

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) NAPP2221727230
Contact mailing address: 614 Reilly Ave, Farmington, NM 87401	

Location of Release Source

Latitude **36.597674** Longitude **-107.776343** (NAD 83 in decimal degrees to 5 decimal places)

Site Name Lateral C-28	Site Type Natural Gas Gathering Pipeline
Date Release Discovered: 08/04/2022	Serial Number (if applicable): N/A

Unit Letter	Section	Township	Range	County
N	3	27N	9W	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)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> Condensate	Volume Released (bbls): Estimated 5-10 BBLs	Volume Recovered (bbls): None
<input checked="" type="checkbox"/> Natural Gas	Volume Released (Mcf): 28 MCF	Volume Recovered (Mcf): None
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

Cause of Release: On July 5, 2022, Enterprise had a release of natural gas from the Lateral C-28 pipeline. The pipeline was isolated, depressurized, locked and tagged out. No liquids were released to the ground surface. No washes were affected. No fire nor injuries occurred. Due to the road conditions, Enterprise began repairs and remediation on August 4, 2022 at which time determined that this release was reportable per NMOCD regulation due to the volume of impacted subsurface soil. Remediation and repairs were completed on August 12, 2022. The final excavation dimensions measured approximately 27.5 feet long by 18 feet wide by 14 feet deep. A total of 392 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:  Date: 6-12-2023

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:  Date: 06/13/2023

Printed Name: Nelson Velez Title: Environmental Specialist – Adv



CLOSURE REPORT

Property:

Lateral C-28 (08/04/22)
Unit Letter N, S3 T27N R9W
San Juan County, New Mexico

New Mexico EMNRD OCD Incident ID No. NAPP2221727230

November 1, 2022

Ensolum Project No. 05A1226197

Prepared for:

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

Prepared by:

Raneet Deechilly
Project Manager

Kyle Summers
Senior Managing Geologist

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1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Lateral C-28 (08/04/22) (Site)
NM EMNRD OCD Incident ID No.	NAPP2221727230
Location:	36.597674° North, 107.776343° West Unit Letter N, Section 3, Township 27 North, Range 9 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 July 5, 2022, Enterprise personnel discovered of a release of natural gas from the Lateral C-28 pipeline. Enterprise personnel subsequently isolated and locked the pipeline out of service. On August 4, 2022, Enterprise initiated activities to repair the pipeline and remediate potential petroleum hydrocarbon impact. After initiating excavation activities, Enterprise determined the release was “reportable” due to the estimated volume of impacted soil. The NM EMNRD OCD was subsequently notified.

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

1.2 Project Objective

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

2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the 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 adjacent sections (**Figure A, Appendix B**).
- Two cathodic protection wells (CPWs) were identified in the NM EMNRD OCD imaging database in the same PLSS section as the Site, and six CPWs were identified in the adjacent

PLSS sections. **Figure B (Appendix B)**. The record for the cathodic protection well located near the Hughes #10A and Turner Hughes #5 well locations indicates a depth to water of approximately 175 feet bgs. This cathodic protection well is approximately 0.6 miles north of the Site and is approximately 580 feet higher in elevation than the Site. The record for the cathodic protection well located near the Turner Hughes #14A well location indicates a depth to water of approximately 120 feet bgs. This cathodic protection well is approximately 0.7 miles west of the Site and is approximately 130 feet higher in elevation than the Site. The record for the cathodic protection well located near the Turner Hughes #14 well location indicates a depth to water of approximately 130 feet bgs. This cathodic protection well is approximately 0.8 miles northwest of the Site and is approximately 185 feet higher in elevation than the Site. The record for the cathodic protection well located near the Turner Hughes #15 and #19 well locations indicates a depth to water of approximately 180 feet bgs. This cathodic protection well is approximately 0.8 miles northeast of the Site and is approximately 50 feet lower in elevation than the Site. The record for the cathodic protection well located near the Turner Hughes #21-A well location indicates "damp" at approximately 80 feet bgs. This cathodic protection well is approximately 1.2 miles northwest of the Site and is approximately 870 feet higher in elevation than the Site. The record for the cathodic protection well located near the Turner Hughes #16, #13, and #10 well locations indicates a depth to water of approximately 145 feet bgs. This cathodic protection well is approximately 1.3 miles southeast of the Site and is approximately 230 feet lower in elevation than the Site. The record for the cathodic protection well located near the Storey C#11 well location indicates a depth to water of approximately 360 feet bgs. This cathodic protection well is approximately 1.6 miles northeast of the Site and is approximately 570 feet higher in elevation than the Site. The record for the cathodic protection well located near the Hancock A #1A well location indicates a "seep" at approximately 100 feet bgs. This cathodic protection well is approximately 1.6 miles northeast of the Site and is approximately 270 feet lower 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 freshwater 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 August 4, 2022, Enterprise initiated activities to remediate petroleum hydrocarbon impact resulting from the release. During the remediation and corrective action activities, OFT Construction Inc (OFT), provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final excavation measured approximately 27.5 feet long and 18 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 14 feet bgs. The lithology encountered during the completion of remediation activities consisted primarily of unconsolidated silty sandy clay underlain by sandstone.

Approximately 392 cubic yards (yd³) of petroleum hydrocarbon-affected soils and 65 barrels (bbls) of hydro-excavation soil cuttings and water were transported to the Envirotech, Inc., (Envirotech) landfarm near Hilltop, NM for disposal/remediation. The executed C-138 solid waste acceptance form is provided in **Appendix C**. The excavation was backfilled with imported fill and 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 calibrated Dexsil PetroFLAG[®] hydrocarbon analyzer system and a photoionization detector (PID) fitted with a 10.6 eV lamp to guide excavation extents.

Ensolum's soil sampling program included the collection of 11 composite soil samples (S-1 through S-11) from the excavation. The composite samples were comprised of five aliquots each and represent an estimated 200 square foot (ft²) or less sample area per guidelines outlined in

Section D of 19.15.29.12 NMAC. A backhoe, operated by OFT was utilized to obtain fresh aliquots from each area of the excavation. Regulatory correspondence is provided in **Appendix E**.

First Sampling Event

On August 12, 2022, sampling was performed at the Site. The NM EMNRD OCD and BLM were notified of the sampling event although no representatives were present during sampling activities. Composite soil samples S-1 (12'-14'), S-2 (12'-14'), and S-3 (12'-14') were collected from the floor of the excavation. Composite soil samples S-4 (0'-12'), S-5 (0'-12'), S-6 (0'-12'), S-7 (0'-14'), S-8 (0'-14'), S-9 (0'-14'), S-10 (0'-14'), and S-11 (0'-12') were collected from the walls of the excavation.

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

5.0 SOIL LABORATORY ANALYTICAL METHODS

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

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

6.0 SOIL DATA EVALUATION

Ensolum compared the BTEX, TPH, and chloride laboratory analytical results associated with the composite soil samples (S-1 through S-11) to the NM EMNRD OCD Tier I closure criteria. In the event that the laboratory did not quantify a result for BTEX or chloride, Ensolum compared the laboratory supplied practical quantitation limits (PQLs) / reporting limits (RLs) to the NM EMNRD OCD closure criteria. Due to the high PQLs/RLs associated with the TPH MRO range when using EPA SW-846 Method #8015, Ensolum only compared the quantified results to the NM EMNRD OCD closure criteria.

- The laboratory analytical result for composite soil sample S-3 indicates a benzene concentration of 0.015 mg/kg, which is below the applicable NM EMNRD OCD criteria of 10 mg/kg. The laboratory analytical results for all other composite soil samples indicate benzene is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable NM EMNRD OCD criteria of 10 mg/kg.
- The laboratory analytical results for composite soil samples S-3, S-4, S-5, S-8, and S-9 indicate total BTEX concentrations ranging from 0.046 mg/kg (S-4) to 0.33 mg/kg (S-8), which are less than the applicable NM EMNRD OCD closure criteria of 50 mg/kg. The laboratory analytical results for all other 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 composite soil samples S-7 and S-11 indicate combined TPH GRO/DRO/MRO concentrations of 34 mg/kg and 66 mg/kg, respectively, which are less than the applicable NM EMNRD OCD closure criteria of 100 mg/kg. The laboratory analytical results for all other composite soil samples indicate combined TPH GRO/DRO/MRO is not

present 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 composite soil samples S-1, S-2, S-3, and S-8 through S-11 indicate total chloride concentrations ranging from 79 mg/kg (S-10) to 110 mg/kg (S-8), which are less than the applicable NM EMNRD OCD closure criteria of 600 mg/kg. The laboratory analytical results for all other 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. Enterprise will re-seed the Site with an approved seeding mixture.

8.0 FINDINGS AND RECOMMENDATION

- Eleven composite soil samples were collected from the Site. Based on laboratory analytical results, no benzene, BTEX, chloride, or combined TPH GRO/DRO/MRO exceedances were identified in the soils remaining at the Site.
- Approximately 392 yd³ of petroleum hydrocarbon-affected soils and 65 bbls of hydro-excavation soil cuttings and water 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.

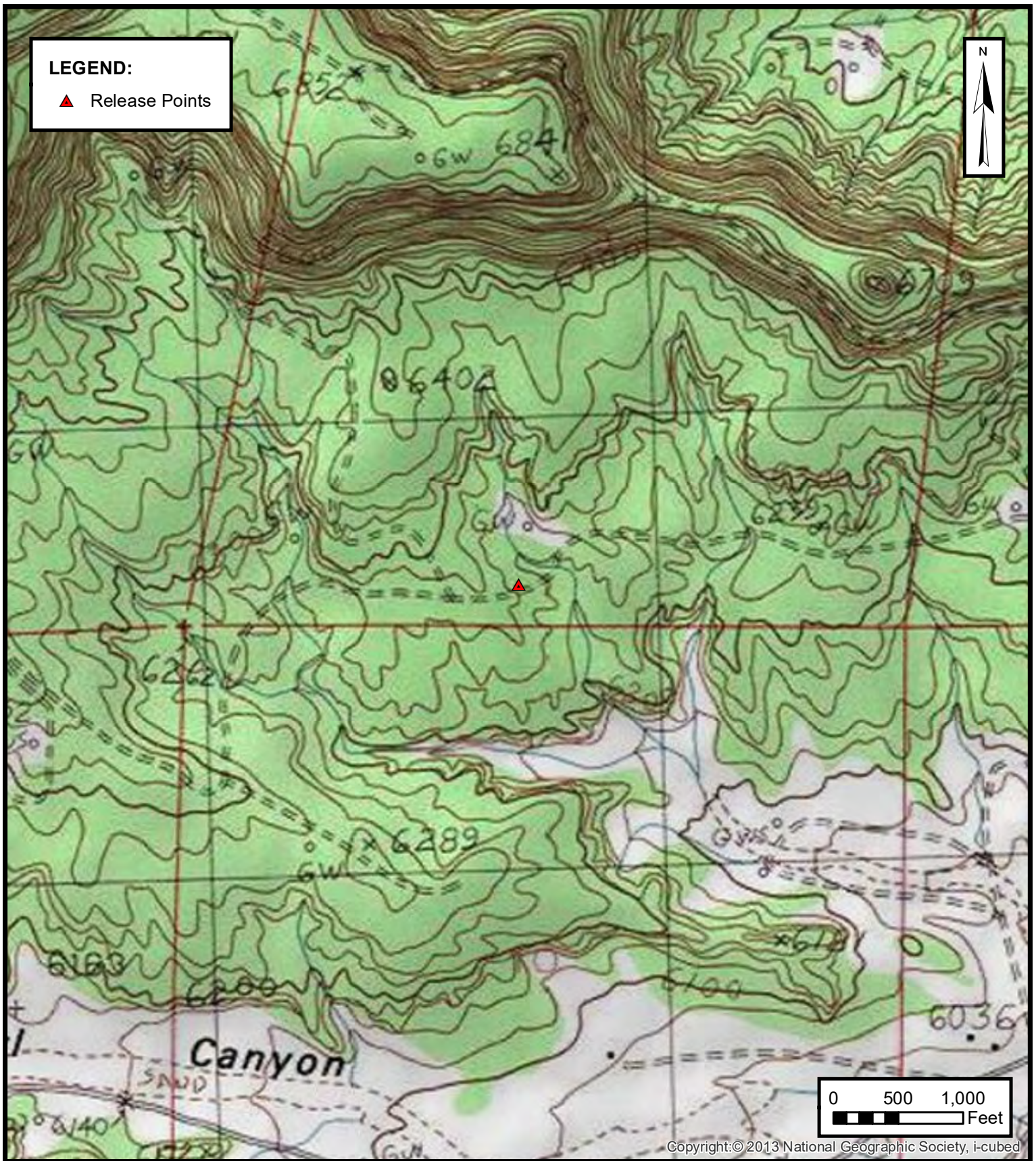
9.3 Reliance

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.



