBONS					
TOTAL DISSOLVED SOLIDS				1684	
pH				8.9	
SPECIFIC GRAVITY			AT 60F		
RESISTIVITY			OHM-CM AT 72		
CONDUCTIVITY			MICROMHOS @ 25C.		

ALL RESULTS EXPRESSED IN PARTS PER MILLION-TRACE IS LESS THAN 0.1 ppm

cc: R. A. ULLRICH
J. D. EVANS
D. C. ADAMS
E. R. PAULEY
W. B. SHROPSHIRE
FILE

Dennis Bird
CHEMIST CCK



CONSTRUCTION LOGGING READINGS

CPS #: 1736-a WELL NAME: Huerfano #105 LOCATION: SE 29-27-10 DATE: 11-14-84

TOTAL VOLTS: 12.1 TOTAL AMPS: 20.0 OHMS RESISTANCE: .60

Readings 1099rd Thru 2,400' spool

DEEP	LOG ANODE	ANODE NO.	DEEP	LOG ANODE	ANODE NO.	DEEP	LOG ANODE	ANODE No.	DEEP	LOG ANODE	ANODE No.
5			185	2.08	①	365			545		
10			190	1.92		370			550		
15			197 195	TD		375			555		
20			200			380			560		
25			205			385			565		
30			210			390			570		
35			215			395			575		
water 40	2.00		220			400			580		
45	2.05		225			405			585		
50	2.00		230			410			590		
55	2.41		235			415			595		
60	2.09	10	240			420			600		
65	1.96		245			425			605		
70	1.70		250			430			610		
75	1.82		255			435			615		
80	2.09	⑨	260			440			620		
85	2.27		265			445			625		
90	2.28	⑧	270			450			630		
95	2.13		275			455			635		
100	2.21	⑦	280			460			640		
105	2.22		285			465			645		
110	2.22	⑥	290			470			650		
115	2.11		295			475			655		
120	2.21		300			480			660		
125	2.21	⑤	305			485			665		
130	1.97		310			490			670		
135	2.11		315			495			675		
140	2.17	④	320			500			680		
145	2.12		325			505			685		
150	2.08		330			510			690		
155	2.25	③	335			515			695		
160	2.08		340			520			700		
165	2.22		345			525			705		
170	2.12	②	350			530			710		
175	2.07		355			535			715		
180	1.95		360			540			720		

ANODE READINGS

NO.	DEPTH	NO COKE	WITH COKE
①	185	2.90	4.44
②	170	2.95	4.93
③	155	3.03	4.75
④	140	3.12	4.95
⑤	125	3.20	5.15
⑥	110	3.20	5.06
⑦	100	3.18	5.42
⑧	90	3.28	5.00
⑨	80	3.00	4.45
⑩	58	3.27	4.80

REMARKS: Drilled to 40' found water. Blew water from hole next morning. found good shale from 40' to bottom of hole. Hole Est. enough to make 29gpm. Installed 200' of 1" p.v.c. vent pipe 280' with perforations, slurried approx. 1,970 lbs Coke Dewar hole

EL PASO NATURAL GAS COMPANY

DRILLING DEPARTMENT

DAILY DRILLING REPORT

LEASE CP51736-W WELL NO. Hurtland #105 CONTRACTOR CORR. CONTROL RIG NO. 102 REPORT NO. DATE NOV 14 1984

MORNING

Driller TERENCE LARGENT Total Men In Crew 3

FROM	TO	FORMATION	WT-BIT	R.P.M.
0	20	SURFACE SAND		
20	40	SAND (WATER)		
40	60	SANDSTONE		
60	200	SANDY SHALE		

BIT NO. NO. DC SIZE LENG.

SE L NO. STANDS

SIZE SINGLES

TYPE DOWN ON KELLY

MAKE TOTAL DEPTH

MUD RECORD Time	Wt.	Vis.	MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS –

DAYLIGHT

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.

BIT NO. NO. DC SIZE LENG.

SERIAL NO. STANDS

SIZE SINGLES

TYPE DOWN ON KELLY

MAKE TOTAL DEPTH

MUD RECORD Time	Wt.	Vis.	MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS – DRILLED TO 40 FEET ON 11-13-84. BLEW WATER OUT HOLE DRILLED TO 200 FEET HOLE MAKING WATER. ~~[illegible]~~ 1105 gallons per MINUTE.

EVENING

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.

BIT NO. NO. DC SIZE LENG.

SERIAL NO. STANDS

SIZE SINGLES

TYPE DOWN ON KELLY

MAKE TOTAL DEPTH

MUD RECORD Time	Wt.	Vis.	MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS –

SIGNED: Toolpusher Terence Largent Company Supervisor C. W. Donahue

1117

30-045-20818

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

Operator MERIDIAN OIL Location: Unit NE Sec. 29 Twp 27 Rng 10

Name of Well/Wells or Pipeline Serviced HUERFANO UNIT #217

cps 1743w

Elevation 6014' Completion Date 11/16/84 Total Depth 240' Land Type* N/A

Casing, Sizes, Types & Depths N/A

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

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

N/A

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

Fresh, Clear, Salty, Sulphur, Etc. 45'

Depths gas encountered: N/A

Type & amount of coke breeze used: 2380 lbs.

Depths anodes placed: 215', 205', 190', 180', 150', 125', 115', 105', 95', 80'

Depths vent pipes placed: 240'

Vent pipe perforations: 200'

Remarks: gb #1

RECEIVED
MAY 31 1991
OIL CON. DIV
DIST. 3

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

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

FM-07-0238 (Rev. 10-82)

WELL CASING

CATHODIC PROTECTION CONSTRUCTION REPORT

DAILY LOG

Drilling Log (Attach Hereto) ☑

Completion Date 11-16-84

CPS #	Well Name, Line or Plant:	Work Order #	Static:	Ins. Union Check
1743-W	Huerfano # 217	54860-19-50-20	R/C: 94 600' N	☑ Good ☐ Bad 1.67 amps +

Location	Anode Size:	Anode Type:	Size Bit:
NE 29-27-10	2" X 60"	Duriron	6 3/4

Depth Drilled	Depth Logged	Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used
240	238		2,380 lbs		

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Anode Depth	215	205	190	180	150	125	115	105	95	80
Anode Output (Amps)	4.40	4.65	4.50	4.62	4.40	4.56	4.67	4.60	4.72	4.66
Anode Depth	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20
Anode Output (Amps)	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20

Total Circuit Resistance			No. 8 C.P. Cable Used	No. 2 C.P. Cable Used
Volts 12.0	Amps 18.3	Ohms .65		

Remarks: Drilled to 45' found water, Continued drilling finding shale & sandy shale to bottom of Hole. Installed 240' of 1" P.V.C vent pipe: 40' solid, 200' with perforations. Slurried approx 2,380 lbs Coke down hole.

