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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: **Enterprise Field Services, LLC**	OGRID: **151618**
Contact Name: **Thomas Long**	Contact Telephone: **505-599-2286**
Contact email:**tjlong@eprod.com**	**Incident #** *(assigned by OCD)*: **NRM2029531904**
Contact mailing address: **614 Reilly Ave, Farmington, NM 87401**	

Location of Release Source

Latitude **36.552796** Longitude **-107.741504** *(NAD 83 in decimal degrees to 5 decimal places)*

Site Name **Lateral C-14**	Site Type **Natural Gas Gathering Pipeline**
Date Release Discovered: **10/10/2020**	Serial Number *(if applicable)*: **N/A**

Unit Letter	Section	Township	Range	County
C	**25**	**27N**	**9W**	**San Juan**

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

Nature and Volume of Release

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

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

Cause of Release On October 10, 2020, Enterprise had a release of natural gas and natural gas liquids from the Lateral C-14 pipeline. An area of approximately three feet in diameter was impacted by the released fluids. The release is located in an ephemeral wash (blue line on a USGS topo). No standing liquids remain onsite. The pipeline was isolated, depressurize, locked and tagged out. Enterprise completed remediation on November 3, 2020. The final excavation dimensions measured approximately 9 feet long by 5 feet wide by 3 feet deep. The excavation was backfilled with laboratory-confirmed stockpiled soil. A third party closure report is included with this "Final C-141."

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Jon E. Fields Title: Director, Environmental

Signature: Jon E. Fields Date: 3/4/2021

email: jefields@eprod.com Telephone: (713) 381-6684

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: Nelson Velez Date: 04/26/2022

Printed Name: Nelson Velez Title: Environmental Specialist – Adv

ENSOLUM

CLOSURE REPORT

Property:

Lateral C-14 (10/10/20)
NW ¼, S25 T27N R9W
San Juan County, New Mexico

January 8, 2021
Ensolum Project No. 05A1226121

Prepared for:

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

Prepared by:

Chad D'Aponti
Environmental Scientist

Kyle Summers, CPG
Sr. Project Manager

Table of Contents

LIST OF APPENDICES

ENSOLUM

CLOSURE REPORT

Lateral C-14 (10/10/20)
NW ¼, S25 T27N R9W
San Juan County, New Mexico

Ensolum Project No. 05A1226121

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Lateral C-14 (10/10/20) (Site)
Incident ID	NRM2029531904
Location:	36.552796 ° North, 107.741504 ° West Northwest (NW) ¼ of Section 25, Township 27 North, Range 9 West San Juan County, New Mexico
Property:	Navajo Nation
Regulatory:	Navajo Nation Environmental Protection Agency (NNEPA) and New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On October 10, 2020, a release of natural gas was identified on the Lateral C-14 pipeline. Enterprise subsequently isolated and locked the pipeline out of service. On November 3, 2020, Enterprise initiated activities to facilitate the repair of the pipeline and remediate potential petroleum hydrocarbon impact resulting from the release.

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

1.2 Project Objective

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

2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the NNEPA and the New Mexico EMNRD OCD. Ensolum, LLC (Ensolum) referenced New Mexico Administrative Code (NMAC) 19.15.29 *Releases,* which establishes investigation and abatement action requirements for oil and gas release sites that are subject to reporting and/or corrective action, during the evaluation and remediation of the Site. Ensolum utilized the general site characteristics and information available from the New Mexico Office of the State Engineer (OSE) and the New Mexico EMNRD OCD imaging database to determine the appropriate closure criteria for the Site. Supporting figures and documentation associated with the following bullets are provided in **Appendix B**.

- The OSE tracks the usage and assignment of water rights and water well installations and records this information in the Water Rights Reporting System (WRRS) database. Water wells and other

points of diversion (PODs) are each assigned POD numbers in the database (which is searchable and includes an interactive map). No PODs were identified within a one (1) mile radius of the Site in the OSE WRRS database. In addition, no PODs were identified in adjacent Public Land Survey System (PLSS) sections (**Figure A**, **Appendix B**).

- Three (3) cathodic protection wells were identified near the Site. The cathodic protection well associated with the Huerfanito Unit #79M oil/gas production well, located approximately 0.9 miles southwest of the Site and at a higher elevation (6,236 feet) than the Site (6,094 feet), indicates a depth to water of approximately 102 feet below grade surface (bgs). The cathodic protection well associated with the Huerfanito Units #172 and #56-23 oil/gas production wells, located approximately 1.1 mile northwest of the Site and at a higher elevation (6,115 feet) than the Site, indicates a depth to water of approximately 130 feet bgs. The cathodic protection well associated with the Huerfanito Units #10, #178, and #151 oil/gas production wells, located approximately 1.2 mile southeast of the Site and at a higher elevation (6,138 feet) than the Site, indicates a depth to water of approximately 25 feet bgs (**Figure B**, **Appendix B**).

- The Site is located within a New Mexico EMNRD OCD-defined continuously flowing watercourse (**Figure C**, **Appendix B**).

- The Site is not located within 200 feet of a lakebed, sinkhole, or playa lake.

- The Site is not located within 300 feet of a permanent residence, school, hospital, institution, or church. The nearest permanent residence is located approximately 800 feet (northwest) from the Site (**Figure D**, **Appendix B**).

- No springs, or private domestic fresh water wells used by less than five (5) households for domestic or stock watering purposes were identified within 500 feet of the Site (**Figure E**, **Appendix B**).

- According to the OSE WRRS database there are no fresh water wells or springs within 1,000 feet of the Site. However, the residence located approximately 800 feet (northwest) from the Site may have unregistered water wells (**Figure E**, **Appendix B**).

- The Site is not located within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to New Mexico Statutes Annotated (NMSA) 1978, Section 3-27-3.

- Based on information identified in the U.S. Fish & Wildlife Service National Wetlands Inventory Wetlands Mapper, the Site is not located within 300 feet of a wetland (**Figure F**, **Appendix B**).

- Based on information identified in the New Mexico Mining and Minerals Division's Geographic Information System (GIS) Maps and Mine Data database, the Site is not located within an area overlying a subsurface mine (**Figure G**, **Appendix B**).

- The Site is not located within an unstable area.

- Based on information identified in the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) geospatial database, the Site is not located within a 100-year floodplain (**Figure H**, **Appendix B**).

Based on the identified siting criteria, cleanup goals for soils remaining in place at the Site include:

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

3.0 SOIL REMEDIATION ACTIVITIES

On November 3, 2020, Enterprise initiated activities to facilitate the repair of the pipeline and remediate potential petroleum hydrocarbon impact. During the remediation and corrective action activities, Industrial Mechanical, Inc., (IMI) provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final excavation measured approximately nine (9) feet long and five (5) feet wide at the maximum extents. The maximum depth of the excavation measured approximately three (3) feet bgs.

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

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

The **Site Map (Figure 3, Appendix A**) 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 C**.

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 two (2) composite soil samples (S-1 and S-2) from the excavation for laboratory analysis. In addition, one (1) composite soil sample (SP-1) was collected from the stockpiled soil that was segregated for potential reuse to confirm that the material was suitable to remain on Site. The composite samples were comprised of five (5) aliquots each and represent an estimated 200 square foot sample area per guidelines outlined in 19.15.29.12 Section D NMAC. A clean shovel was utilized to obtain fresh aliquots from each area of the excavation.

On November 3, 2020, sampling was performed at the Site. The NNEPA and the New Mexico EMNRD OCD were notified of the sampling event although no representatives were present during sampling activities. Regulatory correspondence is provided in **Appendix D**.

Composite soil samples S-1 (0'-3') and S-2 (0'-3') were collected from the walls and floor of the excavation.

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

5.0 SOIL LABORATORY ANALYTICAL METHODS

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

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

6.0 DATA EVALUATION

Ensolum compared the BTEX, TPH, and chloride laboratory analytical results or laboratory practical quantitation limits (PQLs) / reporting limits (RLs) associated with the composite soil samples (S-1, S-2, and SP-1) to the applicable New Mexico EMNRD OCD closure criteria.

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

- The laboratory analytical results for the composite soil samples indicate total BTEX is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 50 mg/kg.

- The laboratory analytical results for the composite soil samples indicate combined TPH GRO/DRO/MRO is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 100 mg/kg.

- The laboratory analytical results for the composite soil samples indicate chloride concentrations ranging from 110 mg/kg (S-1) to 350 mg/kg (SP-1), which are less than the applicable New Mexico EMNRD OCD closure criteria of 600 mg/kg for chlorides.

The laboratory analytical results are summarized in **Table 1** (**Appendix E**).

7.0 RECLAMATION AND REVEGETATION

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

8.0 FINDINGS AND RECOMMENDATION

- Three (3) composite soil samples were collected from the excavation and stockpiled soil. Based on laboratory analytical results, the soils remaining in place at the Site do not exhibit COC concentrations above the applicable New Mexico EMNRD OCD closure criteria.

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

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.

