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)*: **NAPP2109046512**
Contact mailing address: **614 Reilly Ave, Farmington, NM 87401**	

Location of Release Source

Latitude **36.468474** Longitude **-108.030673** *(NAD 83 in decimal degrees to 5 decimal places)*

Site Name **Blackrock D#1E**	Site Type **Natural Gas Meter Tube**
Date Release Discovered: : **3/31/2021**	Serial Number *(if applicable)*: **N/A**

Unit Letter	Section	Township	Range	County
N	**20**	**26N**	**11W**	**San Juan**

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

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): **5 Barrels**	Volume Recovered (bbls): **None**
☒ Natural Gas	Volume Released (Mcf): **5.9 MCF**	Volume Recovered (Mcf): **None**
☐ Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

Cause of Release On March 31, 2021, Enterprise had a release of natural gas and condensate from the Blackrock D#1E meter tube. The release was a result of a frozen orifice plate. An area of approximately 25 feet long by 10 feet wide was impacted by the released fluids. No washes/waterways were affected. No residences were affected. Remediation activities were completed on April 1, 2021. The final excavation dimensions measured approximately 17 feet long by 15 feet wide by 3.25 feet deep. Approximately 96 cubic yards of hydrocarbon impacted soil was excavated and transported to a New Mexico Oil Conservation Division (NMOCD) approved land farm. A third party closure report is included with this "Final." C-141.

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

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

Signature: Jon E. Fields Date: 9/28/2021

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: 03/04/2022

Printed Name: Nelson Velez Title: Environmental Specialist – Adv

ENSOLUM

CLOSURE REPORT

Property:

Blackrock D#1E
SW ¼, S20 T26N R11W
San Juan County, New Mexico

NM EMNRD OCD Incident ID No. NAPP2109046512

May 18, 2021
Ensolum Project No. 05A1226143

Prepared for:

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

Prepared by:

Chad D'Aponti
Field Environmental Scientist

Landon Daniell
Staff Geologist

Kyle Summers, CPG
Sr. Project Manager

Table of Contents

LIST OF APPENDICES

ENSOLUM

CLOSURE REPORT

Blackrock D#1E
SW ¼, S20 T26N R11W
San Juan County, New Mexico

Ensolum Project No. 05A1226143

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Blackrock D#1E (Site)
Incident ID	NAPP2109046512
Location:	36.468474° North, 108.030673° West Southwest (SW) ¼ of Section 20, Township 26 North, Range 11 West San Juan County, New Mexico
Property:	Navajo Nation
Regulatory:	Navajo Nation Environmental Protection Agency (NNEPA) and the New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On March 15, 2021, Enterprise personnel discovered a release of pipeline liquids from a blown orifice gasket on the Blackrock D#1E meter run. Enterprise subsequently isolated, locked the meter out of service, and repaired the valve. On March 31, 2021, Enterprise initiated activities to 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 information provided by Enterprise, the general site characteristics, and information available from the New Mexico Office of the State Engineer (OSE) and the New Mexico EMNRD OCD imaging database to determine the appropriate closure criteria for the Site. 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 (**Figure A**, **Appendix B**). One (1) POD (SJ-01626) was identified in the adjacent Public Land Survey System (PLSS) section. The records for POD SJ-01626, located approximately 1.6 miles northeast and at a higher elevation (6,264 feet) than the Site (6,157 feet), indicate an approximate depth to water of 200 feet below grade surface (bgs) (**Figure A**, **Appendix B**).

- No cathodic protection wells were identified within one (1) mile of the Site or in adjacent PLSS sections (**Figure B**, **Appendix B**). The closest cathodic protection well (associated with the Montcrief Com #1E productions well) is located approximately two (2) miles northeast of the Site and at a higher elevation (6,285 feet, based on the well record) than the Site (**Figure B**, **Appendix B**). The record for this cathodic well indicates a depth to water of approximately 100 feet bgs.