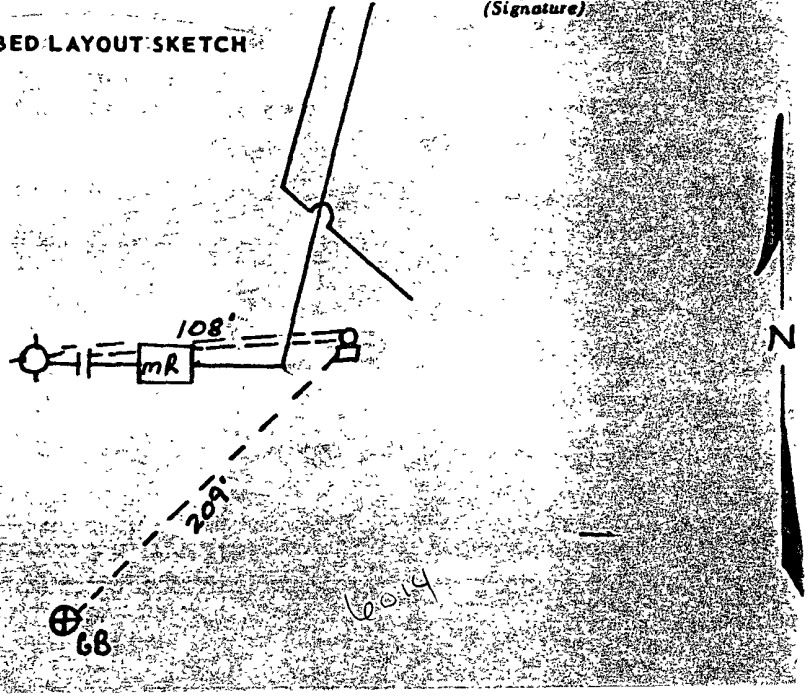
Rectifier Size: 40 V 16 ✓ A
Addn'l Depth:
Depth Credit: 262' ✓
Extra Cable: 128' ✓
Ditch & 1 Cable: 317' ✓
25' Meter Pole:
20' Meter Pole: 1 ✓
10' Stub Pole:

Reg. Time = 8 hrs.
O.T. = 0 hrs.

All Construction Completed

C. W. Donahue
(Signature)

GROUND BED LAYOUT SKETCH



EL PASO NATURAL GAS COMPANY

CONSTRUCTION LOGGING READINGS

CPS #: 1743-W WELL NAME: Huerfano #217 LOCATION: NE 29-27-10 DATE: 11-16-84

TOTAL VOLTS: 12.0 TOTAL AMPS: 18.3 OHMS RESISTANCE: .65

Readings logged thru 2.300's spool

DEEP	LOG ANODE	ANODE NO.	DEEP	LOG ANODE	ANODE NO.	DEEP	LOG ANODE	ANODE No.	DEEP	LOG ANODE	ANODE No.
5			185	2.01		365			545		
10			190	1.81	3	370			550		
15			195	1.77		375			555		
20			200	1.84		380			560		
25			205	1.84	2	385			565		
30			210	2.07		390			570		
35			215	1.90	1	395			575		
40			220	1.66		400			580		
45	.79		225	1.44		405			585		
water 50	1.06		230	1.00		410			590		
55	1.49		235			415			595		
60	1.96		Drilled 240	238		420			600		
65	1.87		245			425			605		
70	1.91		250			430			610		
75	1.93		255			435			615		
80	1.99	10	260			440			620		
85	1.97		265			445			625		
90	1.88		270			450			630		
95	1.93	9	275			455			635		
100	1.96		280			460			640		
105	1.92	8	285			465			645		
110	2.00		290			470			650		
115	1.92	7	295			475			655		
120	2.05		300			480			660		
125	1.81	6	305			485			665		
130	1.56		310			490			670		
135	1.30		315			495			675		
140	1.13		320			500			680		
145	1.72		325			505			685		
150	1.86	5	330			510			690		
155	1.84		335			515			695		
160	1.67		340			520			700		
165	1.34		345			525			705		
170	1.14		350			530			710		
175	1.69		355			535			715		
180	1.87	4	360			540			720		

ANODE READINGS

NO.	DEPTH	NO COKE	WITH COKE
1	215	2.70	4.40
2	205	2.71	4.65
3	190	2.71	4.50
4	180	2.72	4.62
5	150	2.69	4.40
6	125	2.76	4.56
7	115	2.77	4.67
8	105	2.77	4.60
9	95	2.77	4.72
10	80	2.80	4.66

REMARKS: Drilled to 45' found water, began Injection & Continued drilling finding shale & sandy shale to bottom of hole. Installed 240' of 1" PVC vent pipe with 200' perforated. Slurried approx. 2,300 lbs coke down hole.

Form 22-2 (Rev. 5-79)

EL PASO NATURAL GAS COMPANY
DRILLING DEPARTMENT

DAILY DRILLING REPORT

LEASE CPS. 1743 WELL NO. Huerfano 217 CONTRACTOR 3C - Corrosion Control RIG NO. REPORT NO. DATE 11-15 1984

MORNING

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.
0	20	Sand gravel		
20	60	Bent-water		
60	240	Shale - sandstone		

BIT NO. NO. DC SIZE LENG.
SERIAL NO. NO. DC SIZE LENG.
SIZE STANDS
TYPE SINGLES
MAKE DOWN ON KELLY
TOTAL DEPTH 240'

MUD RECORD

Time	Wt.	Vis.

MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS –

DAYLIGHT

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.

BIT NO. NO. DC SIZE LENG.
SERIAL NO. NO. DC SIZE LENG.
SIZE STANDS
TYPE SINGLES
MAKE DOWN ON KELLY
TOTAL DEPTH

MUD RECORD

Time	Wt.	Vis.

MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS – Hot water at 50'-60'
drilled to 240'

EVENING

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.

BIT NO. NO. DC SIZE LENG.
SERIAL NO. NO. DC SIZE LENG.
SIZE STANDS
TYPE SINGLES
MAKE DOWN ON KELLY
TOTAL DEPTH

MUD RECORD

Time	Wt.	Vis.

MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS –

SIGNED: Toolpusher Brian E. Burge Company Supervisor C.W. Donohue

1087

E

30-045-26373

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

Operator MERIDIAN OIL INC. Location: Unit L Sec. 29 Twp 27 Rng 10

Name of Well/Wells or Pipeline Serviced HUERFANO UNIT #105E

cps 1825

Elevation 6056' Completion Date 9/29/87 Total Depth 280' Land Type* N/A

Casing, Sizes, Types & Depths N/A

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

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

N/A

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

Fresh, Clear, Salty, Sulphur, Etc. 50' SAMPLE TAKEN

Depths gas encountered: N/A

Type & amount of coke breeze used: N/A

Depths anodes placed: 180', 170', 160', 150', 140', 130', 120', 110', 95', 85'

Depths vent pipes placed: 270'

Vent pipe perforations: 200'

Remarks: gb #1

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OIL CON. DIV
DIST. 3

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

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

FM-07-0238 (Rev. 10-82)

WELL CASING
CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOG

Drilling Log (Attach Hereto) ☒ Completion Date 9-29-87

CPS #	Well Name, Line or Plant:	Work Order #	State:	Ins. Union Check
1825-W	Huerfano # 105-E		600' W=.80	☒ Good ☐ Bad

Location	Anode Size:	Anode Type:	Size Bit:
L29-27-10	2"x60"	Duriron	6 3/4"

Depth Drilled	Depth Logged	Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used
280'	265'				

Anode Depth	# 1 180'	# 2 170'	# 3 160'	# 4 150'	# 5 140'	# 6 130'	# 7 120'	# 8 110'	# 9 95'	# 10 85
Anode Output (Amps)	# 1 5.8	# 2 6.7	# 3 6.6	# 4 6.9	# 5 5.9	# 6 6.2	# 7 6.0	# 8 6.2	# 9 5.8	# 10 5.8
Anode Depth	# 11	# 12	# 13	# 14	# 15	# 16	# 17	# 18	# 19	# 20
Anode Output (Amps)	# 11	# 12	# 13	# 14	# 15	# 16	# 17	# 18	# 19	# 20

Total Circuit Resistance			No. 8 C.P. Cable Used	No. 2 C.P. Cable Used
Volts 11.7	Amps 20.2	Ohms .58 .51	ELEVATION = 6056'	

Remarks: DRILLED TO 280'; LOGGED 265'. DRILLER SAID WATER AT 50', CAUGHT SAMPLE. INSTALLED 270' OF 1" PVC VENT PIPE. PERFORATED BOTTOM 200'

Rectifier Size: 40 V 16 A

Addn'l Depth

Depth Credit: 235' ✓

Extra Cable: 30' ✓

Ditch & 1 Cable: 20' ✓

Ditch & 2 Cable: 115'

25' Meter Pole:

20' Meter Pole: 1

20' Stub Pole:

Junction Box: 1

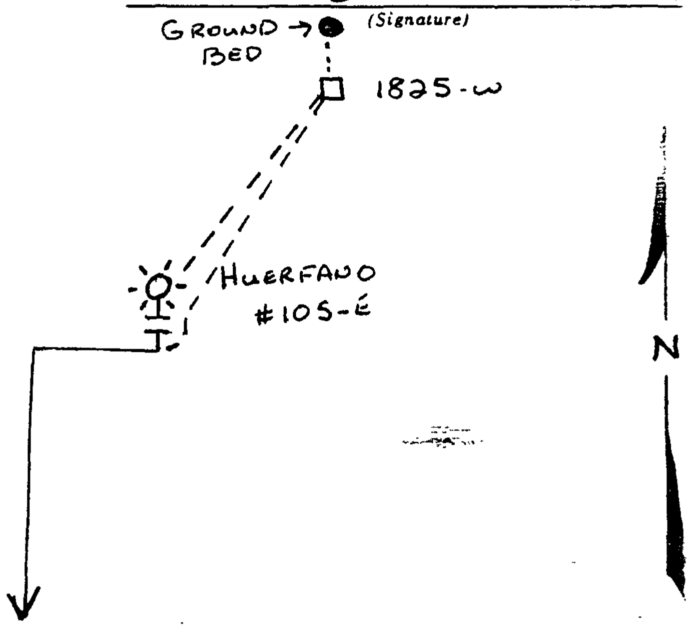
Ω .579

4300.00
- 940.00 ✓
7.50 ✓
7.80 ✓
59.80 ✓
295.[illegible]
40.00
3770.10
188.50
3[illegible]

6056

All Construction Completed

(Signature)



BURG CORROSION SYSTEMS, IC.

P.O. BOX 1359 - PHONE 334-6141
AZTEC, NEW MEXICO 87410

DEEP WELL GROUNDBED LOG

Date 9-29-87

Company Meridian

Well No. H. #105-E Location L-29-27-10 Volts Applied 11.7 .51 Amperes 20.

Depth	Reading		Mark	Anode
0				
5				
10				
15				
20				
25				
30				
35				
40				
45				
50				
55				
60				
65				
70	3	3		
75	2	8		
80	2	9		
85	2	1		(10)
90	2	2	[illegible]	
95	2	9		(9)
100	2	2	[illegible]	
105	2	1		
110	2	7	\	(8)
115	2	1		
120	2	9	\	(7)
125	2	9		
130	2	9	\	(6)
135	2	8		
140	2	9	\	(5)
145	2	0		
150	2	6	\	(4)
155	2	4		
160	2	7	\	(3)
165	2	5		
170	2	4	\	(2)
175	2	2		
180	2	1	\	(1)
185	1	8		
190	1	2		
195	1	0		
200	.	9		
205	.	9		
210		9		
215		7		
220	.	7		
225	.	7		

Depth	Entry
230	9
235	7
240	4
245	4
250	5
255	6
260	
265	TD 265'
270	
275	
280	Drilled 280'
285	
290	200' Perf
295	Vent Pipe
300	
305	
310	
315	
320	
325	
330	
335	
340	
345	
350	
355	
360	
365	
370	
375	
380	
385	
390	
395	
400	
405	
410	
415	
420	
425	
430	
435	
440	
445	
450	

Depth	Anode	Depth (ft)	Reading
455			
460	(1)	180'	3.2
465	(2)	170	3.9
470	(3)	160	4.3
475	(4)	150	4.2
480	(5)	140	4.0
485	(6)	130	3.9
490	(7)	120	3.9
495	(8)	110	3.8
500	(9)	95	3.8
505	(10)	85	3.8
510			
515			
520			
525			
530			
535			
540			
545			
550			
555			
560			
565			
670			
575			
580			
585			
590			
595			
600			
605			
610			
615			
620			
625			
630			
635			
640			
645			
650			
655			
660			
665			
670			
675			