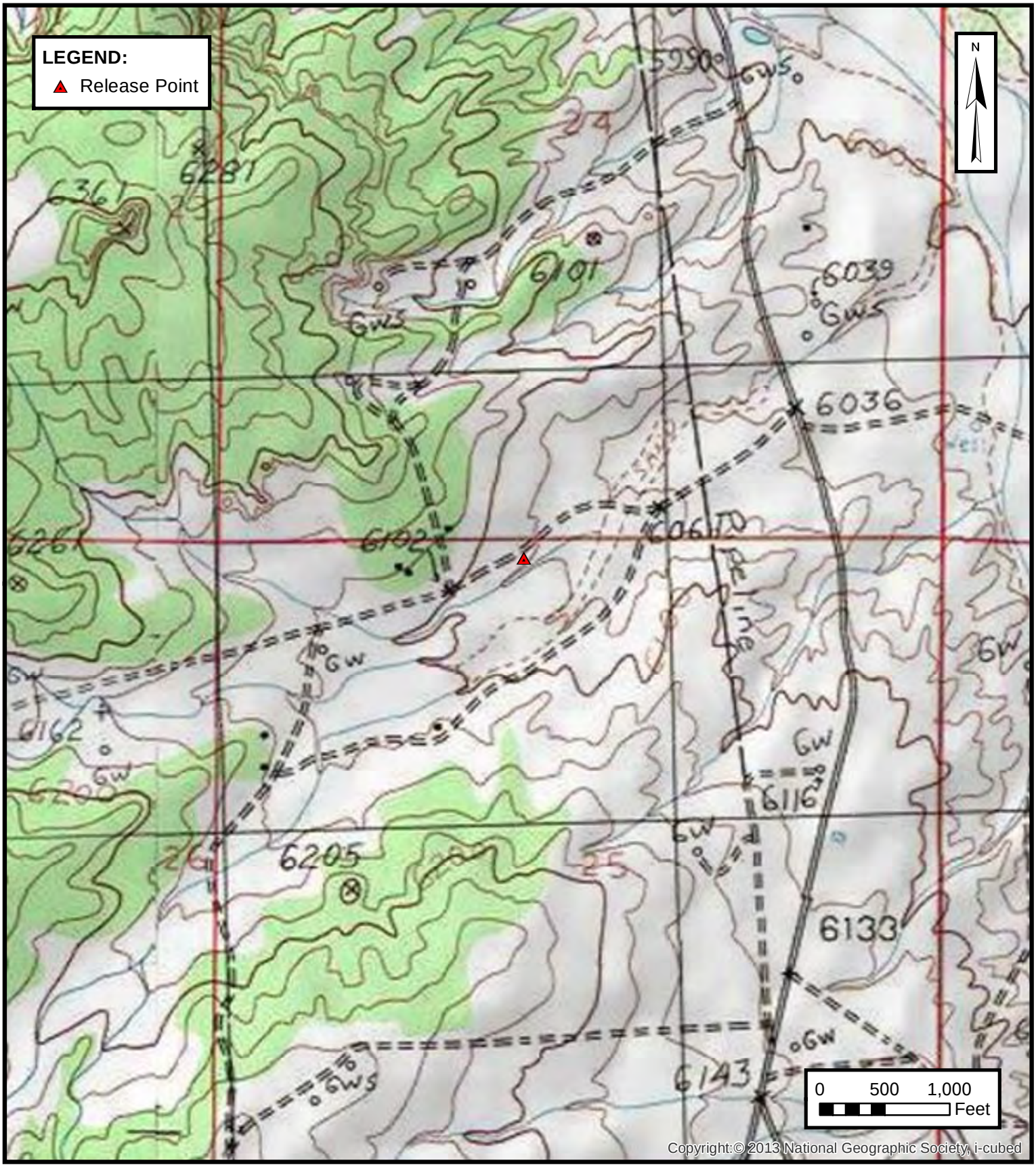
9.3 Reliance

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 report, and Ensolum's Master Services Agreement. The limitation of liability defined in the agreement is the aggregate limit of Ensolum's liability to the client.

ENSOLUM

APPENDIX A

Figures



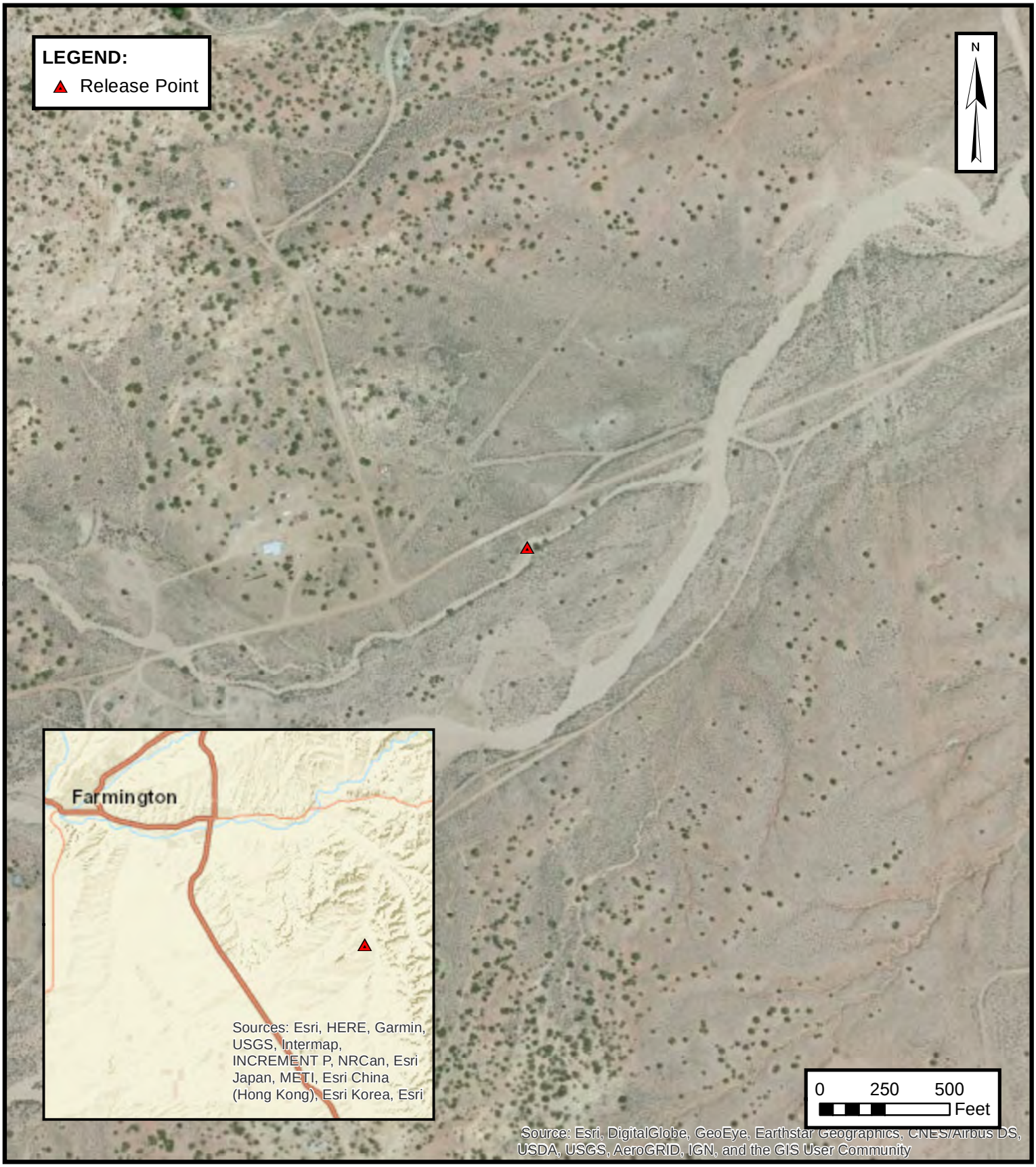
ENSOLUM
Environmental & Hydrogeologic Consultants

TOPOGRAPHIC MAP

ENTERPRISE FIELD SERVICES, LLC
LATERAL C-14 (10/10/20)
NW ¼, S25 T27N R9W, San Juan County, New Mexico
36.552796° N, 107.741504° W