APPENDIX A

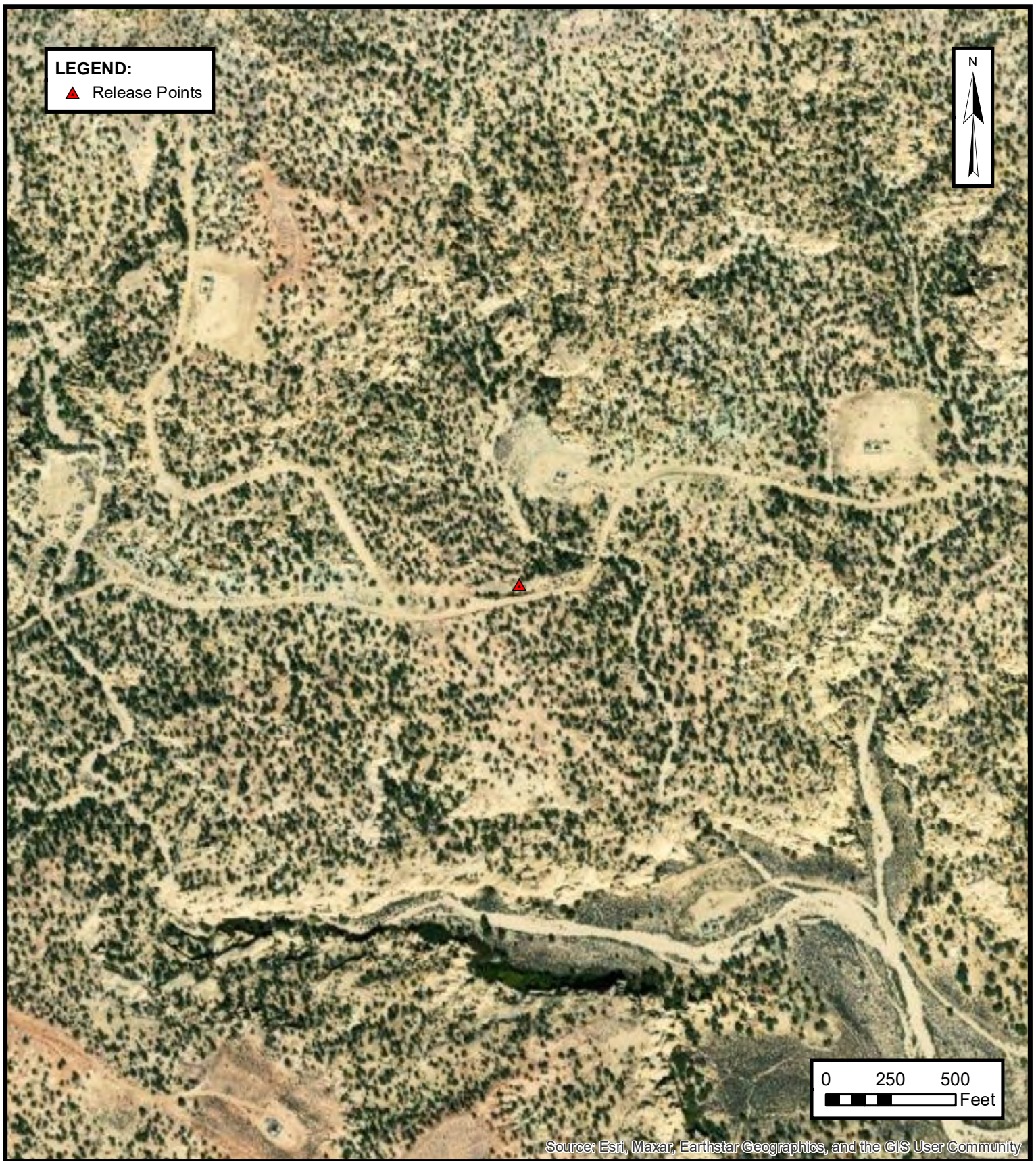
Figures

**TOPOGRAPHIC MAP**

ENTERPRISE FIELD SERVICES, LLC
LATERAL C-28 (08/04/22)
Unit Letter N, S3 T27N R9W, San Juan County, New Mexico
36.597674° N, 107.776343° W

PROJECT NUMBER: 05A1226197

FIGURE**1**



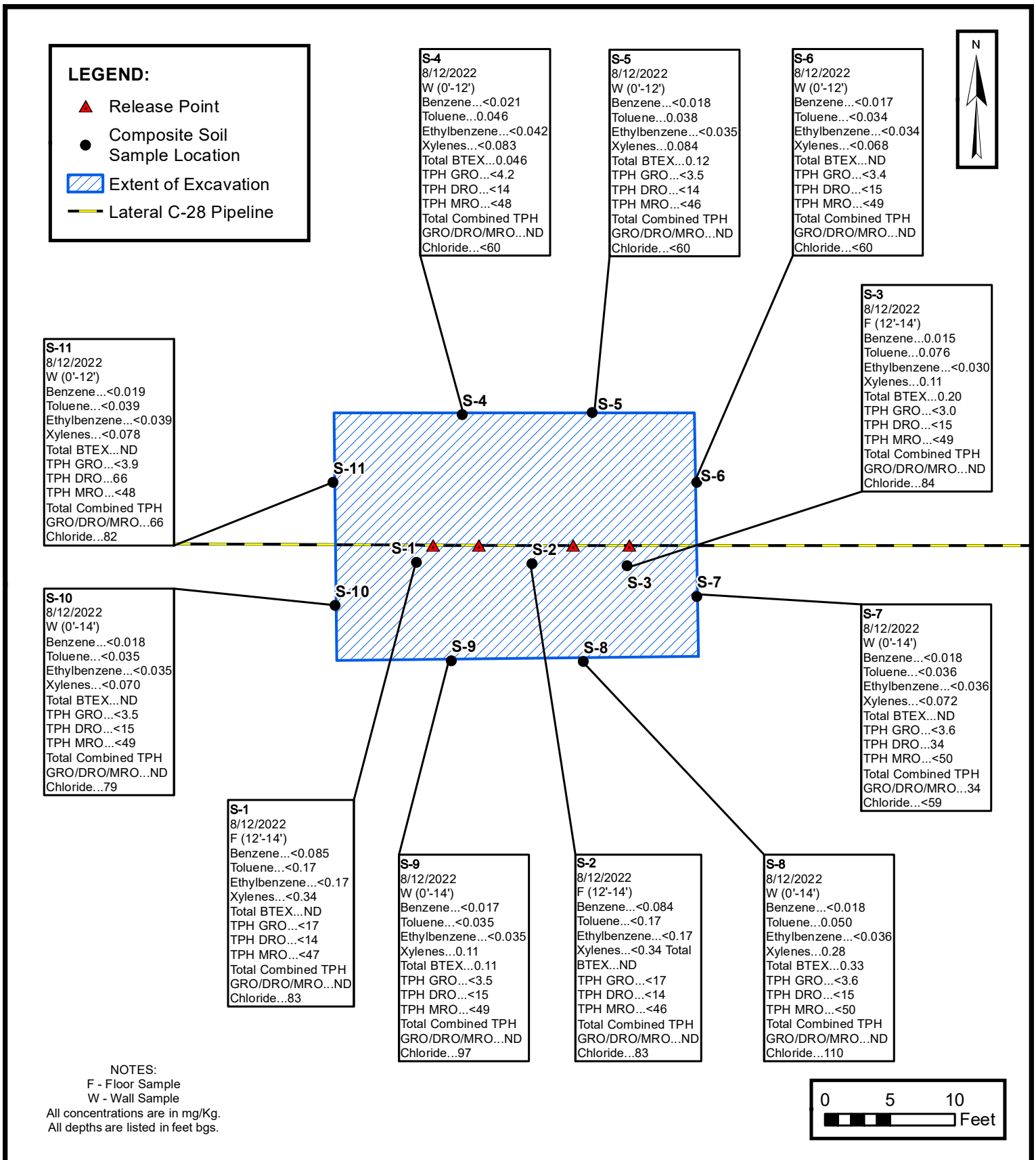
SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC
LATERAL C-28 (08/04/22)
Unit Letter N, S3 T27N R9W, San Juan County, New Mexico
36.597674° N, 107.776343° W

PROJECT NUMBER: 05A1226197

FIGURE

2



SITE MAP WITH SOIL ANALYTICAL RESULTS

ENTERPRISE FIELD SERVICES, LLC
LATERAL C-28 (08/04/22)
Unit Letter N, S3 T27N R9W, San Juan County, New Mexico
36.597674° N, 107.776343° W