- The Site is not located within 300 feet of a New Mexico EMNRD OCD-defined continuously flowing watercourse or significant watercourse. The nearest significant watercourse, located approximately 1,500 feet to the south, is Gallegos Canyon Wash (**Figure C**, **Appendix B**).

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

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

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

- No fresh water wells or springs were identified within 1,000 feet of the Site (**Figure E**, **Appendix B**).

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

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

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

- The Site is not located within an unstable area.

- Based on information 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 the estimated depth to water is greater than 100 feet. However, the soil requirements of NMAC 19.15.29.13(D)(1) indicate that a minimum of the upper four (4) feet must contain "uncontaminated" soil and that the soils meet Tier I closure criteria listed in Table 1 of NMAC 19.15.29.12. The applicable closure criteria for soils at the Site (at which all impact was less than four feet bgs) includes the following:

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

[1] – Constituent concentrations are in milligrams per kilograms (mg/kg).
[2] – Total Petroleum Hydrocarbons (TPH). Gasoline Range Organics (GRO). Diesel Range Organics (DRO). Motor Oil/Lube Oil Range Organics (MRO).
[3] – Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX).

3.0 SOIL REMEDIATION ACTIVITIES

On March 31, 2021, Enterprise initiated activities to remediate petroleum hydrocarbon impact. During the remediation and corrective action activities, OFT Construction Inc., provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The meter house, meter, and above-grade piping were temporarily dismantled and removed to allow access to the impacted soils. The final excavation measured approximately 17 feet long and 15 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 3.5 feet bgs. The lithology encountered during the completion of remediation activities consisted primarily of unconsolidated silty sand.

Approximately 96 cubic yards of petroleum hydrocarbon affected soils was transported to the Envirotech, Inc., (Envirotech) landfarm near Hilltop, New Mexico for disposal/remediation. The executed C-138 solid waste acceptance form is provided in **Appendix C**. The excavation was backfilled with imported fill and then contoured to the surrounding grade, and the meter run was reassembled and placed back into service.

The map in **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 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 four (4) composite soil samples (S-1 through S-4) from the excavation for laboratory analysis. The composite samples were comprised of five (5) aliquots each and represent an estimated 200 square foot sample area per guidelines outlined in Section D of 19.15.29.12 NMAC. A clean shovel was utilized to obtain fresh aliquots from each area of the excavation. The regulatory notification and documentation are provided in **Appendix E**.

On April 1, 2021, composite soil samples S-1 (3.5') and S-2 (3.5') were collected from the floor of excavation. Composite soil samples S-3 (0'-3.5') and S-4 (0'-3.5) were collected from the walls of the excavation.

All soil samples were placed in laboratory prepared glassware. The containers were labeled and sealed using the laboratory supplied labels and custody seals and were stored on ice in a cooler. The samples

were relinquished to the courier for Hall Environmental Analysis Laboratory of Albuquerque, New Mexico, under proper chain-of-custody procedures.

5.0 SOIL LABORATORY ANALYTICAL METHODS

The composite soil samples 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** in **Appendix F**. The laboratory data sheets and executed chain-of-custody forms are provided in **Appendix G**.

6.0 DATA EVALUATION

Ensolum compared the BTEX, TPH, and chloride laboratory analytical results or laboratory practical quantitation limits (PQLs) / reporting limits (RLs) associated with the composite soil samples (S-1 through S-4) 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 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 is not present at concentrations greater than the laboratory PQLs/RLs, 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 F**).

7.0 RECLAMATION AND REVEGETATION

The excavation was backfilled with imported soil and then contoured to surrounding grade. The area near the meter run is a driving area.

8.0 FINDINGS AND RECOMMENDATION

- Four (4) composite soil samples were collected from the excavation. 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 96 cubic yards of petroleum hydrocarbon impacted soil was transported to the Envirotech landfarm for disposal/remediation. The excavation was backfilled with imported fill and then contoured to the 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.