PROJECT NUMBER: 05A1226121

FIGURE
1



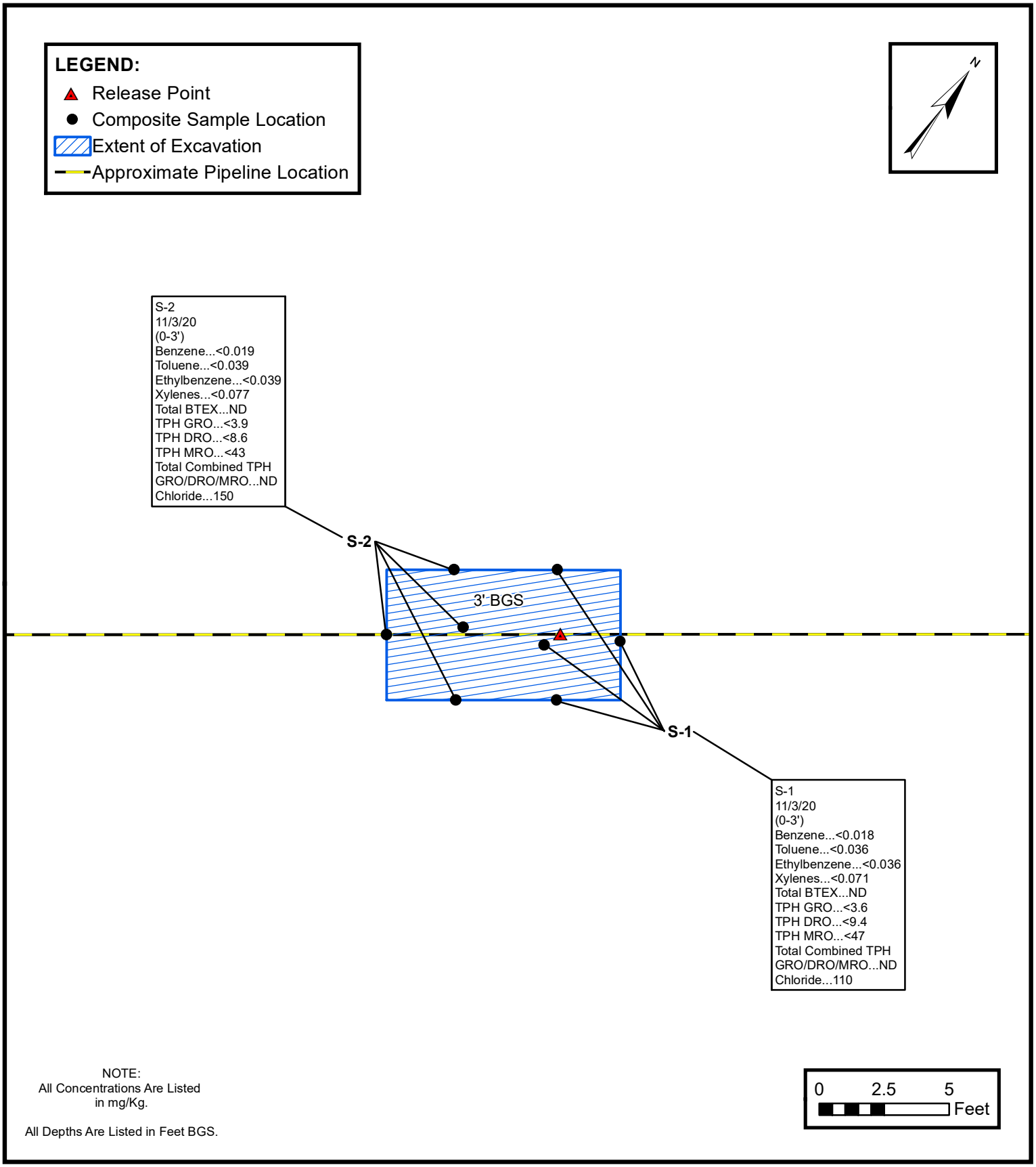
ENSOLUM
Environmental & Hydrogeologic Consultants

SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC
LATERAL C-14 (10/10/20)
NW ¼, S25 T27N R9W, San Juan County, New Mexico
36.552796° N, 107.741504° W

PROJECT NUMBER: 05A1226121

FIGURE
2



ENSOLUM
Environmental & Hydrogeologic Consultants

SITE MAP

ENTERPRISE FIELD SERVICES, LLC
LATERAL C-14 (10/10/20)
NW ¼, S25 T27N R9W, San Juan County, New Mexico
36.552796° N, 107.741504° W

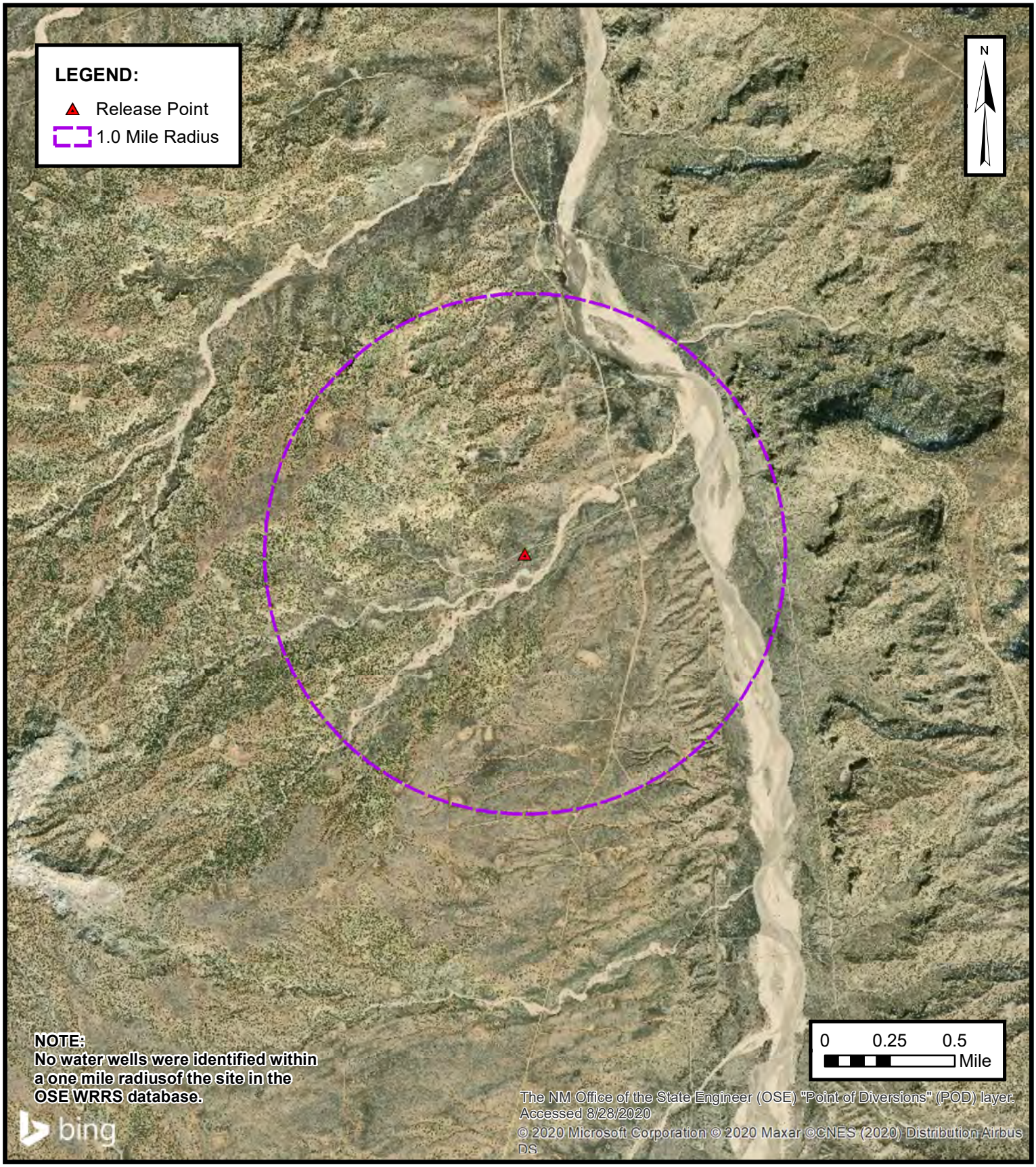
PROJECT NUMBER: 05A1226121

FIGURE
3

ENSOLUM

APPENDIX B

Siting Figures and Documentation



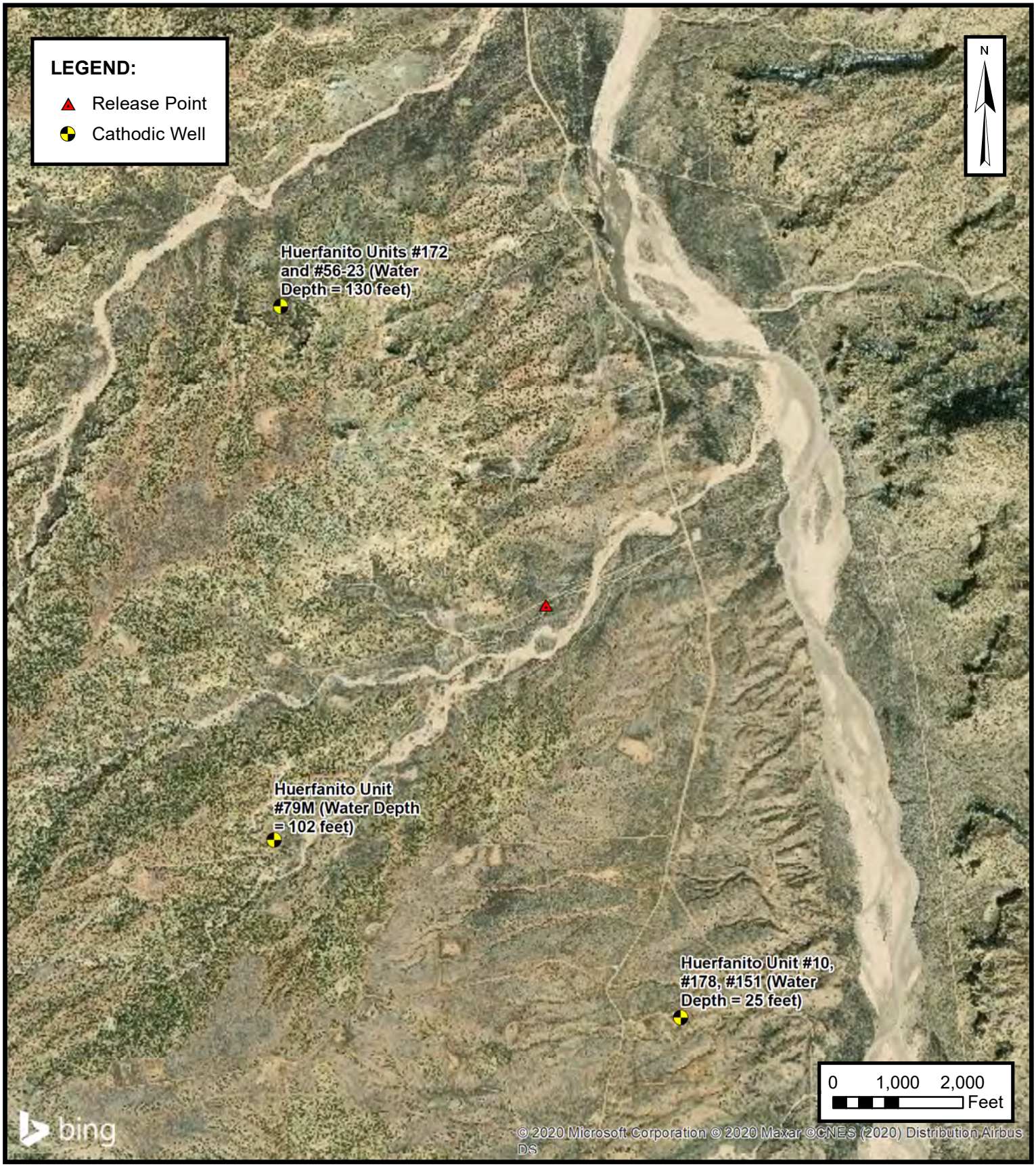
ENSOLUM
Environmental & Hydrogeologic Consultants