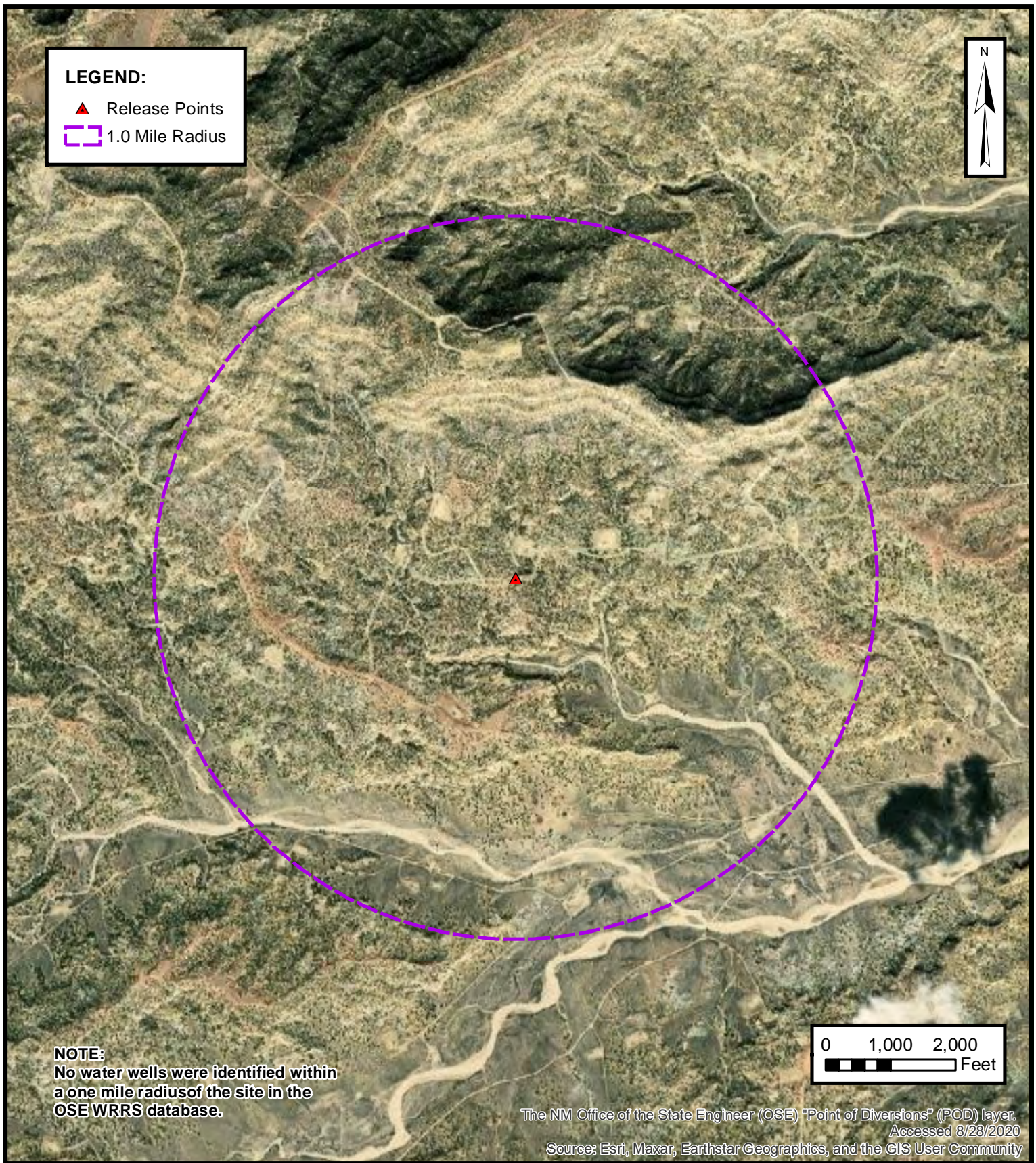
PROJECT NUMBER: 05A1226197

FIGURE
3



APPENDIX B

Siting Figures and Documentation



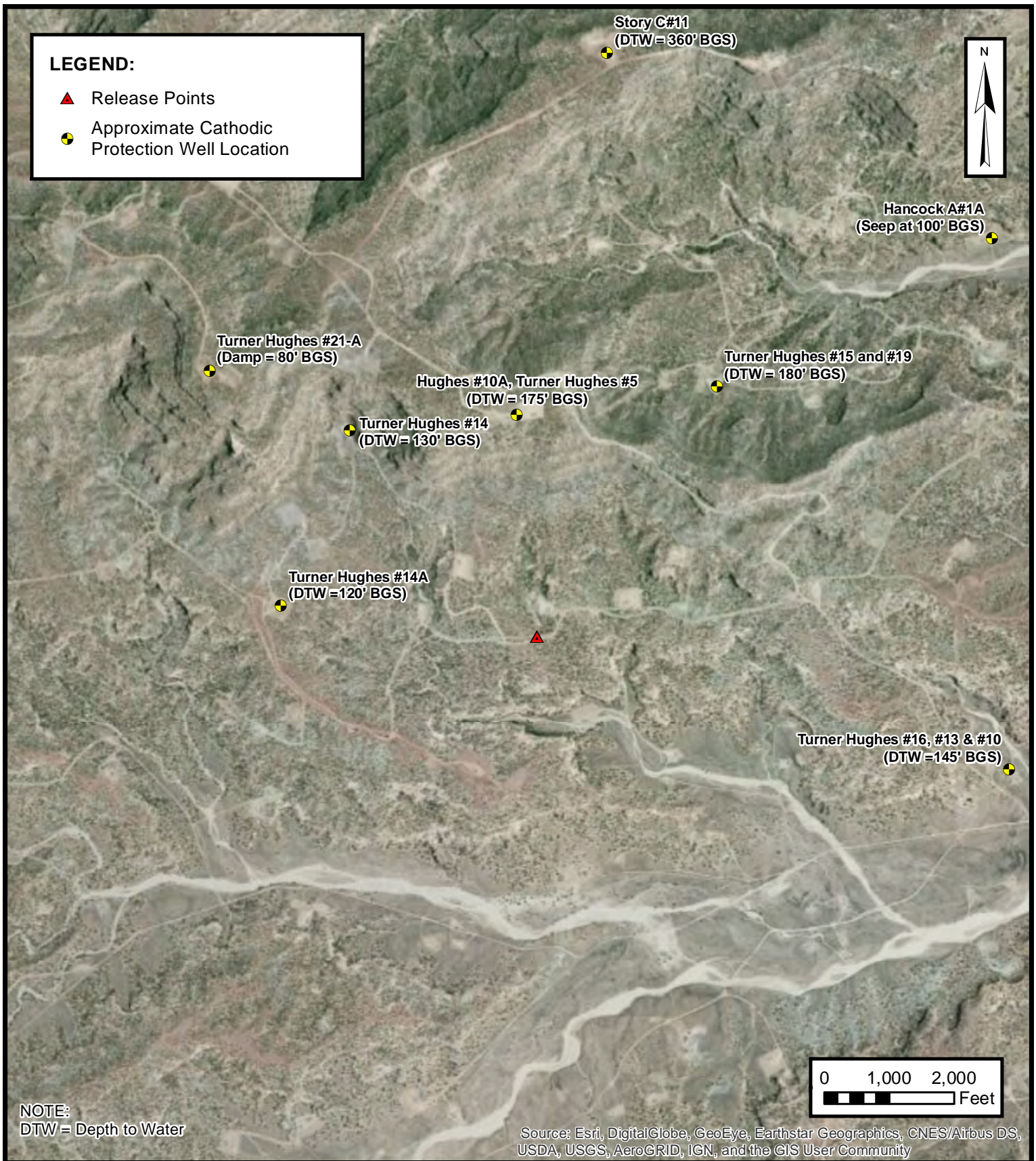
1.0 MILE RADIUS WATER WELL/ POD LOCATION MAP

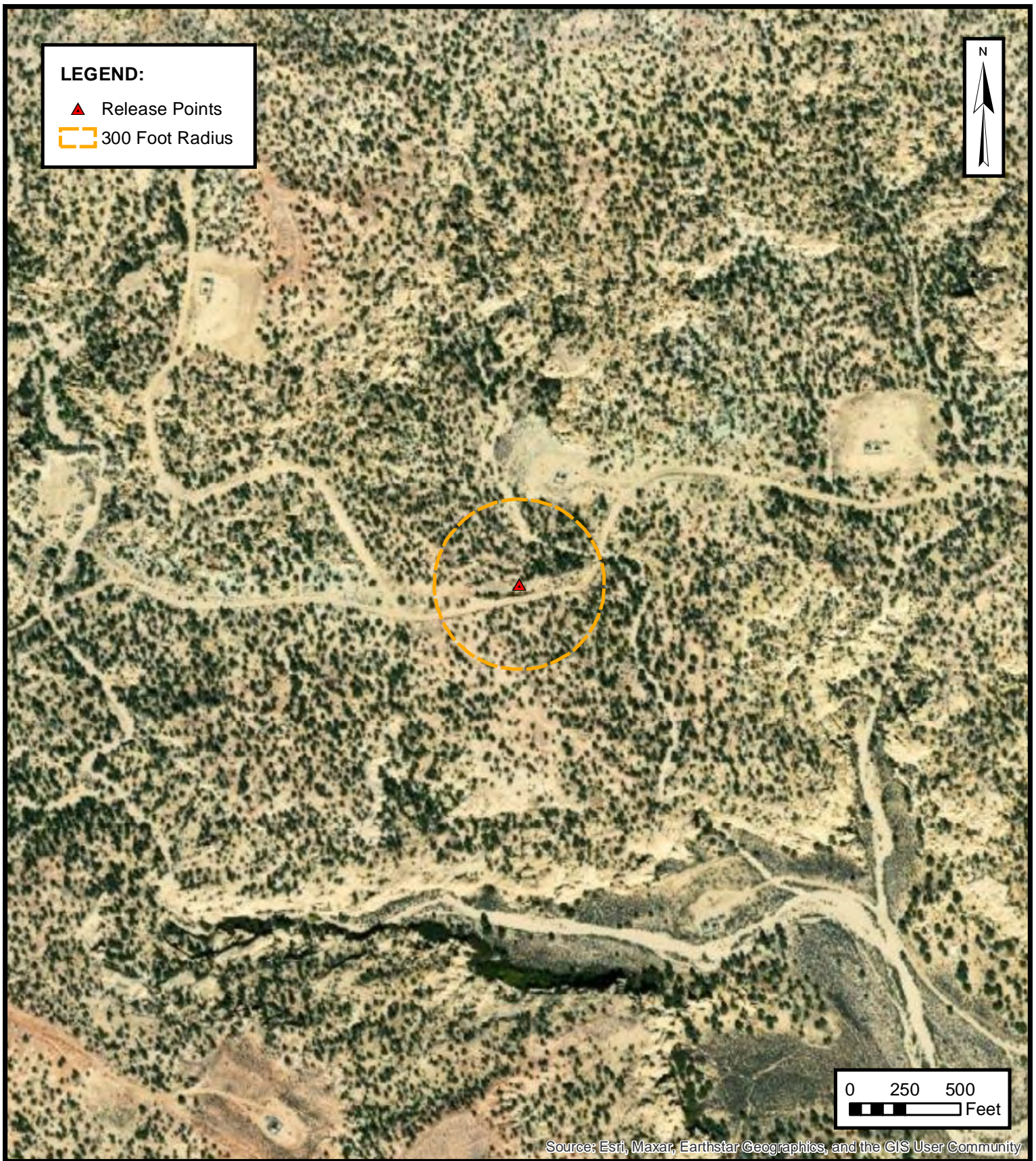
ENTERPRISE FIELD SERVICES, LLC
LATERAL C-28 (08/04/22)
Unit Letter N, S3 T27N R9W, San Juan County, New Mexico
36.597674° N, 107.776343° W