Depth	Entry
680	
685	
690	
695	
700	
705	
710	
715	
720	
725	
730	
735	
740	
745	
750	
755	
760	
765	
770	
775	
780	
785	
790	
795	
800	
805	
810	
815	
820	
825	
830	
835	
840	
845	
850	
855	
860	
865	
870	
875	
880	
885	
890	
895	
900	

aps 1825 W

API WATER ANALYSIS REPORT FORM

Company	Sample No.	Date Sampled
MERIDIAN OIL. Co.	1	9/29/87

Field	Legal Description	County or Parish	State
Angel Peak		San Juan	NM

Lease or Unit	Well	Depth	Formation	Water, B/D
Huerfano	# 105 E			

Type of Water (Produced, Supply, etc.)	Sampling Point	Sampled By
Ground Red	50	MW

DISSOLVED SOLIDS

CATIONS

	mg/l	me/l
Sodium, Na (calc.)	7860	342
Calcium, Ca	513	25.6
Magnesium, Mg	729	6.0
Barium, Ba		

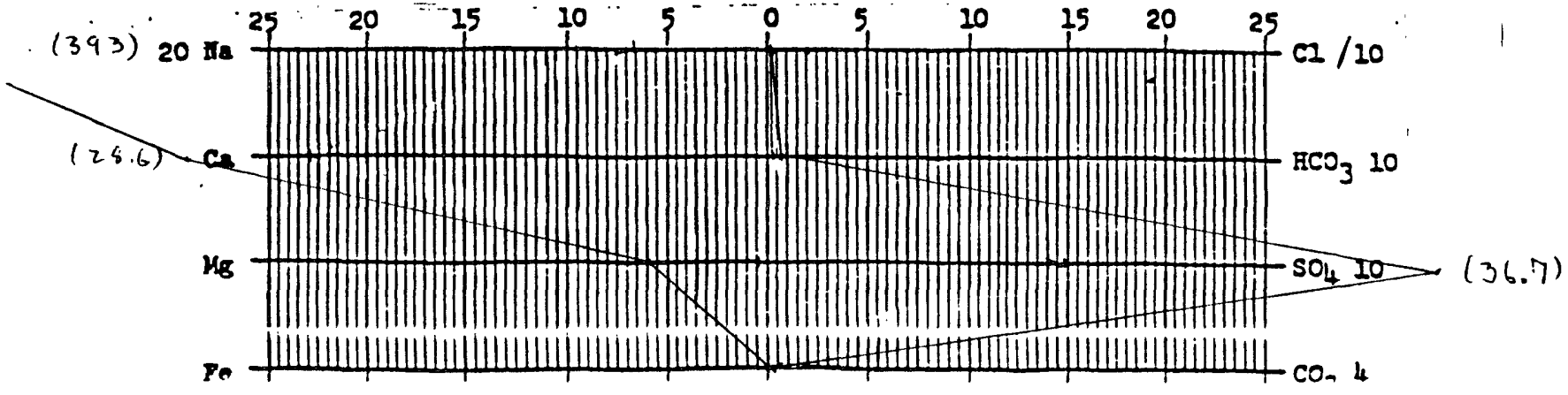
ANIONS

	mg/l	me/l
Chloride, Cl	78	2.0
Sulfate, SO_4	17600	367
Carbonate, CO_3		
Bicarbonate, HCO_3	408	7.0

OTHER PROPERTIES

pH	8.17
Specific Gravity, 60/60 F.	1.0198
Resistivity (ohm-meters) 72 F.	61 ohm-m
Conductivity	16000 micromhos
Total Dissolved Solids (calc.)	26600
Iron, Fe (total)	
Sulfide, as H_2S	

REMARKS & RECOMMENDATIONS:



BURGE CORROSION SYSTEMS, INC.

P.O. BOX 1359 - PHONE 334-6141
AZTEC, NEW MEXICO 87410

CPS 1825W

COMPANY Meridian DAILY DRILLING REPORT 9-20 ,19 87

WELL NAME:	WELL NUMBER:	SECTION:	TOWNSHIP:	RANGE:
Hyerfano	105E	29	27	10

WATER AT:	FEET:	HOLE MADE:
40-60 ft		6¾ 280 ft.

DESCRIPTION OF FORMATION

FROM	TO	FORMATION IS	COLOR
0	30	Sand & Sand Stone	brown
30	60	Water sand	Grey
60	100	Shale	dk Grey
100	110	Sand Stone	lt Grey
110	140	Shale	dk Grey
140	150	Sand Stone	md Grey
150	200	Shale & Sandy shale	dk Grey
200	260	Water Sand	md Grey
		T.D. 280 ft.	

REMARKS: water sample at 40 ft

Grant Brown Driller Tool Dresser

30-045-06332 3660

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

Operator Meridian Oil Co Location: Unit M Sec. 22 Twp 27 Rng 10

Name of Well/Wells or Pipeline Serviced Gordon #5

Elevation 6131 Completion Date 2/21/92 Total Depth 374' Land Type F

Casing Strings, Sizes, Types & Depths 2/12 Set 98' of 8" PVC Casing. No Gas, Water, or Boulders were Encountered During Casing.

If Casing Strings are cemented, show amounts & types used Cemented with 21 sacks.

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

Depths & thickness of water zones with description of water: Fresh, Clear, Salty, Sulphur, Etc. 115' fresh

Depths gas encountered: None

Ground bed depth with type & amount of coke breeze used: 374', 51 sacks of Loresco type SW

Depths anodes placed: 355, 345, 335, 325, 315, 305, 295, 285, 245, 235, 225, 217, 210, 203, 175

Depths vent pipes placed: 374'

Vent pipe perforations: Bottom 259'

Remarks:

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JAN 31 1994
OIL CON. DIV.
DIST. 3

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

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

TECH, Inc.
333 East Main
Farmington
New Mexico
87401
505/327-3311

LABORATORY REPORT

OIL-FIELD WATER ANALYSIS

Lab Number:	25930315-05 2389W	Date Sampled:	02-21-93
Client:	Meridian Oil	Date Received:	03-15-93
Sample ID:	Gordon #5 groundbed	Date Analyzed:	03-15-93
Location:	M22-27-10	Date Reported:	03-18-93

DISSOLVED SOLIDS:

	me/L	mg/L	Detection Limit, mg/L
Calcium, Ca^{++}	0.8	16	1.0
Magnesium, Mg^{++}	0.1	2	1.0
Sodium, Na^{+} (calc)	25.7	591	5.0
Chloride, Cl^{-}	0.4	13	2.0
Sulfate, SO_4^{--}	19.1	916	5.0
Bicarbonate, HCO_3^{-}	6.8	415	5.0
Carbonate, CO_3^{--}	0.4	12	1.0
Hydroxide, OH^{-}	ND	ND	1.0
Total Dissolved Solids (calculated):		1,960	10.0