1.0 MILE RADIUS WATER WELL MAP

ENTERPRISE FIELD SERVICES, LLC
LATERAL C-14 (10/10/20)
NW ¼, S25 T27N R9W, San Juan County, New Mexico
36.552796° N, 107.741504° W

PROJECT NUMBER: 05A1226121

FIGURE
A



ENSOLUM
Environmental & Hydrogeologic Consultants

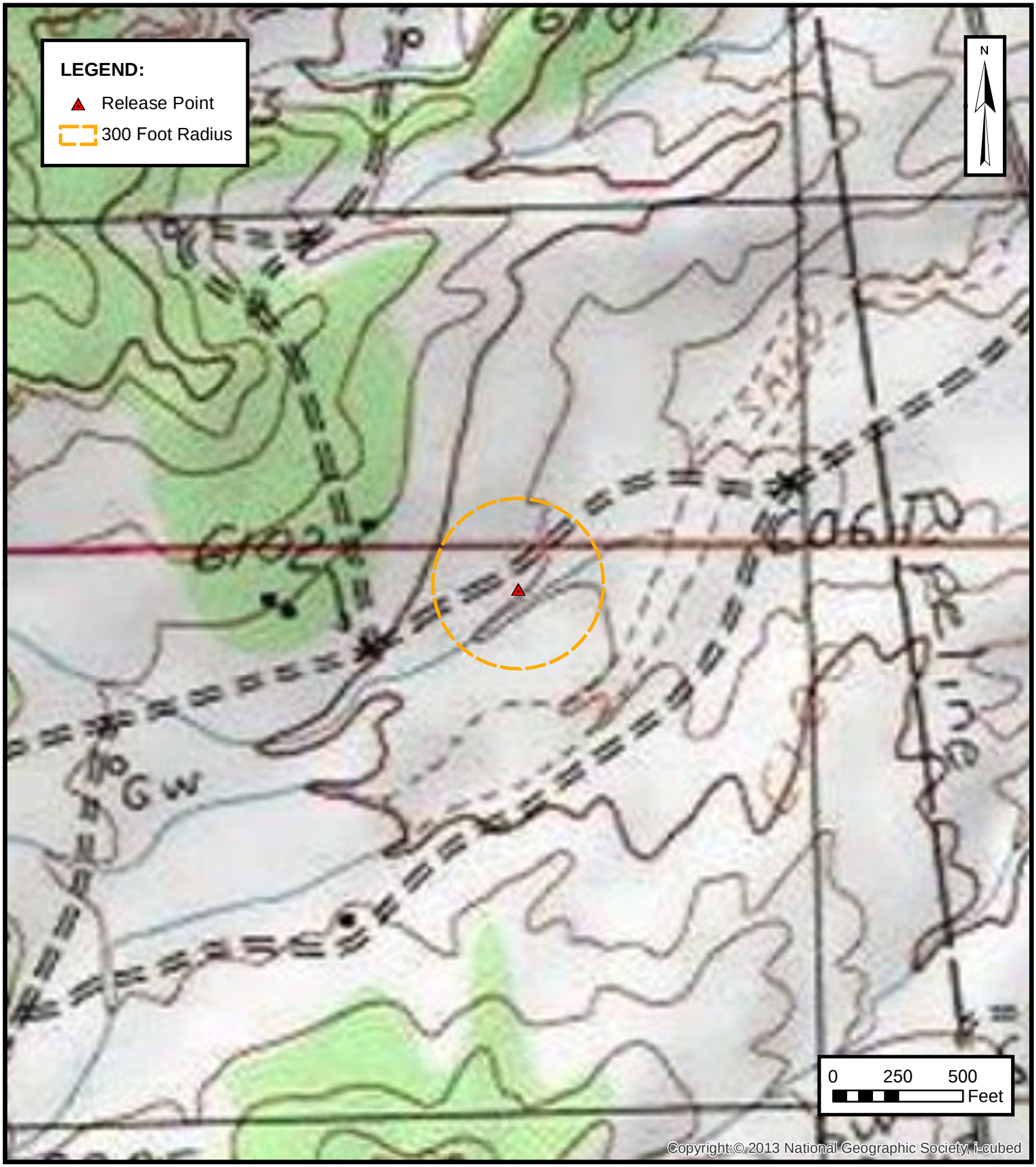
CATHODIC PROTECTION WELL RECORDED DEPTH TO WATER

ENTERPRISE FIELD SERVICES, LLC
LATERAL C-14 (10/10/20)
NW ¼, S25 T27N R9W, San Juan County, New Mexico
36.552796° N, 107.741504° W

PROJECT NUMBER: 05A1226121

FIGURE

B



ENSOLUM
Environmental & Hydrogeologic Consultants

300 FOOT RADIUS
WATERCOURSE AND DRAINAGE IDENTIFICATION
ENTERPRISE FIELD SERVICES, LLC
LATERAL C-14 (10/10/20)
NW ¼, S25 T27N R9W, San Juan County, New Mexico
36.552796° N, 107.741504° W

PROJECT NUMBER: 05A1226121

FIGURE
C

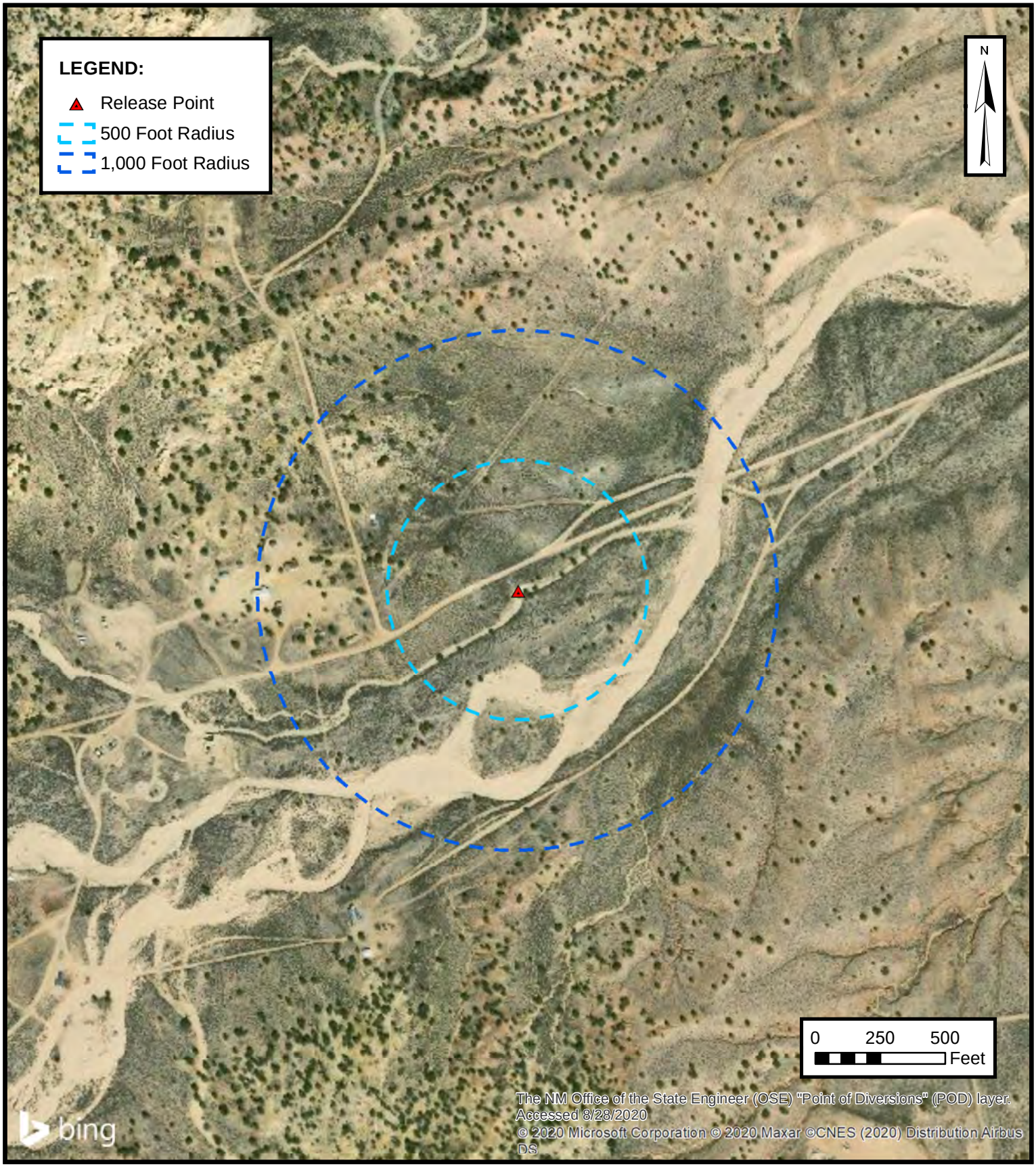
ENSOLUM
Environmental & Hydrogeologic Consultants