PROJECT NUMBER: 05A1226197

FIGURE

A

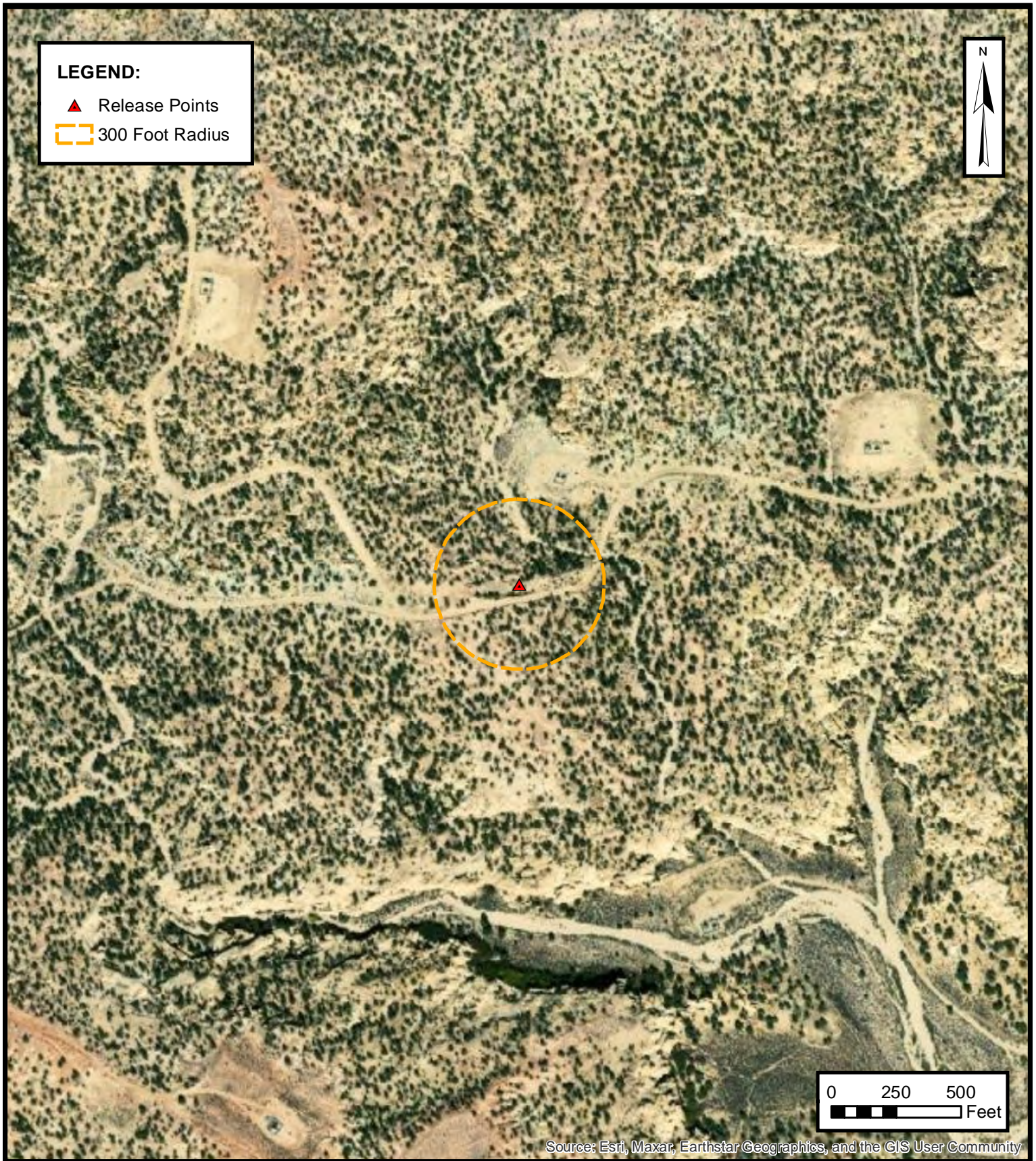


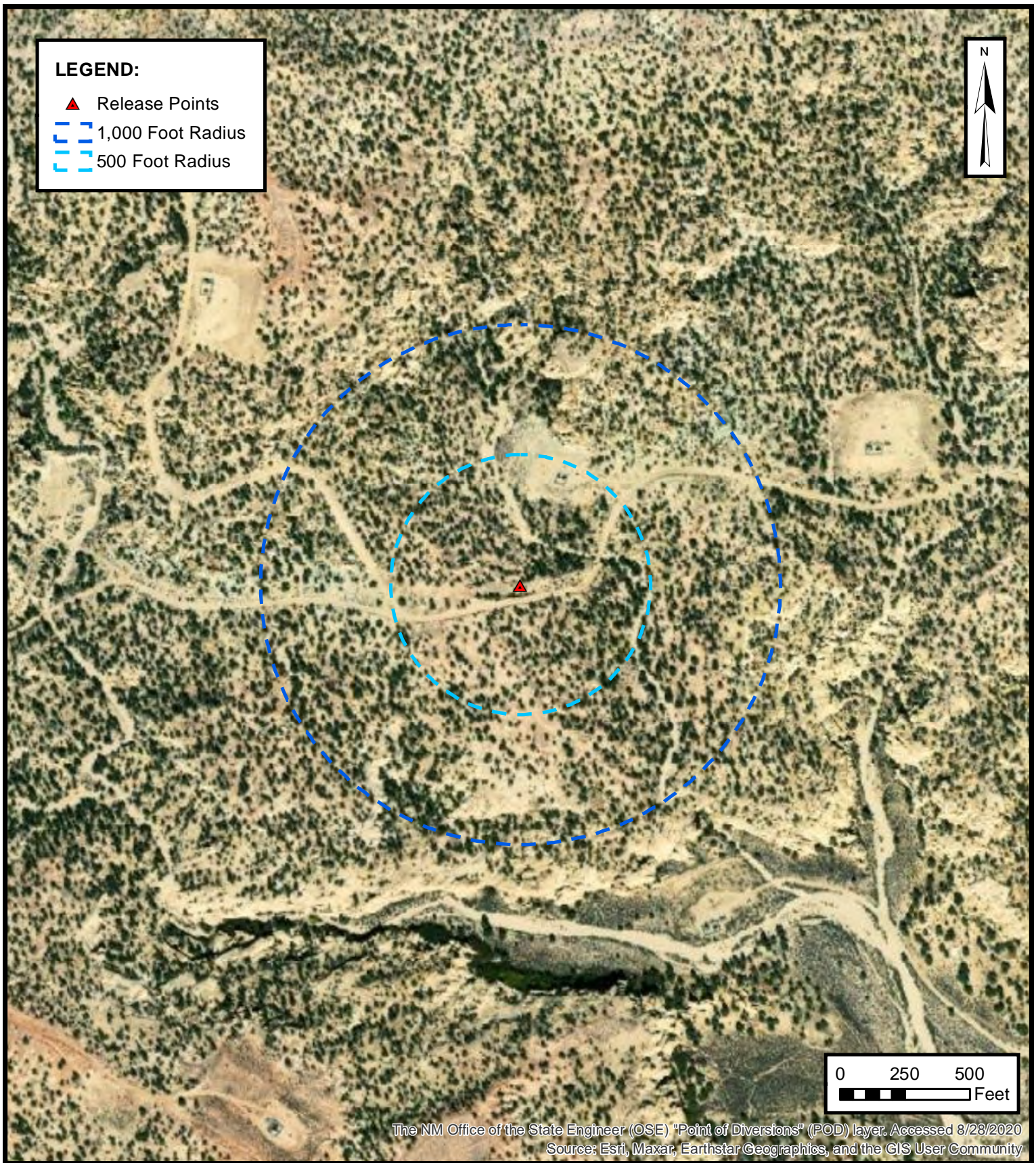


**300 FOOT RADIUS
WATERCOURSE AND DRAINAGE IDENTIFICATION**
ENTERPRISE FIELD SERVICES, LLC
LATERAL C-28 (08/04/22)
Unit Letter N, S3 T27N R9W, San Juan County, New Mexico
36.597674° N, 107.776343° W

PROJECT NUMBER: 05A1226197

**FIGURE
C**

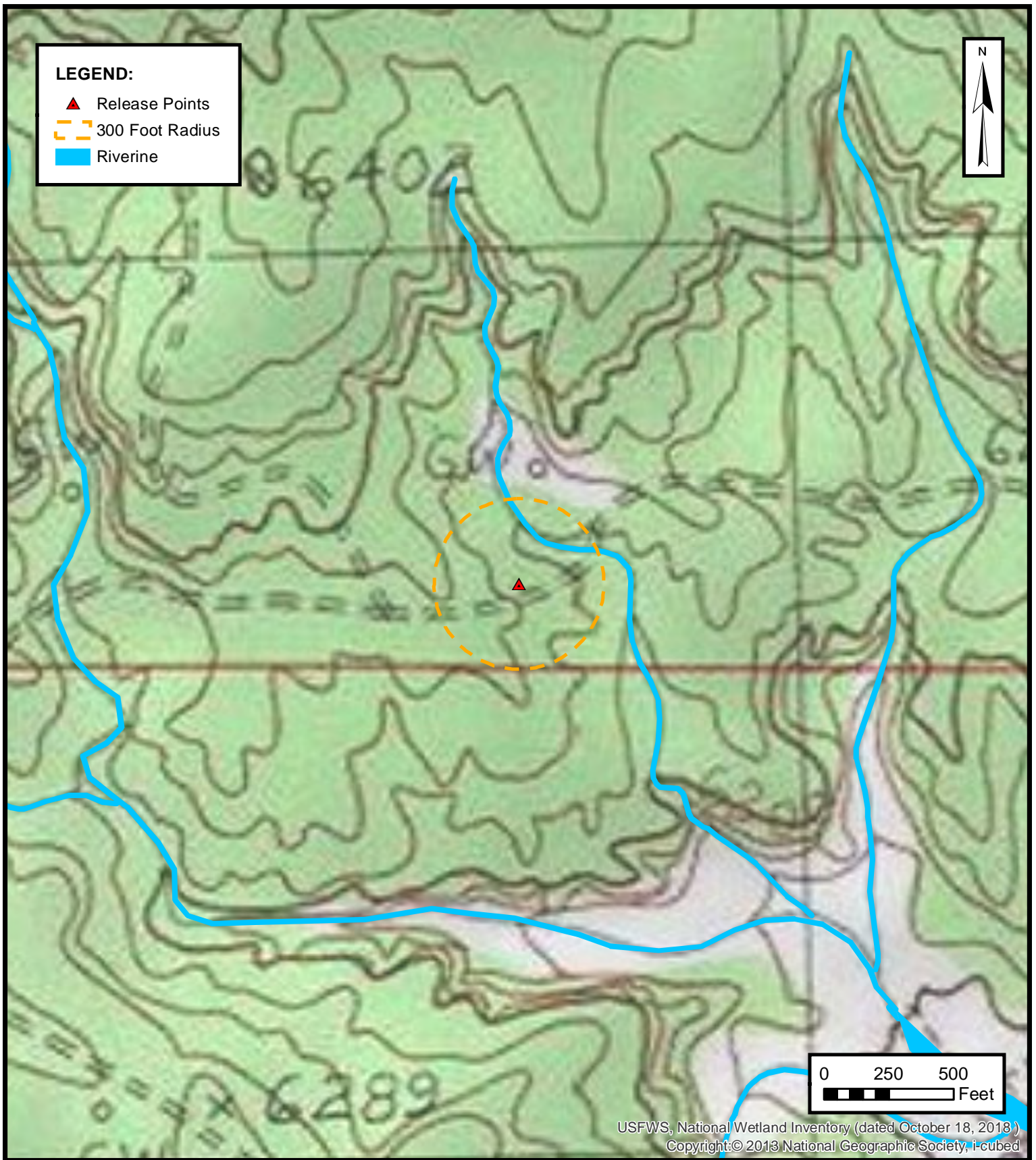


**WATER WELL AND NATURAL SPRING LOCATION**

ENTERPRISE FIELD SERVICES, LLC
LATERAL C-28 (08/04/22)
Unit Letter N, S3 T27N R9W, San Juan County, New Mexico
36.597674° N, 107.776343° W

PROJECT NUMBER: 05A1226197

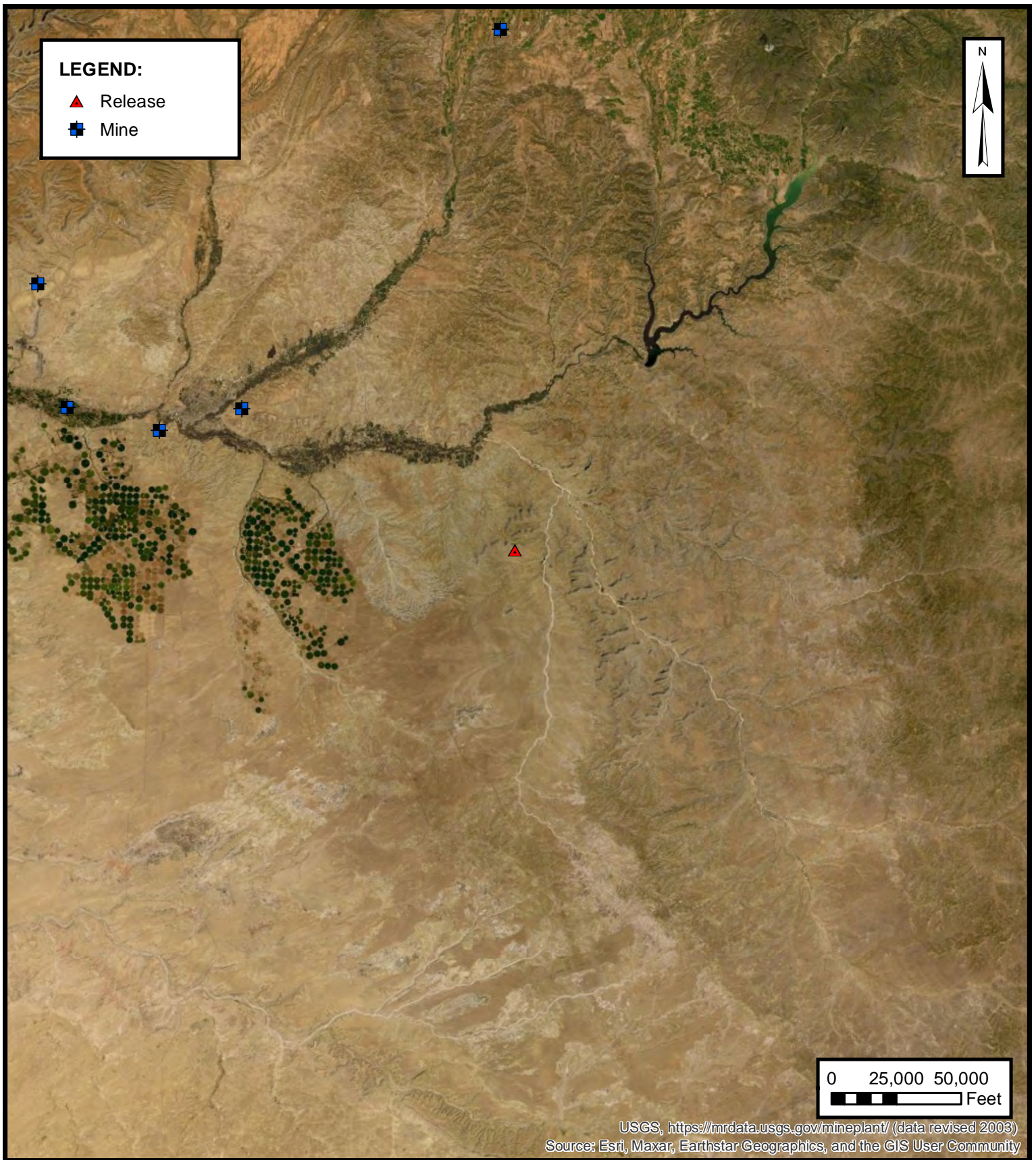
FIGURE
E

**WETLANDS**

ENTERPRISE FIELD SERVICES, LLC
LATERAL C-28 (08/04/22)
Unit Letter N, S3 T27N R9W, San Juan County, New Mexico
36.597674° N, 107.776343° W