OTHER PROPERTIES:

pH (units):	8.5
reisistivity (ohm-meters):	5.0
specific gravity at 60F:	1.0057
room temperature (F):	72

ND = Not Detected at the stated dectection limit

Comments: San Juan County, New Mexico
Sampled by Keith Bishop

Methods: American Petroleum Institute, "Recommended Practice for Analysis of Oil-Field Waters;" 2nd edition.

analyst

TECH, Inc.
333 East Main
Farmington
New Mexico
87401
505/327-3311

LABORATORY REPORT

OIL-FIELD WATER ANALYSIS

Lab Number: 25930315-05 2389 w
Client: Meridian Oil
Sample ID: Gordon #5 groundbed
Location: M22-27-10

Date Sampled: 02-21-93
Date Received: 03-15-93
Date Analyzed: 03-15-93
Date Reported: 03-18-93

DISSOLVED SOLIDS:

	me/L	mg/L	Detection Limit, mg/L
Calcium, Ca++	0.8	16	1.0
Magnesium, Mg++	0.1	2	1.0
Sodium, Na+ (calc)	25.7	591	5.0
Chloride, Cl-	0.4	13	2.0
Sulfate, SO4--	19.1	916	5.0
Bicarbonate, HCO3-	6.8	415	5.0
Carbonate,CO3--	0.4	12	1.0
Hydroxide, OH-	ND	ND	1.0
Total Dissolved Solids (calculated):		1,960	10.0

OTHER PROPERTIES:

pH (units):	8.5
reisistivity (ohm-meters):	5.0
specific gravity at 60F:	1.0057
room temperature (F):	72

ND = Not Detected at the stated dectection limit

Comments: San Juan County, New Mexico
Sampled by Keith Bishop

Methods: American Petroleum Institute, "Recommended Practice for Analysis of Oil-Field Waters;" 2nd edition.

Leb Pellow
analyst

3661

30-045-27512

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

Operator Meridian Oil Co. Location: Unit G Sec. 22 Twp 27 Rng 10

Name of Well/Wells or Pipeline Serviced

Gordon #500

Elevation ____ Completion Date 2/22/93 Total Depth 389' Land Type F

Casing Strings, Sizes, Types & Depths 2/11 Set 100' of 8" PVC Casing.
No Gas, Water, or Boulders were Encountered During Casing.

If Casing Strings are cemented, show amounts & types used Cemented
With 22 Sacks.

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

Depths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc. 120' fresh

Depths gas encountered: none

Ground bed depth with type & amount of coke breeze used: 389',

Depths anodes placed: 350, 340, 325, 318, 310, 300, 225, 185, 175, 165, 155, 145, 137, 125, 118

Depths vent pipes placed: ~~[illegible]~~ 389'

Vent pipe perforations: Bottom 280'

Remarks:

RECEIVED
JAN 31 1994
OIL CON. DIV.
DIST. 3

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

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

TECH, Inc.
333 East Main
Farmington
New Mexico
87401
505/327-3311

LABORATORY REPORT

OIL-FIELD WATER ANALYSIS

Lab Number: 25930315-07 2442W
Client: Meridian Oil
Sample ID: Gordon # 500 Groundbed
Location: G22-27-10

Date Sampled: 02-22-93
Date Received: 03-15-93
Date Analyzed: 03-17-93
Date Reported: 03-18-93

DISSOLVED SOLIDS:	me/L	mg/L	Detection Limit, mg/L
Calcium, Ca++	0.5	11	1.0
Magnesium, Mg++	0.1	2	1.0
Sodium, Na+ (calc)	22.4	514	5.0
Chloride, Cl-	0.4	13	2.0
Sulfate, SO4--	16.9	810	5.0
Bicarbonate, HCO3-	5.0	305	5.0
Carbonate, CO3--	0.8	24	1.0
Hydroxide, OH-	ND	ND	1.0
Total Dissolved Solids (calculated):		1,680	10.0

OTHER PROPERTIES:

pH (units):	8.7
reisistivity (ohm-meters):	6.2
specific gravity at 60F:	1.0044
room temperature (F):	72

ND = Not Detected at the stated dectection limit

Comments: San Juan County, New Mexico
Sampled by Keith Bishop

Methods: American Petroleum Institute, "Recommended Practice for Analysis of Oil-Field Waters;" 2nd edition.

Keith Fallon
analyst

TECH, Inc.
333 East Main
Farmington
New Mexico
87401
505/327-3311

LABORATORY REPORT

OIL-FIELD WATER ANALYSIS

Lab Number: 25930315-07
Client: Meridian Oil 2442 W
Sample ID: Gordon # 500 Groundbed
Location: G22-27-10

Date Sampled: 02-22-93
Date Received: 03-15-93
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pH (units):	8.7
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specific gravity at 60F:	1.0044
room temperature (F):	72

ND = Not Detected at the stated dectection limit

Comments: San Juan County, New Mexico
Sampled by Keith Bishop

Methods: American Petroleum Institute, "Recommended Practice for Analysis of Oil-Field Waters;" 2nd edition.

ANALYST

ENSOLUM

APPENDIX C

Executed C-138 Solid Waste Acceptance Form

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-138
Revised 08/01/11

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

97057-1125

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. Originating Site:
Lateral 2A-2

AFE: N65562
PM: ME Eddleman
Pay Key: AM14058

2. Location of Material (Street Address, City, State or ULSTR):
UL I Section 21 T27N R10W; 36.557716, -107.892107

March 2023

4. Source and Description of Waste:
Source: Hydrocarbon contaminated soil associated with remediation activities from a natural gas pipeline release.
Description: Hydrocarbon contaminated soil associated with remediation activities from a natural gas pipeline release.
Estimated Volume 50 (yd³) / bbls Known Volume (to be entered by the operator at the end of the haul) 24 (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) 3-24-2023, representative for Enterprise Products Operating authorize to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

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

5. Transporter: IMI or Subcontractors

OCD Permitted Surface Waste Management Facility

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

Waste Acceptance Status:

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

PRINT NAME: Greg Crabtree TITLE: Enviro Manager DATE: 3/28/23

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

ENSOLUM

APPENDIX D

Photographic Documentation

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Lateral 2A-2 (03/20/23)
Ensolum Project No. 05A1226232

ENSOLUM

Photograph 1 Photograph Description: View of the in-process excavation activities.	
Photograph 2 Photograph Description: View of the wash and FP-1 and FP-2 sample locations.	
Photograph 3 Photograph Description: View of the final excavation.	