300 FOOT RADIUS
OCCUPIED STRUCTURE IDENTIFICATION

ENTERPRISE FIELD SERVICES, LLC
LATERAL C-14 (10/10/20)
NW ¼, S25 T27N R9W, San Juan County, New Mexico
36.552796° N, 107.741504° W

PROJECT NUMBER: 05A1226121

FIGURE
D



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Environmental & Hydrogeologic Consultants

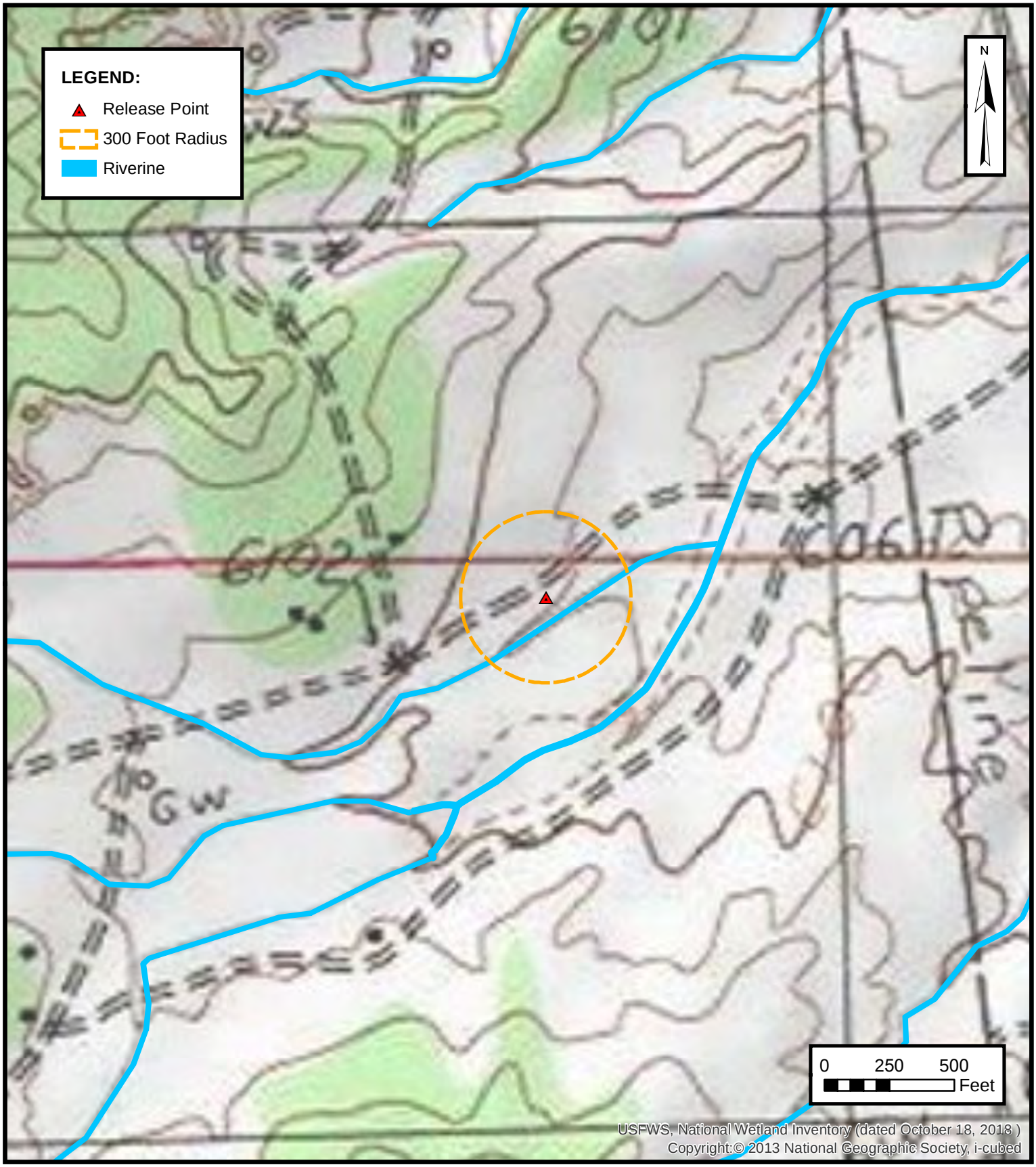
WATER WELL AND NATURAL SPRING LOCATION

ENTERPRISE FIELD SERVICES, LLC
LATERAL C-14 (10/10/20)
NW ¼, S25 T27N R9W, San Juan County, New Mexico
36.552796° N, 107.741504° W

PROJECT NUMBER: 05A1226121

FIGURE

E



ENSOLUM
Environmental & Hydrogeologic Consultants

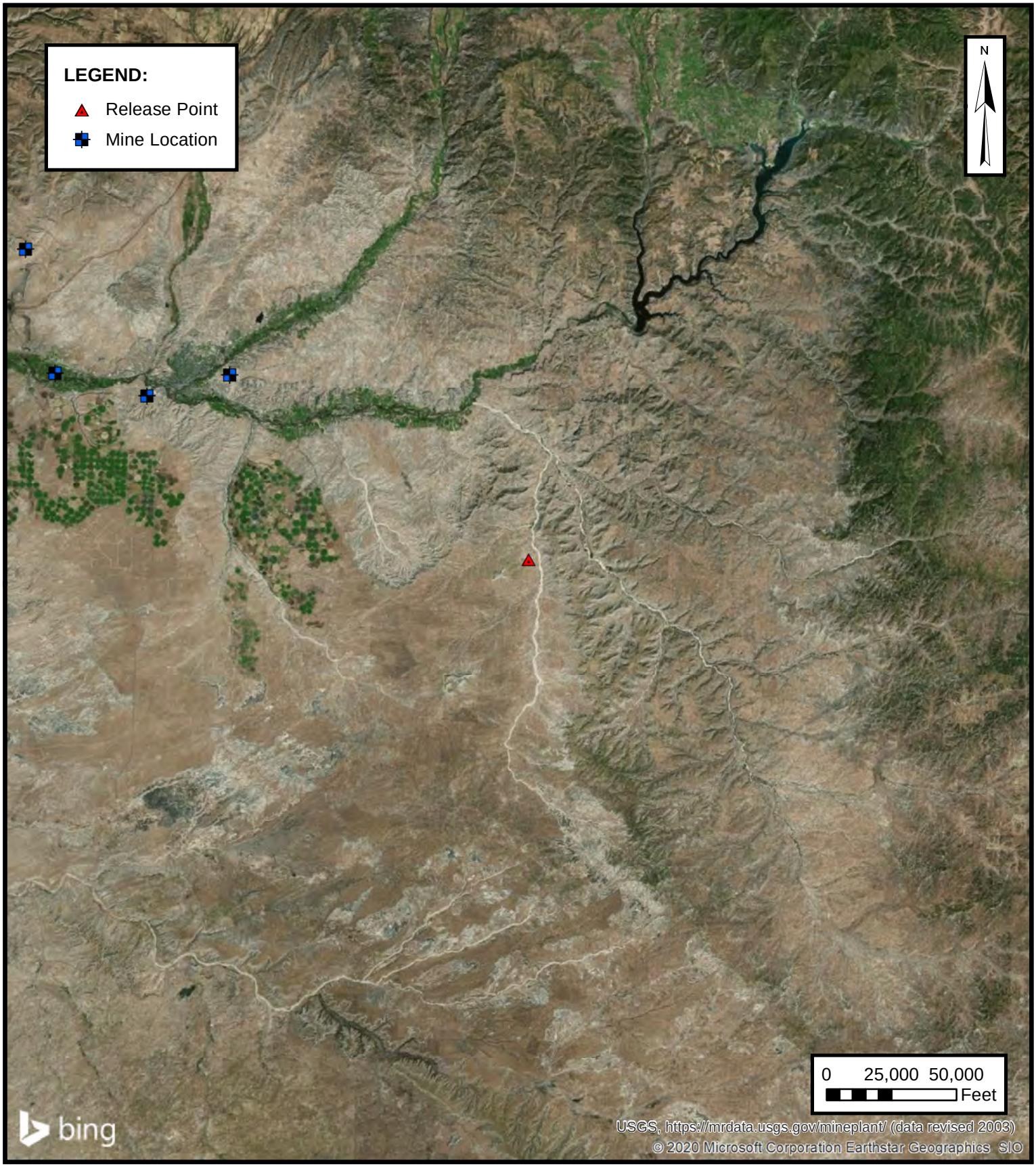
WETLANDS

ENTERPRISE FIELD SERVICES, LLC
LATERAL C-14 (10/10/20)
NW ¼, S25 T27N R9W, San Juan County, New Mexico
36.552796° N, 107.741504° W