PROJECT NUMBER: 05A1226197

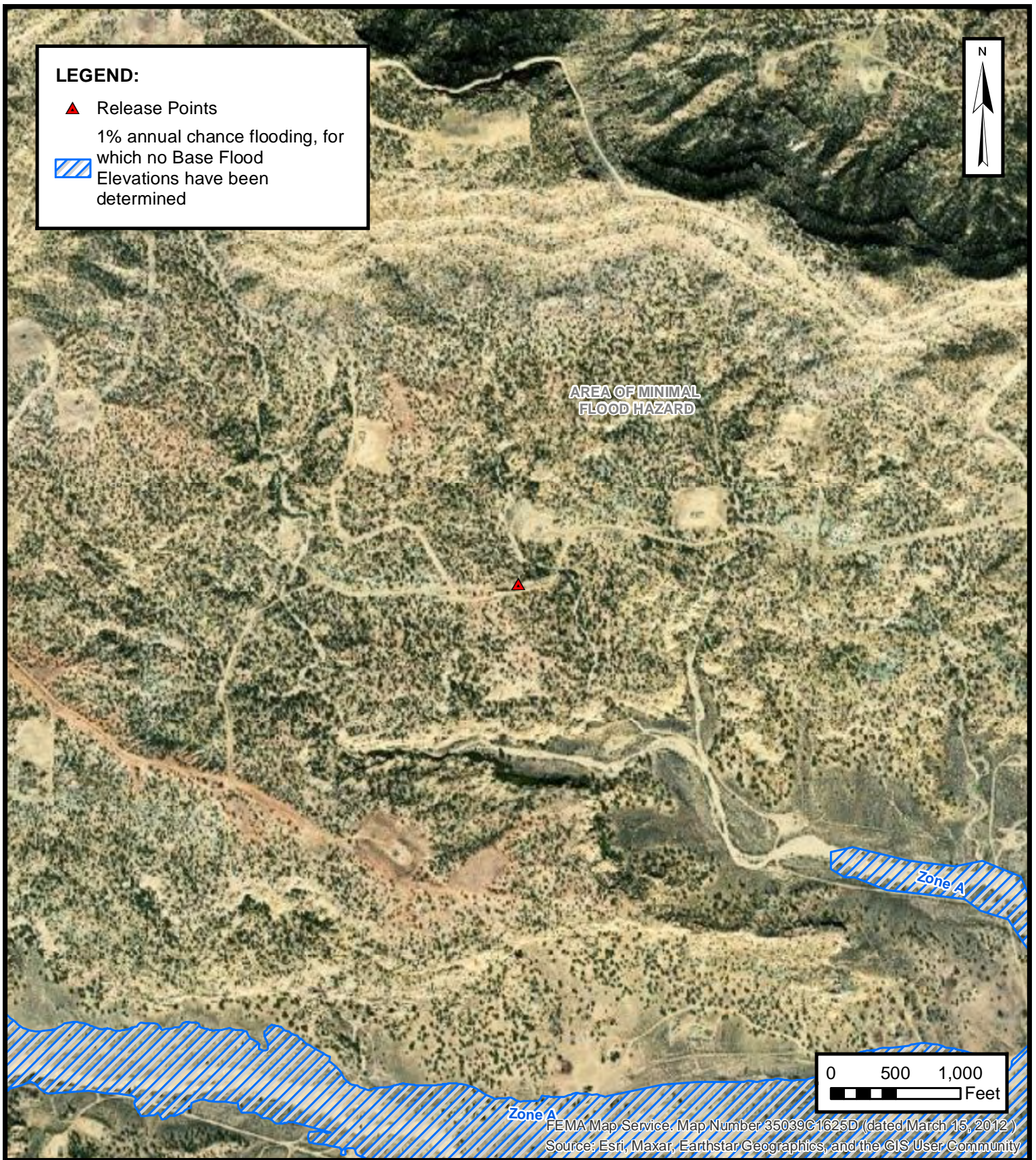
FIGURE**F**

**MINES, MILLS AND QUARRIES**

ENTERPRISE FIELD SERVICES, LLC
LATERAL C-28 (08/04/22)
Unit Letter N, S3 T27N R9W, San Juan County, New Mexico
36.597674° N, 107.776343° W

PROJECT NUMBER: 05A1226197

FIGURE**G**





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

No records found.

PLSS Search:

Section(s): 3, 2, 4, 9, 10, 11 **Township:** 27N **Range:** 09W

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

7/11/22 12:08 PM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER



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

No records found.

PLSS Search:

Section(s): 33, 34, 35

Township: 28N

Range: 09W

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

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Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER

13-30-045-06683

10-30-045-06710 16-30-045-11874

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICOOperator Meridian Oil Location: Unit 11 Sec. 11 Twp 27 Rng 6Name of Well/Wells or Pipeline Serviced TURNER HUGHES #16
#13 & #10

Elevation _____ Completion Date _____ Total Depth _____ Land Type _____

Casing Strings, Sizes, Types & Depths 99' of 8" PVC surface
CASINGIf Casing Strings are cemented, show amounts & types used yes with
25 bags cementIf Cement or Bentonite Plugs have been placed, show depths & amounts used
NODepths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc. Damp 145' WATER 180'Depths gas encountered: NOGround bed depth with type & amount of coke breeze used: 474' with
6500 lbs Loresco Type SWDepths anodes placed: 455, 445, 410, 340, 330, 300, 290, 280, 255, 245, 235, 225, 215, 205, 195Depths vent pipes placed: 474'Vent pipe perforations: bottom 320'

Remarks: _____

RECEIVED
JAN 20 1985OIL 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.

DATE: 5/9/96DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICOOperator Meridian Oil Inc. Location: Unit A Sec. 03 Twp 27 Rng 09Name of Well/Wells or Pipeline Serviced 30-045-06892Turner Hughes #15 And #19 30-045-21603Elevation 6192 Completion Date 5/9/96 Total Depth 435 Land Type FCasing Strings, Sizes, Types & Depths 5/8 Set 59' of 8" PVC CasingNO GAS, WATER, or Boulders Were Encountered During CasingIf Casing Strings are cemented, show amounts & types used Cemented
WITH 15 SACKS.If Cement or Bentonite Plugs have been placed, show depths & amounts used
NONEDepths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc. HIT FRESH WATER AT 180'Depths gas encountered: NONEGround bed depth with type & amount of coke breeze used: 435' Depth.
Used 110 SACKS OF Asbury 218R (5500#)Depths anodes placed: 405, 395, 385, 375, 365, 355, 345, 335, 290, 280, 265, 240, 225, 215, + 195'Depths vent pipes placed: SURFACE TO 435'Vent pipe perforations: BOTTOM 300'

Remarks: _____

RECEIVED
FEB 19 1997OIL 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.

CPS GROUND BED CONSTRUCTION WORKSHEET

CP# 2916-W P/L NAME(S): NUMBER(S): Turner Hughes #15 AND #19
 -O -2E22 TOTAL VOLTS 11.66 AMPS 33.0 - OHMS .353 DATE 5/9/94 NAME JOHN L. MOSS
 REMARKS (ADD FOR CONSTRUCTION LOG)

Driller Reported Water at 180'

Installed 435' of 1" PE VENT Pipe, WITH THE BOTTOM
 300' Perforated. COKE Breeze To 115'

DEPTH	LOG	ANODE	DEPTH	LOG	ANODE	DEPTH	LOG	ANODE	DEPTH	LOG	ANODE	
	ANODE	"		ANODE	"		ANODE	"		ANODE	"	
100			295	2.7		490			685			
105			300	3.4		495			690			
110			305	2.1		500			695			
115			310	2.2		505			700			
120			315	2.3		510						
125			320	2.0		515						
130	.8		325	2.4		520						
135	.7		330	2.1		525			1	405'	4.5	7.5
140	.6		335	3.5	8	530			2	395'	4.9	7.7
145	.5		340	3.7		535			3	285'	4.5	7.0
150	.7		345	3.7	7	540			4	275'	4.7	7.0
155	.8		350	4.1		545			5	275'	4.4	6.9
160	1.1		355	4.2	6	550			6	355'	4.5	7.0
165	1.3		360	4.2		555			7	345'	3.9	6.1
170	1.4		365	4.1	5	560			8	335'	3.7	5.6
175	1.4		370	4.0		565			9	290'	4.3	6.4
180	1.5		375	4.4	4	570			10	280'	4.2	6.6
185	.8		380	4.5		575			11	265'	3.8	6.0
190	2.8		385	4.2	3	580			12	240'	4.6	6.6
195	3.8	15	390	4.6		585			13	225'	4.5	7.0
200	2.6		395	4.9	2	590			14	215'	4.3	6.6
205	2.4		400	4.3		595			15	195'	3.9	5.8
210	2.6		405	4.3	1	600			16			
215	4.0	-14	410	4.1		605			17			
220	3.3		415	4.0		610			18			
225	4.0	-13	420	4.0		615			19			
230	4.4		425	4.1		620			20			
235	2.9		430	4.0	435	625			21			
240	4.7	-12	435			630			22			
245	2.4		440			635			23			
250	2.5		445			640			24			
255	4.5		450			645			25			
260	2.0		455			650			26			
265	2.0	-11	460			655			27			
270	2.0		465			660			28			
275	2.0		470			665			29			
280	2.0	-10	475			670			30			
285	2.0		480			675						
290	2.0	-9	485			680						

DISTRIBUTION - ORIGINAL - SEPARATE CDB FILE

#10A → 30-045-26533

TH #5 → 30-045-13284

3522

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 E Sec. 3 Twp 27 Rng 9Name of Well/Wells or Pipeline Serviced HUGHES #10A, TURNER HUGHES #5

cps 2024w

Elevation 6848' Completion Date 10/25/88 Total Depth 520' Land Type* N/ACasing, Sizes, Types & Depths N/AIf 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. 175'Depths gas encountered: N/AType & amount of coke breeze used: N/ADepths anodes placed: 485', 475', 465', 455', 445', 400', 390', 305', 215', 205'Depths vent pipes placed: 515'Vent pipe perforations: 360'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.

MERIDIAN OIL INC.

WELL CASING

CATHODIC PROTECTION CONSTRUCTION REPORT

DAILY LOG

Drilling Log (Attach Hereto) ☐

Completion Date 6/25/88

CPS #	Well Name, Line or Plant:	Work Order #	State:	Ins. Union Check
2024 W	Hughes #10A Turner Hughes #5	54312A 49474A	.75V 600' W .76V 600' W	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Bad
Location:	Anode Size:	Anode Type:	Size But:	
E-3-27-9	2X60"	DUPON	6 3/4"	
Depth Drilled	Depth Logged	Drilling Rig Time	Total Lbs. Coke Used	Loss Circulation Mat'l Used
520'	515'			
Anode Depth				
# 1 485	# 2 475	# 3 465	# 4 455	# 5 445
# 6 400	# 7 390	# 8 305	# 9 215	# 10 2.05
Anode Output (Amps)				
# 1 3.8	# 2 3.6	# 3 4.4	# 4 4.5	# 5 4.8
# 6 3.7	# 7 4.1	# 8 3.8	# 9 3.4	# 10 3.6
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 11.8	Amps 21.4	Ohms .55		

Remarks: HIT DAMP SPOT AT 125', Air COMP. WOULD PRESSURE UP, BUT WOULD NOT
 BLOW ANYTHING TO THE TOP OF THE HOLE NEXT A.M. INSTALLED 515' of 1"
 P.V.C. VENT PIPE, PERFORATED 360'.

LAYED 1/2" FUEL LINE, IN WIRE DITCH.