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Lateral 2A-2 (03/20/23)
Ensolum Project No. 05A1226232

ENSOLUM

Photograph 4 Photograph Description: View of the site after initial restoration.	

ENSOLUM

APPENDIX E

Regulatory Correspondence

From: Kyle Summers
To: Chad D"Aponti; Ranee Deechilly
Subject: FW: [EXTERNAL] Lateral 2A-2 - UL I Section 21 T27N R10W; 36.557716, -107.892107; NMOCD Incident # nAPP2307927327
Date: Monday, March 27, 2023 12:26:03 PM
Attachments: image003.png
image004.png
image005.png

Kyle Summers
Principal
903-821-5603
Ensolum, LLC

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Monday, March 27, 2023 10:48 AM
To: Long, Thomas <tjlong@eprod.com>; slandon@blm.gov
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: Re: [EXTERNAL] Lateral 2A-2 - UL I Section 21 T27N R10W; 36.557716, -107.892107; NMOCD Incident # nAPP2307927327

[**EXTERNAL EMAIL**]

Tom,

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

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

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

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

Regards,

Nelson Velez ● Environmental Specialist - Adv

Environmental Bureau | EMNRD - Oil Conservation Division

1000 Rio Brazos Road | Aztec, NM 87410

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

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

From: Long, Thomas <tjlong@eprod.com>
Sent: Monday, March 27, 2023 9:27 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>; slandon@blm.gov <slandon@blm.gov>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: [EXTERNAL] Lateral 2A-2 - UL I Section 21 T27N R10W; 36.557716, -107.892107; NMOCD Incident # nAPP2307927327

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

Nelson/Sherrie,

This email is a notification and a variance request. Enterprise is requesting a variance for required 48 hour notification per 19.15.29.12D (1a) NMAC. Enterprise would like to collect soil samples for laboratory analysis tomorrow March 28, 2023 at 10:00 a.m. Please acknowledge acceptance of this variance request. If you have any questions, please call or email.

Thank you,

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

Enterprise Products

ENSOLUM

APPENDIX F

Table 1 – Soil Analytical Summary

ENSOLUM

TABLE 1
Lateral 2A-2 (03/20/23)
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX[1] (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO/MRO)[1] (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria (Tier I)				10	NE	NE	NE	50	NE	NE	NE	100	600
Flowpath Composite Soil Samples													
FP-1	3.28.23	C	0.25	<0.017	<0.035	<0.035	<0.070	ND	<3.5	<9.6	<48	ND	<60
FP-2	3.28.23	C	0.25	<0.018	<0.035	<0.035	<0.071	ND	<3.5	<9.9	<50	ND	<60
Excavation Composite Soil Samples													
S-1	3.28.23	C	4.5	<0.017	<0.035	<0.035	<0.069	ND	<3.5	<9.6	<48	ND	<60
S-2	3.28.23	C	0 to 4.5	<0.018	<0.036	<0.036	<0.072	ND	<3.6	<9.6	<48	ND	<60
S-3	3.28.23	C	0 to 4.5	<0.017	<0.033	<0.033	<0.067	ND	<3.3	<9.8	<49	ND	<60
S-4	3.28.23	C	0 to 4.5	<0.017	<0.034	<0.034	<0.069	ND	<3.4	<10	<50	ND	<60
S-5	3.28.23	C	0 to 4.5	<0.017	<0.035	<0.035	<0.069	ND	<3.5	<9.7	<48	ND	<60

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

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

NE = Not established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPH = Total Petroleum Hydrocarbon

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics

ENSOLUM

APPENDIX G

Laboratory Data Sheets & Chain of Custody Documentation

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

March 31, 2023

Kyle Summers

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

RE: Lateral 2a 2 OrderNo.: 2303D99

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 7 sample(s) on 3/29/2023 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2303D99**
Date Reported: **3/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-1
Project: Lateral 2a 2 **Collection Date:** 3/28/2023 10:00:00 AM
Lab ID: 2303D99-001 **Matrix:** MEOH (SOIL) **Received Date:** 3/29/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	3/29/2023 11:41:22 AM	74000
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/29/2023 10:33:27 AM	73997
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/29/2023 10:33:27 AM	73997
Surr: DNOP	90.1	69-147		%Rec	1	3/29/2023 10:33:27 AM	73997
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	3/29/2023 11:21:00 AM	GS9563
Surr: BFB	95.5	37.7-212		%Rec	1	3/29/2023 11:21:00 AM	GS9563
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.017		mg/Kg	1	3/29/2023 11:21:00 AM	BS5639
Toluene	ND	0.035		mg/Kg	1	3/29/2023 11:21:00 AM	BS5639
Ethylbenzene	ND	0.035		mg/Kg	1	3/29/2023 11:21:00 AM	BS5639
Xylenes, Total	ND	0.069		mg/Kg	1	3/29/2023 11:21:00 AM	BS5639
Surr: 4-Bromofluorobenzene	93.3	70-130		%Rec	1	3/29/2023 11:21:00 AM	BS5639

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2303D99**
Date Reported: **3/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-2
Project: Lateral 2a 2 **Collection Date:** 3/28/2023 10:05:00 AM
Lab ID: 2303D99-002 **Matrix:** MEOH (SOIL) **Received Date:** 3/29/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	3/29/2023 11:53:46 AM	74000
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/29/2023 11:04:54 AM	73997
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/29/2023 11:04:54 AM	73997
Surr: DNOP	87.4	69-147		%Rec	1	3/29/2023 11:04:54 AM	73997
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	3/29/2023 11:43:00 AM	GS9563
Surr: BFB	91.2	37.7-212		%Rec	1	3/29/2023 11:43:00 AM	GS9563
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.018		mg/Kg	1	3/29/2023 11:43:00 AM	BS5639
Toluene	ND	0.036		mg/Kg	1	3/29/2023 11:43:00 AM	BS5639
Ethylbenzene	ND	0.036		mg/Kg	1	3/29/2023 11:43:00 AM	BS5639
Xylenes, Total	ND	0.072		mg/Kg	1	3/29/2023 11:43:00 AM	BS5639
Surr: 4-Bromofluorobenzene	92.0	70-130		%Rec	1	3/29/2023 11:43:00 AM	BS5639