PROJECT NUMBER: 05A1226121

FIGURE

F



ENSOLUM
Environmental & Hydrogeologic Consultants

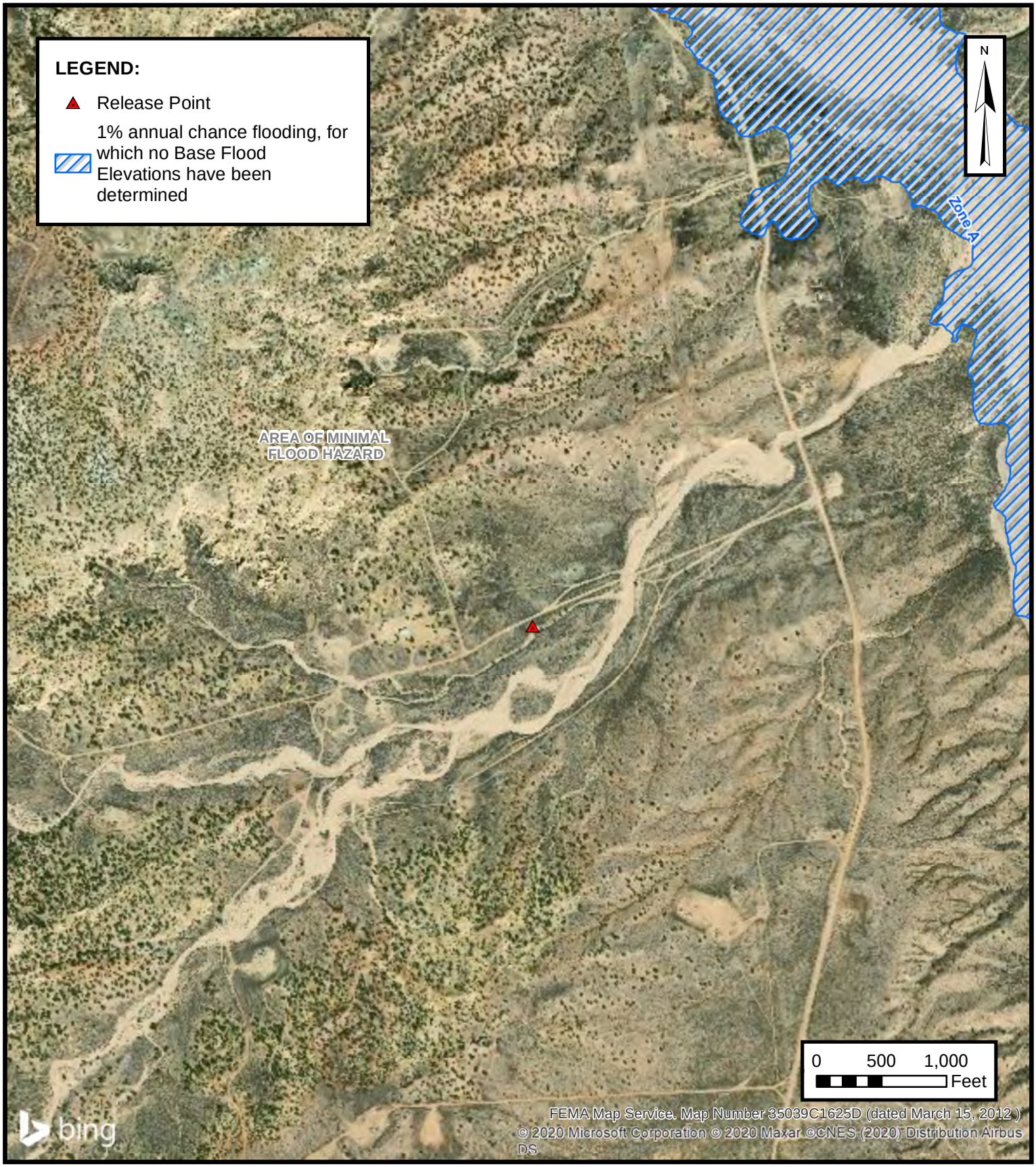
MINES, MILLS AND QUARRIES

ENTERPRISE FIELD SERVICES, LLC
LATERAL C-14 (10/10/20)
NW ¼, S25 T27N R9W, San Juan County, New Mexico
36.552796° N, 107.741504° W

PROJECT NUMBER: 05A1226121

FIGURE

G



ENSOLUM
Environmental & Hydrogeologic Consultants

100-YEAR FLOOD PLAIN MAP

ENTERPRISE FIELD SERVICES, LLC
LATERAL C-14 (10/10/20)
NW ¼, S25 T27N R9W, San Juan County, New Mexico
36.552796° N, 107.741504° W

PROJECT NUMBER: 05A1226121

FIGURE

H

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

No records found.

PLSS Search:

Section(s): 25, 23, 24, 26, 35, 36 **Township:** 27N **Range:** 09W

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

No records found.

PLSS Search:

Section(s): 19, 30, 31 **Township:** 27N **Range:** 08W

#172 30-045-28422
#56 30-045-06400

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

Operator Meridian Oil Co. Location: Unit B Sec. 23 Twp 27 Rng 09

Name of Well/Wells or Pipeline Serviced

Huerfanito Units #172 And #56-23

Elevation 6115 Completion Date 3-4-93 Total Depth 372 Land Type F

Casing Strings, Sizes, Types & Depths 3/3 Set 99' of 8" PVC Casing

No Gas, Water, or Boulders were Encountered During Casing

If Casing Strings are cemented, show amounts & types used Cemented

With 20 Sacks.

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

no plugs

Depths & thickness of water zones with description of water: Fresh, Clear,

Salty, Sulphur, Etc. 130' and was clear.

Depths gas encountered: No gas

Ground bed depth with type & amount of coke breeze used: 372' with

104 (50#) sacks of Asbury Graphitc

Depths anodes placed: #1 is at 350 and #15 is at 160'.

Depths vent pipes placed: Bottom to surface

Vent pipe perforations: Up to 150'.

Remarks:

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

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

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

API WATER ANALYSIS REPORT FORM

Laboratory No. 25-930315-11

Company		Sample No.	Date Sampled
MERIDIAN OIL			3-4-93
Field	**Legal Description**	**County or Parish**	**State**
2441 W		San Juan	NM
Lease or Unit	**Well**	**Depth**	**Formation**	**Water, B/D**
	Huerfanito #172		Fruitland	
Type of Water (Produced, Supply, etc.)	**Sampling Point**	**Sampled By**
	Ground Bed	R. Smith

DISSOLVED SOLIDS

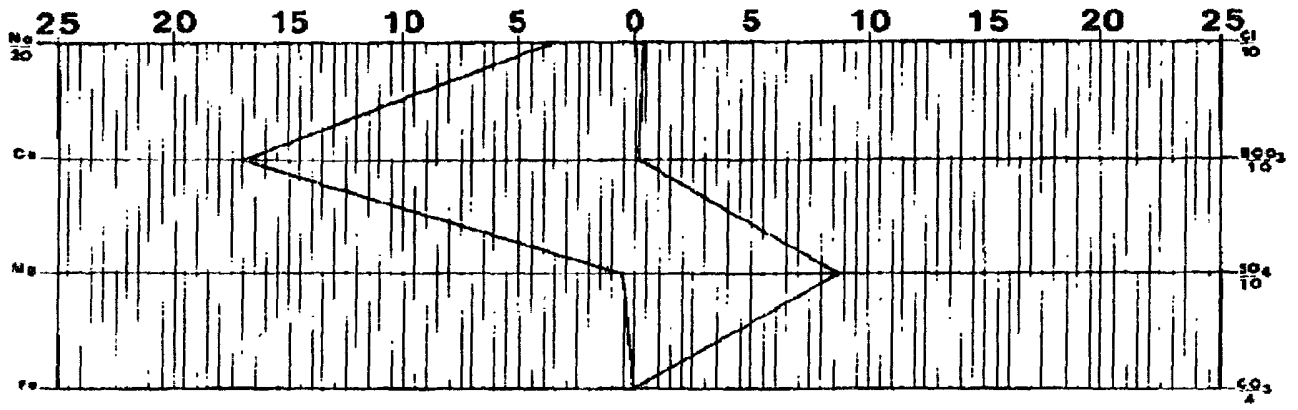
CATIONS	mg/l	me/l
Sodium, Na (calc.)	1700	76
Calcium, Ca	340	17
Magnesium, Mg	7	0.6
Barium, Ba		

ANIONS		
Chloride, Cl	160	4.5
Sulfate, So_4	4200	87
Carbonate, CO_3	-	-
Bicarbonate, HCO_3	110	1.8

OTHER PROPERTIES

pH	7.4
Specific Gravity, 60/60 F.	1.0085
Resistivity (ohm-meters) 71 F.	1.6
Total Dissolved Solids (calc.)	6600
Iron, Fe (total)	
Sulfide, as H_2S	

REMARKS & RECOMMENDATIONS: ATTN: BILL DONAHUE



Date Received	Preserved	Date Analyzed	Analyzed By
March 15th, 1993		March 18th, 1993	R.H.

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

3682

30-045-28948

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

Operator Meridian Oil Inc. Location: Unit I Sec. 26 Twp 29 Rng 07

Name of Well/Wells or Pipeline Serviced

Huerfanito Unit #79M

Elevation ____ Completion Date 9/17/93 Total Depth 408' Land Type F

Casing Strings, Sizes, Types & Depths 9/16 Set 58' of 8" PVC Casing. No Gas, Water, or Boulders Were Encountered During Casing.

If Casing Strings are cemented, show amounts & types used Cemented With 16 Sacks.

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

None

Depths & thickness of water zones with description of water: Fresh, Clear, Salty, Sulphur, Etc. Hit A Water Seep At 102', And A Major Fresh Water Vein At 185'. A Water Sample Was Taken.

Depths gas encountered: None

Ground bed depth with type & amount of coke breeze used: 408' Depth Used 112 Sacks of Asbury 218R (5600#)

Depths anodes placed: 380', 370', 320', 310', 300', 290', 280', 270', 260', 250', 240', 230', 197', 190', & 144'

Depths vent pipes placed: Surface To 408'.

Vent pipe perforations: Bottom 300'.