G.B. 4170.00

Rectifier Size: T.E. 6. V A 7695.00
 Addn'l Depth 15' .750 112.50
 Depth Credit: 0
 Extra Cable: 380 .25 95.00
 Ditch & 1 Cable: 405' .75 303.75

Ditch & 2 Cable:
 25' Meter Pole: 0
 20' Meter Pole: 0
 10' Stub Pole: 0
 Junction Box: 1

249.00

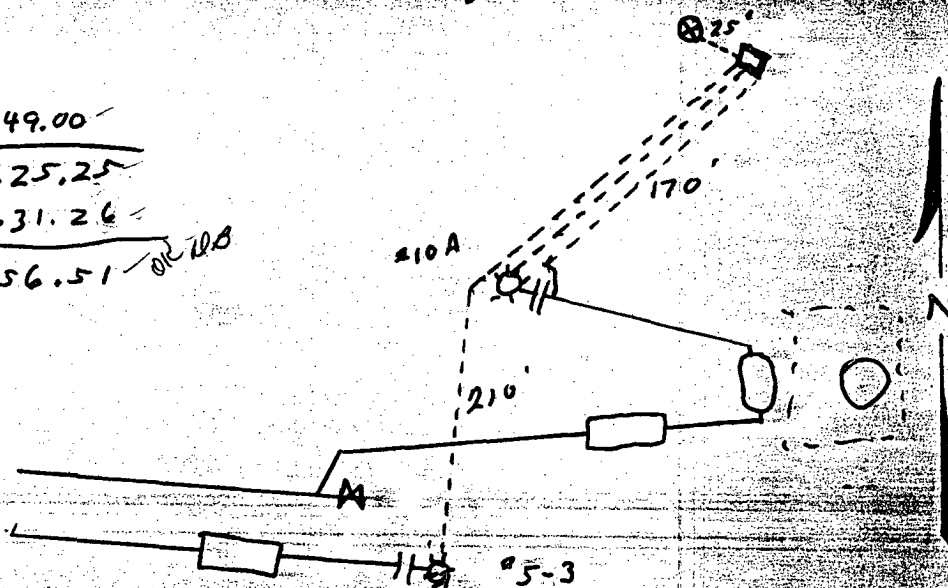
12625.25

TAX 631.26

TOTAL \$13256.51 OR 108

All Construction Completed

(Signature)



D. CRASS DRILLING CO.

Drill No. 3

2024

DRILLER'S WELL LOG

S. P. No. Hughes #10A Date 10-25-88
Client Meridian Oil Co. Prospect _____
County SAN JUAN State New Mex.

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

FROM	TO	FORMATION — COLOR — HARDNESS
0	165	SANDSTONE
165	180	SAND ✓
180	225	SHALE
225	245	SANDSTONE
245	250	SHALE
250	260	SANDY SHALE
260	305	SANDSTONE
305	325	SHALE
325	375	SANDSTONE
375	420	SHALE
420	440	SANDSTONE
440	495	SHALE
495	520	SANDSTONE
Mud	Brom	Lime

Rock Bit Number _____ Make _____

Remarks: Water @ 175'Driller RONNIE BROWN

#14 30-045-06864

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICOOperator Meridian Oil Inc. Location: Unit 4 Sec. 4 Twp 27 Rng 9Name of Well/Wells or Pipeline Serviced Turner Hughes #14Elevation Completion Date 6-22-95 Total Depth 378' Land Type SCasing Strings, Sizes, Types & Depths 4-25-95 - Set 100' of 8"PVC casing. No gas, water or boulders encountered during casing.If Casing Strings are cemented, show amounts & types used Cemented
with 18 sacksIf Cement or Bentonite Plugs have been placed, show depths & amounts used
NoneDepths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc. 130' - FreshDepths gas encountered: NoneGround bed depth with type & amount of coke breeze used: 378'
5000lbs AsburyDepths anodes placed: 1-365, 358, 351, 344, 337, 330, 280, 273, 245, 238, 237, 180, 173, 166, 158Depths vent pipes placed: Surface to 378'Vent pipe perforations: 100' - 378'Remarks: RECEIVED
JAN 11 1996OIL 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.

#14A 30-045-26382

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICOOperator Meridian Oil Inc. Location: Unit I Sec. 4 Twp 27 Rng 9Name of Well/Wells or Pipeline Serviced Turner Hughes #14AElevation — Completion Date 6/27/95 Total Depth 473' Land Type —Casing Strings, Sizes, Types & Depths 4-24-95- 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 18 sacksIf Cement or Bentonite Plugs have been placed, show depths & amounts used N/ADepths & thickness of water zones with description of water: Fresh, Clear, Salty, Sulphur, Etc. 120' - FreshDepths gas encountered: N/AGround bed depth with type & amount of coke breeze used: 473'
133 sacks Asbery 218RDepths anodes placed: 468, 450, 443, 436, 422, 415, 408, 401, 394, 387, 373, 365, 350, 140Depths vent pipes placed: 473'Vent pipe perforations: Bottom 325'Remarks: —RECEIVED
JAN 11 1996OIL 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.

2644W

30-045-26481

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICOOperator MERIDIAN Oil Location: Unit C Sec. 4 Twp 27 Rng 9Name of Well/Wells or Pipeline Serviced TURNER HUGHES #21-A

Elevation _____ Completion Date _____ Total Depth _____ Land Type _____

Casing Strings, Sizes, Types & Depths 8" PVC SURFACE CASING
58' DEEPIf Casing Strings are cemented, show amounts & types used YES
with 14 BAGS NEAT CEMENTIf Cement or Bentonite Plugs have been placed, show depths & amounts used
NODepths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc. Damp 80', 240', 310'Depths gas encountered: NOGround bed depth with type & amount of coke breeze used: 452' DEEP
with 6000 lbs Asbury FLO COKEDepths anodes placed: 432, 425, 418, 411, 404, 396, 386, 370, 270, 231, 221, 200, 190, 180
170Depths vent pipes placed: 452'Vent pipe perforations: bottom 350'

Remarks: _____

RECEIVED
JAN 20 1995OIL 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.

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICOOperator Burlington Resources Location: Unit P Sec. 35 Twp 28 Rng 9Name of Well/Wells or Pipeline Served Hanlock "A" #1A30-045-27492Elevation _____ Completion Date 8-12-98 Total Depth 300' Land Type ICasing Strings, Sizes, Types & Depths 8" PVC X 20'If Casing Strings are cemented, show amounts & types used 4 Bags Cement

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

NoneDepths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc. 100', seepDepths gas encountered: NoneGround bed depth with type & amount of coke breeze used: 300' = 1500 lbsLoroso SWDepths anodes placed: 290, 280, 273, 260, 259, 245, 238, 231Depths vent pipes placed: 300'Vent pipe perforations: Bottom 200'

Remarks: _____

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

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

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

TIERRA DYNAMIC COMPANY			DEEP WELL GROUNDED LOG DATA SHEET			Lease # 04209		
COMPANY NAME: <u>Burlington Resources</u>								
WELL NAME: <u>Hancedck "A" 1A</u>								
LEGAL LOCATION: <u>Sec. 35-28-9</u>						COUNTY: <u>San Juan</u>		
DATE: <u>8-12-98</u>						TYPE OF COKE: <u>Larocco SW</u>		
DEPTH: <u>300'</u>						AMT. OF COKE BACKFILL: <u>1500 lbs</u>		
BIT SIZE: <u>10 3/4</u>						VENT PIPE: <u>300'</u>		
DRILLER NAME: <u>Jack Ledbetter</u>						PERF. PIPE: <u>Bottom 200'</u>		
SIZE AND TYPE OF CASING: <u>8" PVC X 20'</u>						ANODE AMT. & TYPE: <u>Anotec-Puiron</u>		
BOULDER DRILLING:								

DEPTH			DEPTH			DEPTH			COMPLETION INFORMATION:			
FT.	LOG	ANODE	FT.	LOG	ANODE	FT.	LOG	ANODE	WATER DEPTHS: <u>100 seep</u>			
									ISOLATION PLUGS:			
100			265	1.9	4	430						
105			270	2.0		435					OUTPUT	OUTPUT
110			275	2.0	3	440			ANODE#	DEPTH	NO COK	COKED
115			280	2.0	2	445			1	290	1.8	3.5
120			285	1.9		450			2	290	1.9	4.1
125			290	1.8	1	455			3	273	2.0	4.1
130			295	1.7		460			4	266	2.0	4.1
135			300	T.D.		465			5	259	1.9	4.0
140			305			470			6	245	2.8	5.0
145			310			475			7	238	3.1	5.4
150	3.3		315			480			8	231	2.7	4.2
155	3.0		320			485			9			
160	3.1		325			490			10			
165	2.5		330			495			11			
170	2.3		335			500			12			
175	1.5		340			505			13			
180	1.4		345			510			14			
185	1.5		350			515			15			
190	3.2		355			520			16			
195	3.1		360			525			17			
200	2.7		365			530			18			
205	2.8		370			535			19			
210	2.6		375			540			20			
215	2.5		380			545			21			
220	2.6		385			550			22			
225	2.1		390			555			23			
230	2.6	8	395			560			24			
235	3.0		400			565			25			
240	3.3	7	405			570			26			
245	2.8	6	410			575			27			
250	1.5		415			580			28			
255	1.7		420			585			29			
260	1.8	5	425			590			30			
						595						

LOGGING VOLTS: <u>12.56</u>	VOLTAGE SOURCE: <u>Auto</u>
TOTAL AMPS: <u>12.7</u>	TOTAL G/B RESISTANCE: <u>.9</u>
REMARKS:	

DATE: 5/8/96DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICOOperator Meridian Oil Inc. Location: Unit G Sec. 34 Twp 28 Rng 09

Name of Well/Wells or Pipeline Serviced _____

Storey C #11Elevation 6824 Completion Date 5/8/96 Total Depth 491 Land Type FCasing Strings, Sizes, Types & Depths 5/7 Set 59' of 8" PVC Casing.No Gas, Water, or Boulders Were Encountered During Casing.If Casing Strings are cemented, show amounts & types used CementedWITH 15 SACKS

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

NONEDepths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc. HIT FRESH WATER AT 360'Depths gas encountered: NONEGround bed depth with type & amount of coke breeze used: 491' Depth.Used 130 SACKS OF Asbury 218R (6500#)Depths anodes placed: 475, 465, 455, 445, 435, 425, 415, 405, 395, 385, 375, 365, 355, 345, 335, 325, 315, 305, 295, 285, 275, 265, 255, 245, 235, 225, 215, 205, 195, 185, 175, 165Depths vent pipes placed: SURFACE TO 491'Vent pipe perforations: BOTTOM 360'

Remarks: _____

RECEIVED
FEB 19 1997OIL CON. DIV.
DIST. 3

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

CPS GROUND BED CONSTRUCTION WORKSHEET

2915-W D/L NAME (S), NUMBER (S) Storey C #11
 2I15 TOTAL VOLTS 11.77 AMPS 19.3 OHMS .610 DATE 5/8/96 NAME JOHN L. MOSS
 REMARKS (NOTES FOR CONSTRUCTION LOG)

Driller Reported DAMP AREAS AT
 70', 200', 260', AND WATER AT 360'. INSTALLED 491' OF 1" PE
 VENT PIPE, WITH THE BOTTOM 360' PERFORATED. CORE
 Breeze To 115'.

DEPTH	LOG	ANODE	DEPTH	LOG	ANODE	DEPTH	LOG	ANODE	DEPTH	LOG	ANODE
	ANODE	"		ANODE	"		ANODE	"		ANODE	"
100			295			490	T.D. 491'		685		
105			300			495			690		
110			305			500			695		
115			310			505			700		
120			315		-13	510					
125			320			515					
130	3		325		-12	520					
135	3		330			525			1	475'	1.8
140	.4		335			530			2	465'	1.7
145	.4		340			535			3	455'	1.7
150	.4		345		-11	540			4	445'	3.0
155	1.0		350			545			5	435'	1.4
160	1.3		355		-10	550			6	425'	1.3
165	1.3	-15	360			555			7	415'	1.2
170	.9		365			560			8	405'	1.6
175	.4		370			565			9	395'	1.4
180	.3		375			570			10	385'	1.3
185	.3		380			575			11	375'	1.2
190	.2		385			580			12	365'	1.3
195	.1		390			585			13	355'	1.5
200	.3		395		-9	590			14	345'	3.0
205	.3		400			595			15	335'	1.7
210	.4		405		-8	600			16		
215	.2		410			605			17		
220	1.0		415		-7	610			18		
225	.9		420			615			19		
230	2.8	-14	425		-6	620			20		
235	2.8		430			625			21		
240	1.2		435		-5	630			22		
245	1.2		440			635			23		
250	1.0		445		4	640			24		
255	1.0		450			645			25		
260	1.1		455		3	650			26		
265	1.1		460			655			27		
270	1.1		465		2	660			28		
275	.9		470			665			29		
280	.9		475		1	670			30		
285	.9		480			675					
290	1.0		485			680					

DISTRIBUTION - ORIGINAL - SEPARATE CPS FILE



APPENDIX C

Executed C-138 Solid Waste Acceptance Form

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

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

Form C-138
Revised 08/01/11

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

97057-1125

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401
PayKey: EM20767
PM: ME Eddleman
AFE: A60159

2. **Originating Site:**
Lateral C-28

3. **Location of Material (Street Address, City, State or ULSTR):**
UL N Section 3 T27N R9W; 36.597674, -107.776343
June - Sept.

4. **Source and Description of Waste:**
Source: Remediation activities associated with a natural gas pipeline leak.
Description: Hydrocarbon/Condensate impacted soil associated natural gas pipeline release.
Estimated Volume 50 yd³/bbls Known Volume (to be entered by the operator at the end of the haul) 392/65 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* 7-7-2022, representative for Enterprise Products Operating authorizes Envirotech, Inc. 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: TBD**

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Envirotech Inc. Soil Remediation Facility * Permit #: NM 01-0011

Address of Facility: Hilltop, NM

Method of Treatment and/or Disposal:

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

Waste Acceptance Status:

☒ **APPROVED**

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

PRINT NAME: Greg Crabtree
SIGNATURE: *Greg Crabtree*
Surface Waste Management Facility Authorized Agent

TITLE: Enviro Manager DATE: 7/7/22
TELEPHONE NO.: 505-632-0615



APPENDIX D

Photographic Documentation

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Lateral C-28 (08/04/22)
Ensolum Project No. 05A1226197

**Photograph 1**

Photograph Description: View of the in-process excavation activities.