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2303D99**
Date Reported: **3/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-3
Project: Lateral 2a 2 **Collection Date:** 3/28/2023 10:10:00 AM
Lab ID: 2303D99-003 **Matrix:** MEOH (SOIL) **Received Date:** 3/29/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	3/29/2023 12:06:11 PM	74000
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/29/2023 11:15:25 AM	73997
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/29/2023 11:15:25 AM	73997
Surr: DNOP	88.5	69-147		%Rec	1	3/29/2023 11:15:25 AM	73997
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	3/29/2023 12:05:00 PM	GS9563
Surr: BFB	94.0	37.7-212		%Rec	1	3/29/2023 12:05:00 PM	GS9563
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.017		mg/Kg	1	3/29/2023 12:05:00 PM	BS5639
Toluene	ND	0.033		mg/Kg	1	3/29/2023 12:05:00 PM	BS5639
Ethylbenzene	ND	0.033		mg/Kg	1	3/29/2023 12:05:00 PM	BS5639
Xylenes, Total	ND	0.067		mg/Kg	1	3/29/2023 12:05:00 PM	BS5639
Surr: 4-Bromofluorobenzene	93.8	70-130		%Rec	1	3/29/2023 12:05:00 PM	BS5639

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2303D99**
Date Reported: **3/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-4
Project: Lateral 2a 2 **Collection Date:** 3/28/2023 10:15:00 AM
Lab ID: 2303D99-004 **Matrix:** MEOH (SOIL) **Received Date:** 3/29/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	3/29/2023 12:18:35 PM	74000
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/29/2023 11:25:59 AM	73997
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/29/2023 11:25:59 AM	73997
Surr: DNOP	87.6	69-147		%Rec	1	3/29/2023 11:25:59 AM	73997
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	3/29/2023 12:27:00 PM	GS9563
Surr: BFB	94.9	37.7-212		%Rec	1	3/29/2023 12:27:00 PM	GS9563
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.017		mg/Kg	1	3/29/2023 12:27:00 PM	BS5639
Toluene	ND	0.034		mg/Kg	1	3/29/2023 12:27:00 PM	BS5639
Ethylbenzene	ND	0.034		mg/Kg	1	3/29/2023 12:27:00 PM	BS5639
Xylenes, Total	ND	0.069		mg/Kg	1	3/29/2023 12:27:00 PM	BS5639
Surr: 4-Bromofluorobenzene	95.3	70-130		%Rec	1	3/29/2023 12:27:00 PM	BS5639

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2303D99**
Date Reported: **3/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-5
Project: Lateral 2a 2 **Collection Date:** 3/28/2023 10:20:00 AM
Lab ID: 2303D99-005 **Matrix:** MEOH (SOIL) **Received Date:** 3/29/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	3/29/2023 12:30:59 PM	74000
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/29/2023 11:36:37 AM	73997
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/29/2023 11:36:37 AM	73997
Surr: DNOP	87.9	69-147		%Rec	1	3/29/2023 11:36:37 AM	73997
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	3/29/2023 12:49:00 PM	GS9563
Surr: BFB	86.8	37.7-212		%Rec	1	3/29/2023 12:49:00 PM	GS9563
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.017		mg/Kg	1	3/29/2023 12:49:00 PM	BS5639
Toluene	ND	0.035		mg/Kg	1	3/29/2023 12:49:00 PM	BS5639
Ethylbenzene	ND	0.035		mg/Kg	1	3/29/2023 12:49:00 PM	BS5639
Xylenes, Total	ND	0.069		mg/Kg	1	3/29/2023 12:49:00 PM	BS5639
Surr: 4-Bromofluorobenzene	85.3	70-130		%Rec	1	3/29/2023 12:49:00 PM	BS5639

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2303D99**
Date Reported: **3/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** FP-1
Project: Lateral 2a 2 **Collection Date:** 3/28/2023 10:25:00 AM
Lab ID: 2303D99-006 **Matrix:** MEOH (SOIL) **Received Date:** 3/29/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	3/29/2023 1:08:13 PM	74000
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/29/2023 11:47:10 AM	73997
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/29/2023 11:47:10 AM	73997
Surr: DNOP	88.7	69-147		%Rec	1	3/29/2023 11:47:10 AM	73997
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	3/29/2023 1:10:00 PM	GS9563
Surr: BFB	80.7	37.7-212		%Rec	1	3/29/2023 1:10:00 PM	GS9563
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.017		mg/Kg	1	3/29/2023 1:10:00 PM	BS5639
Toluene	ND	0.035		mg/Kg	1	3/29/2023 1:10:00 PM	BS5639
Ethylbenzene	ND	0.035		mg/Kg	1	3/29/2023 1:10:00 PM	BS5639
Xylenes, Total	ND	0.070		mg/Kg	1	3/29/2023 1:10:00 PM	BS5639
Surr: 4-Bromofluorobenzene	81.5	70-130		%Rec	1	3/29/2023 1:10:00 PM	BS5639

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2303D99**
Date Reported: **3/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** FP-2
Project: Lateral 2a 2 **Collection Date:** 3/28/2023 10:30:00 AM
Lab ID: 2303D99-007 **Matrix:** MEOH (SOIL) **Received Date:** 3/29/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	3/29/2023 1:20:38 PM	74000
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/29/2023 11:57:45 AM	73997
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/29/2023 11:57:45 AM	73997
Surr: DNOP	91.9	69-147		%Rec	1	3/29/2023 11:57:45 AM	73997
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	3/29/2023 1:32:00 PM	GS9563
Surr: BFB	89.3	37.7-212		%Rec	1	3/29/2023 1:32:00 PM	GS9563
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.018		mg/Kg	1	3/29/2023 1:32:00 PM	BS5639
Toluene	ND	0.035		mg/Kg	1	3/29/2023 1:32:00 PM	BS5639
Ethylbenzene	ND	0.035		mg/Kg	1	3/29/2023 1:32:00 PM	BS5639
Xylenes, Total	ND	0.071		mg/Kg	1	3/29/2023 1:32:00 PM	BS5639
Surr: 4-Bromofluorobenzene	84.9	70-130		%Rec	1	3/29/2023 1:32:00 PM	BS5639

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2303D99**

31-Mar-23

Client: ENSOLUM

Project: Lateral 2a 2

Sample ID: **MB-74000** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **74000** RunNo: **95644**

Prep Date: **3/29/2023** Analysis Date: **3/29/2023** SeqNo: **3461932** Units: **mg/Kg**

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

Sample ID: **LCS-74000** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **74000** RunNo: **95644**

Prep Date: **3/29/2023** Analysis Date: **3/29/2023** SeqNo: **3461933** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.9	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2303D99**
31-Mar-23