Remarks:

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

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

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

1416 10- 30-045-06179
178-
151- 30-045-27162

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 A Sec. 36 Twp 27 Rng 9

Name of Well/Wells or Pipeline Serviced HUERFANITO UNIT #10, #178, #151

cps 2159w

Elevation 6138' Completion Date 6/27/89 Total Depth 300' Land Type* N/A

Casing, Sizes, Types & Depths 30'

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

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

N/A

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

Fresh, Clear, Salty, Sulphur, Etc. 25' & 90'

Depths gas encountered: N/A

Type & amount of coke breeze used: N/A

Depths anodes placed: 245, 235', 225', 215', 205', 195', 185', 175', 165', 155'

Depths vent pipes placed: 300'

Vent pipe perforations: 200'

Remarks: gb #1

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

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

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

WELL CASING
CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOG

COMP 7-12-89

Drilling Log (Attach Hereto) ☐

Completion Date 6-27-89

#10 #78

CBS #	Well Name, Line or Plant:	Work Order #	Static: 5. .876	Ins. Union Check
2159	Huerfanito Unit 151	3513A		☑ Good ☐ Bad

Location:	Anode Size:	Anode Type:	Size Bit:
A NE-36-27-9	2" x 60"	Duriron	6 3/4"

Depth Drilled	Depth Logged	Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used
300'	303'				

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Anode Depth	245	235	225	215	205	195	185	175	165	155
Anode Output (Amps)	5.5	5.9	5.7	6.4	6.1	5.8	6.8	6.8	6.8	6.5
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 11.95	Amps 27.0	Ohms .44		

Remarks: Drilled 300', logged 303', Driller said damp at 25' + 90'. Set 30' of casing (1 bx.) installed 300' of 1" PVC vent pipe, perforated bottom 200'

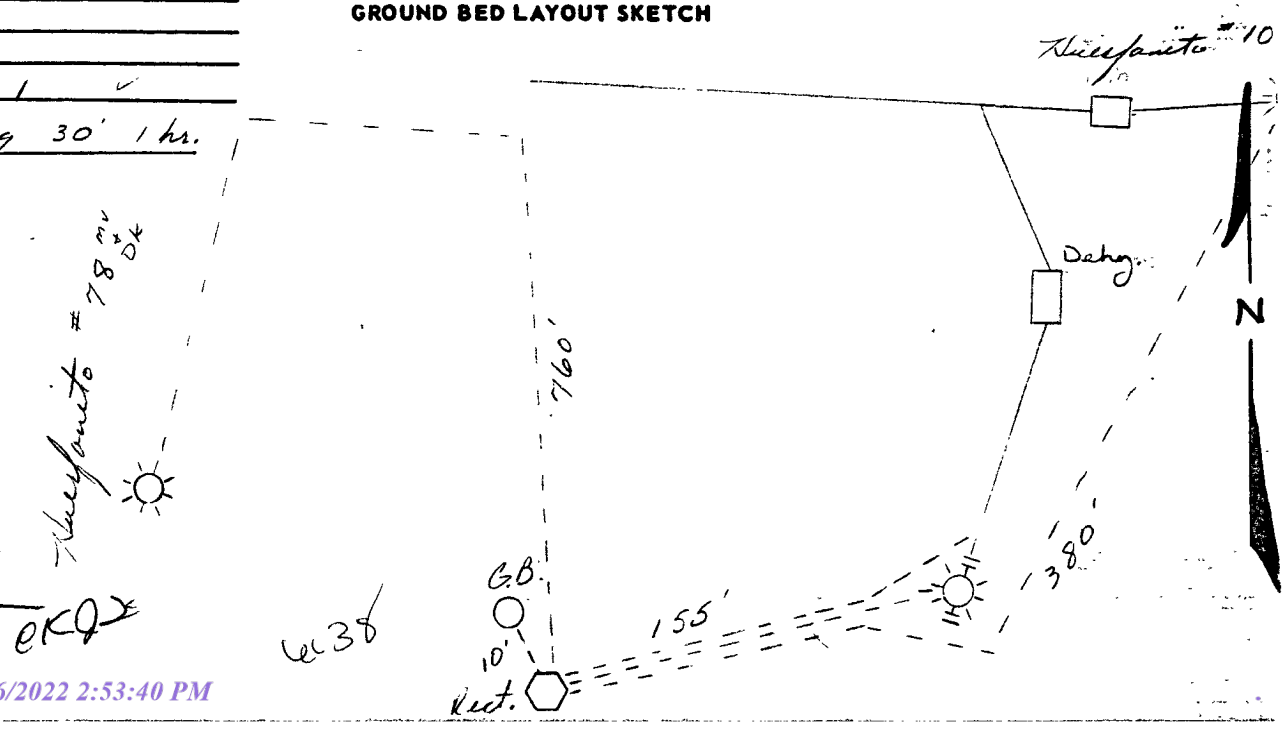
Rectifier Size: 60 V 30 A
Addn'l Depth
Depth Credit: 197' 3.75
Extra Cable: 360' .20
Ditch & 1 Cable: 1150' .10
25' Meter Pole: 1 ✓
20' Meter Pole:
10' Stub Pole:
Junction Box: 1 ✓

Surface Casing 30' 1 hr.

All Construction Completed

Tyler A. Elmstead
(Signature)

GROUND BED LAYOUT SKETCH



3,870.00 ✓
789.00 ✓
- 738.75 ✓
72.00 ✓
805.00 ✓
333.75 ✓
237.00 ✓
138.00 ✓
5506.00 ✓
275.30 ✓
5,781.30 EKQ

D. CIASS DRILLING CO.

Drill No. 3 2159

DRILLER'S WELL LOG

S. P. No. Huerfanito #151 Date 6-27-89

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	30	SAND ~
30	80	Shale
80	100	SANDstone ~
100	260	Shale
260	280	SANDstone
280	300	Shale

Mud Bran Lime

Rock Bit Number Make

Remarks: Water DAMP @ 25' & 90'

30' CASING 1 Hr.

Driller Lonnie Braun

ENSOLUM

APPENDIX C

Photographic Documentation

SITE PHOTOGRAPHS

Enterprise Field Services, LLC
Closure Report
Lateral C-14 (10/10/20)
Ensolum Project No. 05A1226121

ENSOLUM

Photograph 1 Photograph Description: View of the excavation.	
Photograph 2 Photograph Description: View of the stockpiled soils.	
Photograph 3 Photograph Description: View of the excavation after initial restoration.	

ENSOLUM

APPENDIX D

Regulatory Correspondence

From: Long, Thomas
To: "Smith, Cory, EMNRD"; Steve Austin
Cc: Stone, Brian
Subject: RE: Lateral C-14 - UL C Section 25 T27N R9W; 36.552796, -107.741504
Date: Thursday, November 5, 2020 8:53:00 AM
Attachments: Lateral C-14.pdf
Lat C-14 Site map.jpg

Cory/Steve,

Please find the attached site sketch and lab report for the Lateral C-14 excavation. All sample results are below NMOCD Tier I standards. Entperise will backfill the excavation with the stockpile soils. If you have any question, 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

Enterprise Products

From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Tuesday, November 3, 2020 10:31 AM
To: Long, Thomas <tjlong@eprod.com>; Steve Austin <nnepawq@frontiernet.net>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXTERNAL] RE: Lateral C-14 - UL C Section 25 T27N R9W; 36.552796, -107.741504

[Use caution with links/attachments]
Tom,

OCD is ok with the proposed sampling schedule so long as the Land owner also gives you their approval.

Please follow the sampling size constituents of 19.15.29 NMAC

OCD approval does not relieve Enterprise of any other requirements imposed by other regulatory agencies.

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

Cory Smith

Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas <tjlong@eprod.com>
Sent: Tuesday, November 3, 2020 10:10 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Steve Austin <nnepawq@frontiernet.net>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXT] FW: Lateral C-14 - UL C Section 25 T27N R9W; 36.552796, -107.741504

Cory/Steve,

This email is a follow up to our phone conversation earlier this morning. Enterprise has completed the remediation at the Lateral C-14 release site. As discussed earlier, Entperise will proceed with collecting final closure samples from excavation today. If you have any questions, please call or email.

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

From: Long, Thomas
Sent: Tuesday, October 27, 2020 12:36 PM
To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>; Steve Austin <nnepawq@frontiernet.net>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: FW: Lateral C-14 - UL C Section 25 T27N R9W; 36.552796, -107.741504

Cory/Steve,

This email is to notify you that Enterprise has postponed the remediation activities for the Latera C-14 release until next week due to adverse weather/road conditions. I will keep you informed as to when we resume activities. If you have any questions, please call or email.

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

From: Long, Thomas
Sent: Monday, October 26, 2020 7:35 AM
To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>; Steve Austin <nnepawq@frontiernet.net>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: FW: Lateral C-14 - UL C Section 25 T27N R9W; 36.552796, -107.741504

Cory/Steve,

This email is to notify you that Entperise will be begin the repairs and remediation today (weather permitting) for the Lateral C-14 release. I will keep you when we will be ready to collect soil samples for laboratory analysis. If you have any questions, please call or email.

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

From: Long, Thomas
Sent: Tuesday, October 13, 2020 7:19 AM
To: 'Smith, Cory, EMNRD' <Cory.Smith@state.nm.us>; Steve Austin <nnepawq@frontiernet.net>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: RE: Lateral C-14 - UL C Section 25 T27N R9W; 36.552796, -107.741504

Cory,

There were no fires, injuries nor was EMS called.

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

Enterprise Products

From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Tuesday, October 13, 2020 7:03 AM
To: Long, Thomas <tjlong@eprod.com>; Steve Austin <nnepawq@frontiernet.net>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXTERNAL] RE: Lateral C-14 - UL C Section 25 T27N R9W; 36.552796, -107.741504

[Use caution with links/attachments]
Tom,

Per our phone conversation there were no injuries, fires or EMS called correct?