**Photograph 2**

Photograph Description: View of the in-process excavation activities.

**Photograph 3**

Photograph Description: View of the final excavation.



SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Lateral C-28 (08/04/22)
Ensolum Project No. 05A1226197



Photograph 4

Photograph Description: View of the site after initial restoration.





APPENDIX E

Regulatory Correspondence

From: [Kyle Summers](#)
To: [Chad D"Aponti](#)
Cc: [Ranee Deechilly](#)
Subject: FW: [EXTERNAL] Lateral C-28 - UL G Section 13 T27N R13W; 36.57710, -107.16753; Incident # nAPP2214553570
Date: Friday, August 12, 2022 8:07:38 AM
Attachments: [image003.png](#)
[image004.png](#)
[image005.png](#)



Kyle Summers

Principal
903-821-5603

Ensolum, LLC

[in](#) [f](#) [t](#)

From: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Sent: Friday, August 12, 2022 8:06 AM
To: Long, Thomas <tjlong@eprod.com>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; rjoyner@blm.gov
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: RE: [EXTERNAL] Lateral C-28 - UL G Section 13 T27N R13W; 36.57710, -107.16753; Incident # nAPP2214553570

[**EXTERNAL EMAIL**]

Tom,

Thank you for the notice. 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@state.nm.us

Office Hrs.:
7:00am - 12:00pm & 1:00 - 3:30 pm Mon.-Thur.
7:00am - 12:00pm & 1:00 - 4:00 pm Fri.

From: Long, Thomas <tjlong@eprod.com>
Sent: Wednesday, August 10, 2022 1:03 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; rjoyner@blm.gov
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: [EXTERNAL] Lateral C-28 - UL G Section 13 T27N R13W; 36.57710, -107.16753; Incident # nAPP2214553570

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

Nelson/Ryan,

This email is a variance request and notification. Enterprise is requesting a variance for required 48 hour notification per 19.15.29.12D (1a) NMAC. Enterprise would like to collect closure samples on Friday August 12, 2022 at 8:30 a.m. at the Lateral C-28 excavation. Please acknowledge acceptance of this variance request. If you have any questions, please call or email.

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



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



APPENDIX F

Table 1 – Soil Analytical Summary



TABLE 1
Lateral C-28 (08/04/22)
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type	Sample Depth	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX ¹	TPH GRO	TPH DRO	TPH MRO	Total Combined TPH (GRO/DRO/MRO) ¹	Chloride
		C- Composite G - Grab	(feet)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria (Tier I)				10	NE	NE	NE	50	NE	NE	NE	100	600
Excavation Composite Soil Samples													
S-1	8.12.22	C	12 to 14	<0.085	<0.17	<0.17	<0.34	ND	<17	<14	<47	ND	83
S-2	8.12.22	C	12 to 14	<0.084	<0.17	<0.17	<0.34	ND	<17	<14	<46	ND	83
S-3	8.12.22	C	12 to 14	0.015	0.076	<0.030	0.11	0.20	<3.0	<15	<49	ND	84
S-4	8.12.22	C	0 to 12	<0.021	0.046	<0.042	<0.083	0.046	<4.2	<14	<48	ND	<60
S-5	8.12.22	C	0 to 12	<0.018	0.038	<0.035	0.084	0.12	<3.5	<14	<46	ND	<60
S-6	8.12.22	C	0 to 12	<0.017	<0.034	<0.034	<0.068	ND	<3.4	<15	<49	ND	<60
S-7	8.12.22	C	0 to 14	<0.018	<0.036	<0.036	<0.072	ND	<3.6	34	<50	34	<59
S-8	8.12.22	C	0 to 14	<0.018	0.050	<0.036	0.28	0.33	<3.6	<15	<50	ND	110
S-9	8.12.22	C	0 to 14	<0.017	<0.035	<0.035	0.11	0.11	<3.5	<15	<49	ND	97
S-10	8.12.22	C	0 to 14	<0.018	<0.035	<0.035	<0.070	ND	<3.5	<15	<49	ND	79
S-11	8.12.22	C	0 to 12	<0.019	<0.039	<0.039	<0.078	ND	<3.9	66	<48	66	82

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

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

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

NA = Not Analyzed

NE = Not established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPH = Total Petroleum Hydrocarbons

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics



APPENDIX G

Laboratory Data Sheets & Chain of Custody Documentation



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

August 18, 2022

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: Lateral C 28 West

OrderNo.: 2208872

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 11 sample(s) on 8/13/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2208872

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-1

Project: Lateral C 28 West

Collection Date: 8/12/2022 8:30:00 AM

Lab ID: 2208872-001

Matrix: SOIL

Received Date: 8/13/2022 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	83	60		mg/Kg	20	8/15/2022 11:43:01 AM	69495
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/15/2022 12:35:11 PM	69488
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/15/2022 12:35:11 PM	69488
Surr: DNOP	97.2	21-129		%Rec	1	8/15/2022 12:35:11 PM	69488
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	17		mg/Kg	5	8/15/2022 9:38:23 AM	G90279
Surr: BFB	84.9	37.7-212		%Rec	5	8/15/2022 9:38:23 AM	G90279
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.085		mg/Kg	5	8/15/2022 9:38:23 AM	B90279
Toluene	ND	0.17		mg/Kg	5	8/15/2022 9:38:23 AM	B90279
Ethylbenzene	ND	0.17		mg/Kg	5	8/15/2022 9:38:23 AM	B90279
Xylenes, Total	ND	0.34		mg/Kg	5	8/15/2022 9:38:23 AM	B90279
Surr: 4-Bromofluorobenzene	97.8	70-130		%Rec	5	8/15/2022 9:38:23 AM	B90279

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

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

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Analytical Report

Lab Order 2208872

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-2

Project: Lateral C 28 West

Collection Date: 8/12/2022 8:35:00 AM

Lab ID: 2208872-002

Matrix: SOIL

Received Date: 8/13/2022 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	83	60		mg/Kg	20	8/15/2022 11:55:22 AM	69495
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/15/2022 12:59:08 PM	69488
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/15/2022 12:59:08 PM	69488
Surr: DNOP	101	21-129		%Rec	1	8/15/2022 12:59:08 PM	69488
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	17		mg/Kg	5	8/15/2022 10:01:45 AM	G90279
Surr: BFB	87.6	37.7-212		%Rec	5	8/15/2022 10:01:45 AM	G90279
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.084		mg/Kg	5	8/15/2022 10:01:45 AM	B90279
Toluene	ND	0.17		mg/Kg	5	8/15/2022 10:01:45 AM	B90279
Ethylbenzene	ND	0.17		mg/Kg	5	8/15/2022 10:01:45 AM	B90279
Xylenes, Total	ND	0.34		mg/Kg	5	8/15/2022 10:01:45 AM	B90279
Surr: 4-Bromofluorobenzene	98.6	70-130		%Rec	5	8/15/2022 10:01:45 AM	B90279

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

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

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Analytical Report

Lab Order 2208872

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-3

Project: Lateral C 28 West

Collection Date: 8/12/2022 8:40:00 AM

Lab ID: 2208872-003

Matrix: SOIL

Received Date: 8/13/2022 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	84	60		mg/Kg	20	8/15/2022 12:07:42 PM	69495
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/15/2022 1:22:56 PM	69488
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/15/2022 1:22:56 PM	69488
Surr: DNOP	92.5	21-129		%Rec	1	8/15/2022 1:22:56 PM	69488
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.0		mg/Kg	1	8/15/2022 10:25:09 AM	G90279
Surr: BFB	90.8	37.7-212		%Rec	1	8/15/2022 10:25:09 AM	G90279
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	0.015	0.015		mg/Kg	1	8/15/2022 10:25:09 AM	B90279
Toluene	0.076	0.030		mg/Kg	1	8/15/2022 10:25:09 AM	B90279
Ethylbenzene	ND	0.030		mg/Kg	1	8/15/2022 10:25:09 AM	B90279
Xylenes, Total	0.11	0.060		mg/Kg	1	8/15/2022 10:25:09 AM	B90279
Surr: 4-Bromofluorobenzene	98.1	70-130		%Rec	1	8/15/2022 10:25:09 AM	B90279

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

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

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Analytical Report

Lab Order 2208872

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-4

Project: Lateral C 28 West

Collection Date: 8/12/2022 8:45:00 AM

Lab ID: 2208872-004

Matrix: SOIL

Received Date: 8/13/2022 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/15/2022 12:20:03 PM	69495
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/15/2022 1:53:59 PM	69488
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/15/2022 1:53:59 PM	69488
Surr: DNOP	104	21-129		%Rec	1	8/15/2022 1:53:59 PM	69488
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	8/15/2022 10:48:35 AM	G90279
Surr: BFB	89.0	37.7-212		%Rec	1	8/15/2022 10:48:35 AM	G90279
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.021		mg/Kg	1	8/15/2022 10:48:35 AM	B90279
Toluene	0.046	0.042		mg/Kg	1	8/15/2022 10:48:35 AM	B90279
Ethylbenzene	ND	0.042		mg/Kg	1	8/15/2022 10:48:35 AM	B90279
Xylenes, Total	ND	0.083		mg/Kg	1	8/15/2022 10:48:35 AM	B90279
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	8/15/2022 10:48:35 AM	B90279

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

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

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Analytical Report

Lab Order 2208872

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-5

Project: Lateral C 28 West

Collection Date: 8/12/2022 8:50:00 AM

Lab ID: 2208872-005

Matrix: SOIL

Received Date: 8/13/2022 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/15/2022 12:32:24 PM	69495
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/15/2022 2:18:28 PM	69488
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/15/2022 2:18:28 PM	69488
Surr: DNOP	91.5	21-129		%Rec	1	8/15/2022 2:18:28 PM	69488
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	8/15/2022 11:12:01 AM	G90279
Surr: BFB	86.4	37.7-212		%Rec	1	8/15/2022 11:12:01 AM	G90279
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.018		mg/Kg	1	8/15/2022 11:12:01 AM	B90279
Toluene	0.038	0.035		mg/Kg	1	8/15/2022 11:12:01 AM	B90279
Ethylbenzene	ND	0.035		mg/Kg	1	8/15/2022 11:12:01 AM	B90279
Xylenes, Total	0.084	0.070		mg/Kg	1	8/15/2022 11:12:01 AM	B90279
Surr: 4-Bromofluorobenzene	96.6	70-130		%Rec	1	8/15/2022 11:12:01 AM	B90279

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

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

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Analytical Report

Lab Order 2208872

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-6

Project: Lateral C 28 West

Collection Date: 8/12/2022 8:55:00 AM

Lab ID: 2208872-006

Matrix: SOIL

Received Date: 8/13/2022 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/15/2022 12:44:45 PM	69495
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/15/2022 2:42:46 PM	69488
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/15/2022 2:42:46 PM	69488
Surr: DNOP	93.5	21-129		%Rec	1	8/15/2022 2:42:46 PM	69488
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	8/15/2022 11:35:36 AM	G90279
Surr: BFB	89.2	37.7-212		%Rec	1	8/15/2022 11:35:36 AM	G90279
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.017		mg/Kg	1	8/15/2022 11:35:36 AM	B90279
Toluene	ND	0.034		mg/Kg	1	8/15/2022 11:35:36 AM	B90279
Ethylbenzene	ND	0.034		mg/Kg	1	8/15/2022 11:35:36 AM	B90279
Xylenes, Total	ND	0.068		mg/Kg	1	8/15/2022 11:35:36 AM	B90279
Surr: 4-Bromofluorobenzene	97.2	70-130		%Rec	1	8/15/2022 11:35:36 AM	B90279

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

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

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Analytical Report

Lab Order 2208872

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-7

Project: Lateral C 28 West

Collection Date: 8/12/2022 9:00:00 AM

Lab ID: 2208872-007

Matrix: SOIL

Received Date: 8/13/2022 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	59		mg/Kg	20	8/15/2022 12:57:06 PM	69495
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	34	15		mg/Kg	1	8/15/2022 3:07:23 PM	69488
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/15/2022 3:07:23 PM	69488
Surr: DNOP	98.2	21-129		%Rec	1	8/15/2022 3:07:23 PM	69488
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	8/15/2022 11:59:09 AM	G90279
Surr: BFB	89.7	37.7-212		%Rec	1	8/15/2022 11:59:09 AM	G90279
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.018		mg/Kg	1	8/15/2022 11:59:09 AM	B90279
Toluene	ND	0.036		mg/Kg	1	8/15/2022 11:59:09 AM	B90279
Ethylbenzene	ND	0.036		mg/Kg	1	8/15/2022 11:59:09 AM	B90279
Xylenes, Total	ND	0.072		mg/Kg	1	8/15/2022 11:59:09 AM	B90279
Surr: 4-Bromofluorobenzene	98.7	70-130		%Rec	1	8/15/2022 11:59:09 AM	B90279