Client: ENSOLUM
Project: Lateral 2a 2

Sample ID: **MB-73997** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **73997** RunNo: **95646**
Prep Date: **3/29/2023** Analysis Date: **3/29/2023** SeqNo: **3461213** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.8		10.00		87.7	69	147			

Sample ID: **LCS-73997** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **73997** RunNo: **95646**
Prep Date: **3/29/2023** Analysis Date: **3/29/2023** SeqNo: **3461214** 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	90.7	61.9	130			
Surr: DNOP	4.5		5.000		90.5	69	147			

Sample ID: **2303D99-001AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-1** Batch ID: **73997** RunNo: **95646**
Prep Date: **3/29/2023** Analysis Date: **3/29/2023** SeqNo: **3461247** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	9.2	46.00	0	83.9	54.2	135			
Surr: DNOP	4.3		4.600		92.6	69	147			

Sample ID: **2303D99-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-1** Batch ID: **73997** RunNo: **95646**
Prep Date: **3/29/2023** Analysis Date: **3/29/2023** SeqNo: **3461248** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.9	49.41	0	90.4	54.2	135	14.6	29.2	
Surr: DNOP	4.6		4.941		92.9	69	147	0	0	

Sample ID: **MB-73987** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **73987** RunNo: **95646**
Prep Date: **3/28/2023** Analysis Date: **3/29/2023** SeqNo: **3461648** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.2		10.00		91.6	69	147			

Sample ID: **LCS-73987** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **73987** RunNo: **95646**
Prep Date: **3/28/2023** Analysis Date: **3/29/2023** SeqNo: **3461649** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2303D99**
31-Mar-23

Client: ENSOLUM
Project: Lateral 2a 2

Sample ID: **LCS-73987** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **73987** RunNo: **95646**
Prep Date: **3/28/2023** Analysis Date: **3/29/2023** SeqNo: **3461649** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		87.3	69	147			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2303D99**
31-Mar-23

Client: ENSOLUM
Project: Lateral 2a 2

Sample ID: **2.5ug gro lcs** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **GS95639** RunNo: **95639**
Prep Date: Analysis Date: **3/29/2023** SeqNo: **3461029** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.9	70	130			
Surr: BFB	2300		1000		227	37.7	212			S

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **GS95639** RunNo: **95639**
Prep Date: Analysis Date: **3/29/2023** SeqNo: **3461030** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		107	37.7	212			

Sample ID: **2303D99-001ams** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-1** Batch ID: **GS95639** RunNo: **95639**
Prep Date: Analysis Date: **3/29/2023** SeqNo: **3461201** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	3.5	17.30	0	103	70	130			
Surr: BFB	1500		692.0		221	37.7	212			S

Sample ID: **2303D99-001amsd** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-1** Batch ID: **GS95639** RunNo: **95639**
Prep Date: Analysis Date: **3/29/2023** SeqNo: **3461202** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	3.5	17.30	0	91.6	70	130	12.0	20	
Surr: BFB	1400		692.0		197	37.7	212	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2303D99**
31-Mar-23

Client: ENSOLUM
Project: Lateral 2a 2

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **BS5639**	RunNo: **95639**
Prep Date:	Analysis Date: **3/29/2023**	SeqNo: **3461036** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.2	80	120			
Toluene	0.97	0.050	1.000	0	96.6	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.8	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.9	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **BS5639**	RunNo: **95639**
Prep Date:	Analysis Date: **3/29/2023**	SeqNo: **3461037** 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		104	70	130			

Sample ID: **2303D99-002ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-2**	Batch ID: **BS5639**	RunNo: **95639**
Prep Date:	Analysis Date: **3/29/2023**	SeqNo: **3461591** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.66	0.018	0.7168	0	92.6	68.8	120			
Toluene	0.66	0.036	0.7168	0	92.7	73.6	124			
Ethylbenzene	0.65	0.036	0.7168	0	90.7	72.7	129			
Xylenes, Total	1.9	0.072	2.150	0	89.7	75.7	126			
Surr: 4-Bromofluorobenzene	0.62		0.7168		86.8	70	130			

Sample ID: **2303D99-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-2**	Batch ID: **BS5639**	RunNo: **95639**
Prep Date:	Analysis Date: **3/29/2023**	SeqNo: **3461592** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.66	0.018	0.7168	0	91.5	68.8	120	1.16	20	
Toluene	0.66	0.036	0.7168	0	91.5	73.6	124	1.33	20	
Ethylbenzene	0.64	0.036	0.7168	0	89.3	72.7	129	1.45	20	
Xylenes, Total	1.9	0.072	2.150	0	88.7	75.7	126	1.13	20	
Surr: 4-Bromofluorobenzene	0.62		0.7168		86.1	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: ENSOLUM Work Order Number: 2303D99 RcptNo: 1

Received By: Tracy Casarrubias 3/29/2023 7:35:00 AM

Completed By: Tracy Casarrubias 3/29/2023 7:54:46 AM

Reviewed By: Jn 3/29/23

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° 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? 3/29/23

Checked by: Jn 3/30/2

Jn 3/29/23

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.8	Good	Yes	Morty		

Chain-of-Custody Record

Client: Ensolum, LLC.

Mailing Address: 606 S Rio Grande Suite A 87410

Phone #:

email or Fax#:

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: Normal
☐ Standard ☑ Rush 3-29-23

Project Name: Lateral 2a-2

Project #: 05A1221232

Project Manager: K Summers

Sampler: C DAponti

On Ice: ☑ Yes ☐ No Mandy

# of Coolers: 1

Cooler Temp(Including CF): 3.0-0.2=2.8 (°C)

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 7303D99	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	(Cl, F, Br, NO_3, NO_2, PO_4, SO_4)	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
3/28	1000	S	S-1	1 4oz Jar	Cool	001	✓	✓					✓			
3/28	1005	S	S-2		Cool	002	✓	✓					✓			
3/28	1010	S	S-3		Cool	003	✓	✓					✓			
3/28	1015	S	S-4		Cool	004	✓	✓					✓			
3/28	1020	S	S-5		Cool	005	✓	✓					✓			
3/28	1025	S	FP-1		Cool	006	✓	✓					✓			
3/28	1030	S	FP-2		Cool	007	✓	✓					✓			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
3/28/23	1338				3/28/23	1338
3/28/23	1812	Christian Waetjen		Courier	3/29/23	7:35

Remarks: Tom Long
AFE # N655b2
Pay Key AM14058
Same Day

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

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

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

CONDITIONS

Action 226479

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 226479
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	6/13/2023