Thank you for the notification.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas <tjlong@eprod.com>
Sent: Saturday, October 10, 2020 5:20 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Steve Austin <nnepawq@frontiernet.net>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXT] Lateral C-14 - UL C Section 25 T27N R9W; 36.552796, -107.741504

Cory/Steve,

This email is a notification that Enterprise had a release of natural gas and natural gas liquids on the Lateral C-14 pipeline today at approximately 2:00 p.m. The release is located in an ephemeral wash (blue line on a USGS topo). An area of approximately three feet in diameter was stained by the released fluids. There are no standing liquids. The pipeline has been isolated, depressurized, locked and tagged out. The release is located at UL C Section 25 T27N R9W; 36.552796, -107.741504. I will keep you informed as to when the remediation activities will be scheduled. 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

ENSOLUM

APPENDIX E

Table 1 – Soil Analytical Summary

ENSOLUM

TABLE 1
Lateral C-14 (10/10/20)
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample Depth (Feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO/MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria (Tier I)				**10**	**NE**	**NE**	**NE**	**50**				**100**	**600**
Composite Soil Sample Collected from Stockpiled Soil													
SP-1	11.03.20	C	Stockpile	<0.020	<0.040	<0.040	<0.079	ND	<4.0	<9.4	<47	ND	350
Excavation Composite Soil Samples													
S-1	11.03.20	C	0 to 3	<0.018	<0.036	<0.036	<0.071	ND	<3.6	<9.4	<47	ND	110
S-2	11.03.20	C	0 to 3	<0.019	<0.039	<0.039	<0.077	ND	<3.9	<8.6	<43	ND	150

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

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

NA = Not Analyzed

NE = Not established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPH = Total Petroleum Hydrocarbon

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics

ENSOLUM

APPENDIX F

Laboratory Data Sheets & Chain of Custody Documentation

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

November 06, 2020

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

RE: Lateral C 14 OrderNo.: 2011145

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 3 sample(s) on 11/4/2020 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2011145**
Date Reported: **11/6/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-1
Project: Lateral C 14 **Collection Date:** 11/3/2020 8:30:00 AM
Lab ID: 2011145-001 **Matrix:** SOIL **Received Date:** 11/4/2020 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	110	60		mg/Kg	20	11/4/2020 12:49:18 PM	56197
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	11/4/2020 1:01:03 PM	56194
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/4/2020 1:01:03 PM	56194
Surr: DNOP	104	30.4-154		%Rec	1	11/4/2020 1:01:03 PM	56194
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	11/4/2020 10:53:22 AM	56173
Surr: BFB	92.5	75.3-105		%Rec	1	11/4/2020 10:53:22 AM	56173
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	11/4/2020 10:53:22 AM	56173
Toluene	ND	0.036		mg/Kg	1	11/4/2020 10:53:22 AM	56173
Ethylbenzene	ND	0.036		mg/Kg	1	11/4/2020 10:53:22 AM	56173
Xylenes, Total	ND	0.071		mg/Kg	1	11/4/2020 10:53:22 AM	56173
Surr: 4-Bromofluorobenzene	94.8	80-120		%Rec	1	11/4/2020 10:53:22 AM	56173

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

Qualifiers:

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

Analytical Report
Lab Order **2011145**
Date Reported: **11/6/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-2
Project: Lateral C 14
Collection Date: 11/3/2020 8:35:00 AM
Lab ID: 2011145-002 **Matrix:** SOIL **Received Date:** 11/4/2020 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	150	60		mg/Kg	20	11/4/2020 1:01:42 PM	56197
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	8.6		mg/Kg	1	11/4/2020 1:00:30 PM	56194
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	11/4/2020 1:00:30 PM	56194
Surr: DNOP	97.5	30.4-154		%Rec	1	11/4/2020 1:00:30 PM	56194
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	11/4/2020 11:17:03 AM	56173
Surr: BFB	93.7	75.3-105		%Rec	1	11/4/2020 11:17:03 AM	56173
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	11/4/2020 11:17:03 AM	56173
Toluene	ND	0.039		mg/Kg	1	11/4/2020 11:17:03 AM	56173
Ethylbenzene	ND	0.039		mg/Kg	1	11/4/2020 11:17:03 AM	56173
Xylenes, Total	ND	0.077		mg/Kg	1	11/4/2020 11:17:03 AM	56173
Surr: 4-Bromofluorobenzene	96.8	80-120		%Rec	1	11/4/2020 11:17:03 AM	56173

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

Qualifiers:

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

Analytical Report
Lab Order **2011145**
Date Reported: **11/6/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SP-1
Project: Lateral C 14
Collection Date: 11/3/2020 8:40:00 AM
Lab ID: 2011145-003 **Matrix:** SOIL **Received Date:** 11/4/2020 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	350	60		mg/Kg	20	11/4/2020 1:14:06 PM	56197
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	11/4/2020 12:36:12 PM	56194
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/4/2020 12:36:12 PM	56194
Surr: DNOP	104	30.4-154		%Rec	1	11/4/2020 12:36:12 PM	56194
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	11/4/2020 11:40:37 AM	56173
Surr: BFB	94.4	75.3-105		%Rec	1	11/4/2020 11:40:37 AM	56173
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.020		mg/Kg	1	11/4/2020 11:40:37 AM	56173
Toluene	ND	0.040		mg/Kg	1	11/4/2020 11:40:37 AM	56173
Ethylbenzene	ND	0.040		mg/Kg	1	11/4/2020 11:40:37 AM	56173
Xylenes, Total	ND	0.079		mg/Kg	1	11/4/2020 11:40:37 AM	56173
Surr: 4-Bromofluorobenzene	97.4	80-120		%Rec	1	11/4/2020 11:40:37 AM	56173

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2011145**

06-Nov-20

Client: ENSOLUM

Project: Lateral C 14

Sample ID: **MB-56197** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **56197** RunNo: **73148**

Prep Date: **11/4/2020** Analysis Date: **11/4/2020** SeqNo: **2572599** Units: **mg/Kg**

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

Sample ID: **LCS-56197** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **56197** RunNo: **73148**

Prep Date: **11/4/2020** Analysis Date: **11/4/2020** SeqNo: **2572600** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.6	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2011145**

06-Nov-20

Client: ENSOLUM

Project: Lateral C 14

Sample ID: **MB-56194**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **56194**	RunNo: **73122**
Prep Date: **11/4/2020**	Analysis Date: **11/4/2020**	SeqNo: **2571200** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.9		10.00		88.7	30.4	154			

Sample ID: **LCS-56194**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **56194**	RunNo: **73122**
Prep Date: **11/4/2020**	Analysis Date: **11/4/2020**	SeqNo: **2571201** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	89.6	70	130			
Surr: DNOP	4.2		5.000		83.6	30.4	154			

Qualifiers:

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H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2011145**

06-Nov-20

Client: ENSOLUM

Project: Lateral C 14

Sample ID: **mb-56173**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **56173**	RunNo: **73115**
Prep Date: **11/3/2020**	Analysis Date: **11/4/2020**	SeqNo: **2571725** 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	950		1000		95.0	75.3	105			

Sample ID: **lcs-56173**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **56173**	RunNo: **73115**
Prep Date: **11/3/2020**	Analysis Date: **11/4/2020**	SeqNo: **2571726** 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	89.0	72.5	106			
Surr: BFB	1100		1000		106	75.3	105			S

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2011145**

06-Nov-20

Client: ENSOLUM

Project: Lateral C 14

Sample ID: **mb-56173** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **56173** RunNo: **73115**

Prep Date: **11/3/2020** Analysis Date: **11/4/2020** SeqNo: **2571769** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.97		1.000		96.6	80	120			

Sample ID: **LCS-56173** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **56173** RunNo: **73115**

Prep Date: **11/3/2020** Analysis Date: **11/4/2020** SeqNo: **2571770** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	87.6	80	120			
Toluene	0.94	0.050	1.000	0	94.1	80	120			
Ethylbenzene	0.95	0.050	1.000	0	94.6	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.6	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **ENSOLUM** Work Order Number: **2011145** RcptNo: 1

Received By: **Juan Rojas** **11/4/2020 8:15:00 AM**

Completed By: **Emily Mocho** **11/4/2020 8:24:14 AM**

Reviewed By: DAD 11/4/20

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° 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 11/4/20

Special Handling (if applicable)

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

Person Notified: Date:

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

Regarding:

Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.4	Good	Yes			

Chain-of-Custody Record

Client: Ensolum

Mailing Address: 606 S Rio Grande Suite A 87410

Phone #:

email or Fax#:

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

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

Turn-Around Time: 100% Same Day
☐ Standard ☑ Rush 11-4-20

Project Name: Lateral C-14

Project #:

Project Manager: K Summers

Sampler: C DAponte

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 0.4-0=6.4 (°C)

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. 2011145	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)
11-3	830	S	S-1	1 4oz Jar	Cool	001	X	X					X			
11-3	835	S	S-2	1 4oz Jar	Cool	002	X	X					X			
11-3	846	S	SP-1	1 4oz Jar	Cool	003	X	X					X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11/3/20	1021		Christen Watts		11/3/2020	1021
11/3/20	1819	Christen Watts		courier	11/4/20	8:15

Remarks: PM - Tom Long
Pay Key - RB212020
AFE # N49571
Same Day

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

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

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

CONDITIONS

Operator:	OGRID:
Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	241602
	Action Number: 19653
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	4/26/2022