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

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

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Analytical Report

Lab Order 2208872

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-8

Project: Lateral C 28 West

Collection Date: 8/12/2022 9:05:00 AM

Lab ID: 2208872-008

Matrix: SOIL

Received Date: 8/13/2022 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	110	60		mg/Kg	20	8/15/2022 1:09:27 PM	69495
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/15/2022 2:07:26 PM	69488
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/15/2022 2:07:26 PM	69488
Surr: DNOP	94.0	21-129		%Rec	1	8/15/2022 2:07:26 PM	69488
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	8/15/2022 12:22:46 PM	G90279
Surr: BFB	90.3	37.7-212		%Rec	1	8/15/2022 12:22:46 PM	G90279
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.018		mg/Kg	1	8/15/2022 12:22:46 PM	B90279
Toluene	0.050	0.036		mg/Kg	1	8/15/2022 12:22:46 PM	B90279
Ethylbenzene	ND	0.036		mg/Kg	1	8/15/2022 12:22:46 PM	B90279
Xylenes, Total	0.28	0.072		mg/Kg	1	8/15/2022 12:22:46 PM	B90279
Surr: 4-Bromofluorobenzene	98.5	70-130		%Rec	1	8/15/2022 12:22:46 PM	B90279

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

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

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Analytical Report

Lab Order 2208872

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-9

Project: Lateral C 28 West

Collection Date: 8/12/2022 9:10:00 AM

Lab ID: 2208872-009

Matrix: SOIL

Received Date: 8/13/2022 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	97	60		mg/Kg	20	8/15/2022 1:21:48 PM	69495
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/15/2022 2:21:16 PM	69488
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/15/2022 2:21:16 PM	69488
Surr: DNOP	95.6	21-129		%Rec	1	8/15/2022 2:21:16 PM	69488
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	8/15/2022 12:46:26 PM	G90279
Surr: BFB	92.3	37.7-212		%Rec	1	8/15/2022 12:46:26 PM	G90279
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.017		mg/Kg	1	8/15/2022 12:46:26 PM	B90279
Toluene	ND	0.035		mg/Kg	1	8/15/2022 12:46:26 PM	B90279
Ethylbenzene	ND	0.035		mg/Kg	1	8/15/2022 12:46:26 PM	B90279
Xylenes, Total	0.11	0.070		mg/Kg	1	8/15/2022 12:46:26 PM	B90279
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	8/15/2022 12:46:26 PM	B90279

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

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

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Analytical Report

Lab Order 2208872

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-10

Project: Lateral C 28 West

Collection Date: 8/12/2022 9:15:00 AM

Lab ID: 2208872-010

Matrix: SOIL

Received Date: 8/13/2022 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	79	61		mg/Kg	20	8/15/2022 1:34:09 PM	69495
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/15/2022 2:35:15 PM	69488
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/15/2022 2:35:15 PM	69488
Surr: DNOP	94.3	21-129		%Rec	1	8/15/2022 2:35:15 PM	69488
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	8/15/2022 1:10:05 PM	G90279
Surr: BFB	88.8	37.7-212		%Rec	1	8/15/2022 1:10:05 PM	G90279
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.018		mg/Kg	1	8/15/2022 1:10:05 PM	B90279
Toluene	ND	0.035		mg/Kg	1	8/15/2022 1:10:05 PM	B90279
Ethylbenzene	ND	0.035		mg/Kg	1	8/15/2022 1:10:05 PM	B90279
Xylenes, Total	ND	0.070		mg/Kg	1	8/15/2022 1:10:05 PM	B90279
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	8/15/2022 1:10:05 PM	B90279

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

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

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Analytical Report

Lab Order 2208872

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-11

Project: Lateral C 28 West

Collection Date: 8/12/2022 9:20:00 AM

Lab ID: 2208872-011

Matrix: SOIL

Received Date: 8/13/2022 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	82	60		mg/Kg	20	8/15/2022 2:11:11 PM	69495
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	66	14		mg/Kg	1	8/15/2022 2:49:36 PM	69488
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/15/2022 2:49:36 PM	69488
Surr: DNOP	19.5	21-129	S	%Rec	1	8/15/2022 2:49:36 PM	69488
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	8/15/2022 1:57:34 PM	G90279
Surr: BFB	89.1	37.7-212		%Rec	1	8/15/2022 1:57:34 PM	G90279
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.019		mg/Kg	1	8/15/2022 1:57:34 PM	B90279
Toluene	ND	0.039		mg/Kg	1	8/15/2022 1:57:34 PM	B90279
Ethylbenzene	ND	0.039		mg/Kg	1	8/15/2022 1:57:34 PM	B90279
Xylenes, Total	ND	0.078		mg/Kg	1	8/15/2022 1:57:34 PM	B90279
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	8/15/2022 1:57:34 PM	B90279

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

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

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2208872

18-Aug-22

Client: ENSOLUM

Project: Lateral C 28 West

Sample ID: MB-69495		SampType: mblk		TestCode: EPA Method 300.0: Anions						
Client ID: PBS		Batch ID: 69495		RunNo: 90282						
Prep Date: 8/15/2022		Analysis Date: 8/15/2022		SeqNo: 3220645			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-69495		SampType: lcs		TestCode: EPA Method 300.0: Anions						
Client ID: LCSS		Batch ID: 69495		RunNo: 90282						
Prep Date: 8/15/2022		Analysis Date: 8/15/2022		SeqNo: 3220647			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	99.3	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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

WO#: 2208872

18-Aug-22

Client: ENSOLUM
Project: Lateral C 28 West

Sample ID: MB-69488	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 69488	RunNo: 90269								
Prep Date: 8/15/2022	Analysis Date: 8/15/2022	SeqNo: 3219899 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		99.8	21	129			

Sample ID: LCS-69488	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 69488	RunNo: 90269								
Prep Date: 8/15/2022	Analysis Date: 8/15/2022	SeqNo: 3219900 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	15	50.00	0	93.9	64.4	127			
Surr: DNOP	4.3		5.000		86.4	21	129			

Sample ID: 2208872-001AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: S-1	Batch ID: 69488	RunNo: 90269								
Prep Date: 8/15/2022	Analysis Date: 8/15/2022	SeqNo: 3220015 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	15	49.85	0	100	36.1	154			
Surr: DNOP	4.3		4.985		86.4	21	129			

Sample ID: 2208872-001AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: S-1	Batch ID: 69488	RunNo: 90269								
Prep Date: 8/15/2022	Analysis Date: 8/15/2022	SeqNo: 3220016 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	15	49.12	0	104	36.1	154	2.41	33.9	
Surr: DNOP	4.2		4.912		86.5	21	129	0	0	

Sample ID: MB-69473	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 69473	RunNo: 90276								
Prep Date: 8/12/2022	Analysis Date: 8/16/2022	SeqNo: 3221171 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.3		10.00		83.1	21	129			

Sample ID: LCS-69473	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 69473	RunNo: 90276								
Prep Date: 8/12/2022	Analysis Date: 8/16/2022	SeqNo: 3221173 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2208872

18-Aug-22

Client: ENSOLUM

Project: Lateral C 28 West

Sample ID: LCS-69473	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 69473	RunNo: 90276								
Prep Date: 8/12/2022	Analysis Date: 8/16/2022	SeqNo: 3221173		Units: %Rec						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		86.6	21	129			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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

WO#: 2208872

18-Aug-22

Client: ENSOLUM
Project: Lateral C 28 West

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: G90279			RunNo: 90279						
Prep Date:	Analysis Date: 8/15/2022			SeqNo: 3220347			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	910		1000		91.1	37.7	212			

Sample ID: 2.5ug gro lcs	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: G90279			RunNo: 90279						
Prep Date:	Analysis Date: 8/15/2022			SeqNo: 3220348			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	88.0	72.3	137			
Surr: BFB	1700		1000		165	37.7	212			

Sample ID: 2208872-001ams	SampType: MS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: S-1	Batch ID: G90279			RunNo: 90279						
Prep Date:	Analysis Date: 8/15/2022			SeqNo: 3220349			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	74	17	84.52	0	87.4	70	130			
Surr: BFB	6000		3381		176	37.7	212			

Sample ID: 2208872-001amsd	SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: S-1	Batch ID: G90279			RunNo: 90279						
Prep Date:	Analysis Date: 8/15/2022			SeqNo: 3220350			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	76	17	84.52	0	89.7	70	130	2.62	20	
Surr: BFB	6200		3381		183	37.7	212	0	0	

Qualifiers:

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

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

WO#: 2208872

18-Aug-22

Client: ENSOLUM
Project: Lateral C 28 West

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: B90279			RunNo: 90279						
Prep Date:	Analysis Date: 8/15/2022			SeqNo: 3220377			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.99		1.000		98.9	70	130			

Sample ID: 100ng btex lcs	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: B90279			RunNo: 90279						
Prep Date:	Analysis Date: 8/15/2022			SeqNo: 3220378			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	1.000	0	98.8	80	120			
Toluene	1.0	0.050	1.000	0	101	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.1	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			

Sample ID: 2208872-002ams	SampType: MS			TestCode: EPA Method 8021B: Volatiles						
Client ID: S-2	Batch ID: B90279			RunNo: 90279						
Prep Date:	Analysis Date: 8/15/2022			SeqNo: 3220379			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.3	0.084	3.378	0	97.4	68.8	120			
Toluene	3.4	0.17	3.378	0.04764	99.5	73.6	124			
Ethylbenzene	3.4	0.17	3.378	0	101	72.7	129			
Xylenes, Total	10	0.34	10.14	0.1321	99.4	75.7	126			
Surr: 4-Bromofluorobenzene	3.6		3.378		106	70	130			

Sample ID: 2208872-002amsd	SampType: MSD			TestCode: EPA Method 8021B: Volatiles						
Client ID: S-2	Batch ID: B90279			RunNo: 90279						
Prep Date:	Analysis Date: 8/15/2022			SeqNo: 3220380			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.2	0.084	3.378	0	96.1	68.8	120	1.34	20	
Toluene	3.3	0.17	3.378	0.04764	96.9	73.6	124	2.65	20	
Ethylbenzene	3.3	0.17	3.378	0	98.9	72.7	129	2.36	20	
Xylenes, Total	10	0.34	10.14	0.1321	97.7	75.7	126	1.67	20	
Surr: 4-Bromofluorobenzene	3.6		3.378		106	70	130	0	0	

Qualifiers:

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



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: 2208872

RcptNo: 1

Received By: Juan Rojas

8/13/2022 7:40:00 AM

Juan Rojas

Completed By: Juan Rojas

8/13/2022 8:03:17 AM

*Juan Rojas*Reviewed By: *TML*

8/13/22

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: *JR 8/13/22*

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good				

Chain-of-Custody Record

Client: Ensolium, LLC

Mailing Address: 606 S Rio Grande

Phone #: 505 4 877410

email or Fax#:

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

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 100%

☐ Standard ☒ Rush 8-15-22

Project Name:

Latent C-38 (West)

Project #:

05A1031

Project Manager:

5 Summers

Sampler: 0 D Abont

On Ice: ☐ Yes ☐ No

of Coolers: 1

Cooler Temp (including CR): 1440.1 = 1.1 (°C)

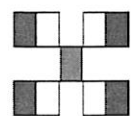
Container Type and #

Preservative Type

HEAL No. 2208872

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)	

Analysis Request



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	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)
8/12	830	S	S-1	1 402	cool		✓	✓					✓			
8/12	835	S	S-2		cool		✓	✓								
8/12	840	S	S-3		cool		✓	✓								
8/12	845	S	S-4		cool		✓	✓								
8/12	850	S	S-5		cool		✓	✓								
8/12	855	S	S-6		cool		✓	✓								
8/12	900	S	S-7		cool		✓	✓								
8/12	905	S	S-8		cool		✓	✓								
8/12	910	S	S-9		cool		✓	✓								
8/12	915	S	S-10		cool		✓	✓								
8/12	920	S	S-11		cool		✓	✓								
8/12	1158															
8/12	1811															

Relinquished by: [Signature] Date: 8/12/22 Time: 1155

Received by: MR War Date: 8/12/22 Time: 1155

Via: Hand Date: 8/13/22 Time: 7:40

Remarks: Tom Long

AB 81200

ARE

Sam

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 226472

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 226472
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

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