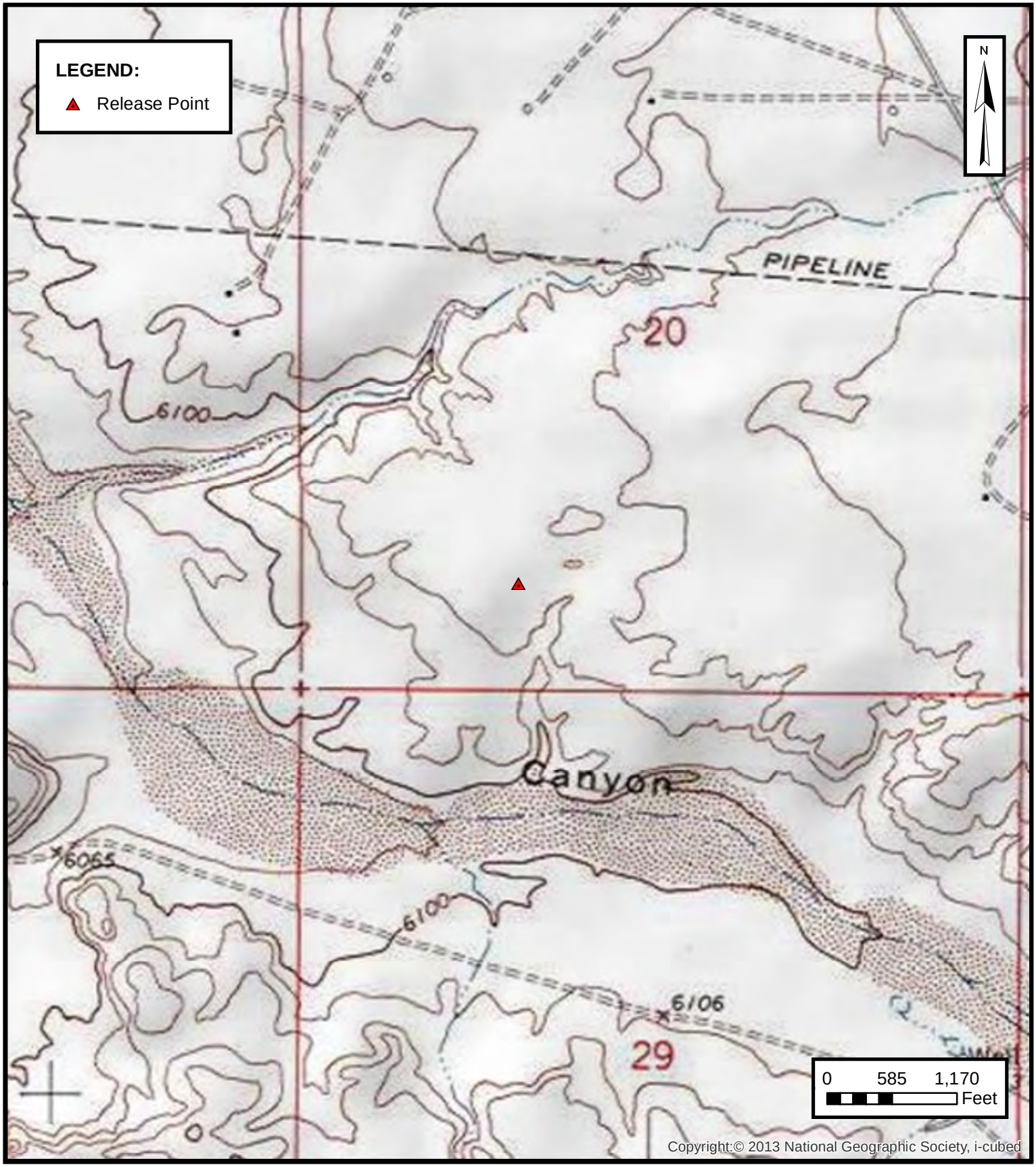
9.3 Reliance

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

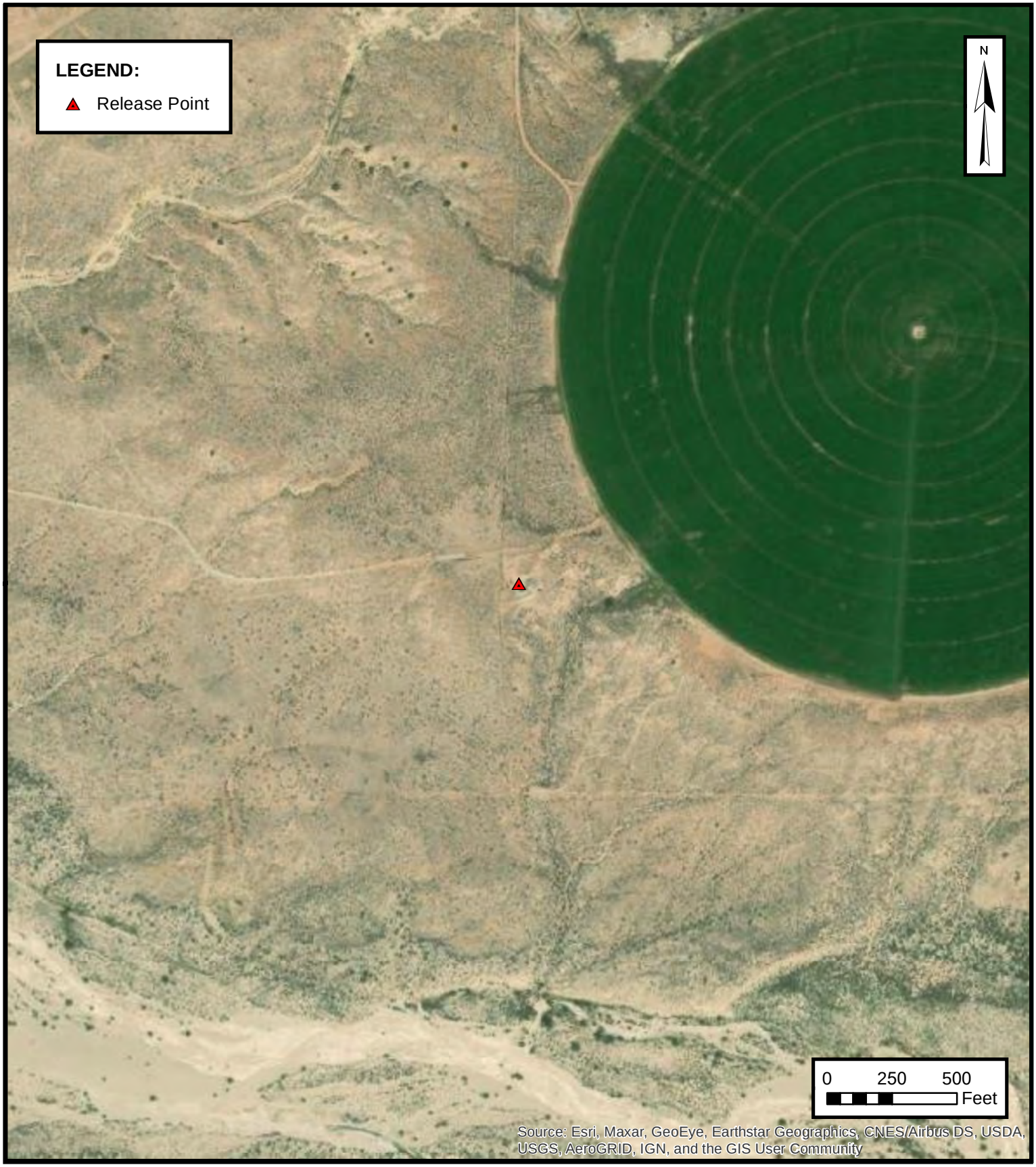
TOPOGRAPHIC MAP

ENTERPRISE FIELD SERVICES, LLC
BLACKROCK D#1E
SW ¼, S20 T26N R11W, San Juan County, New Mexico
36.468474° N, 108.030673° W

PROJECT NUMBER: 05A1226143

FIGURE

1



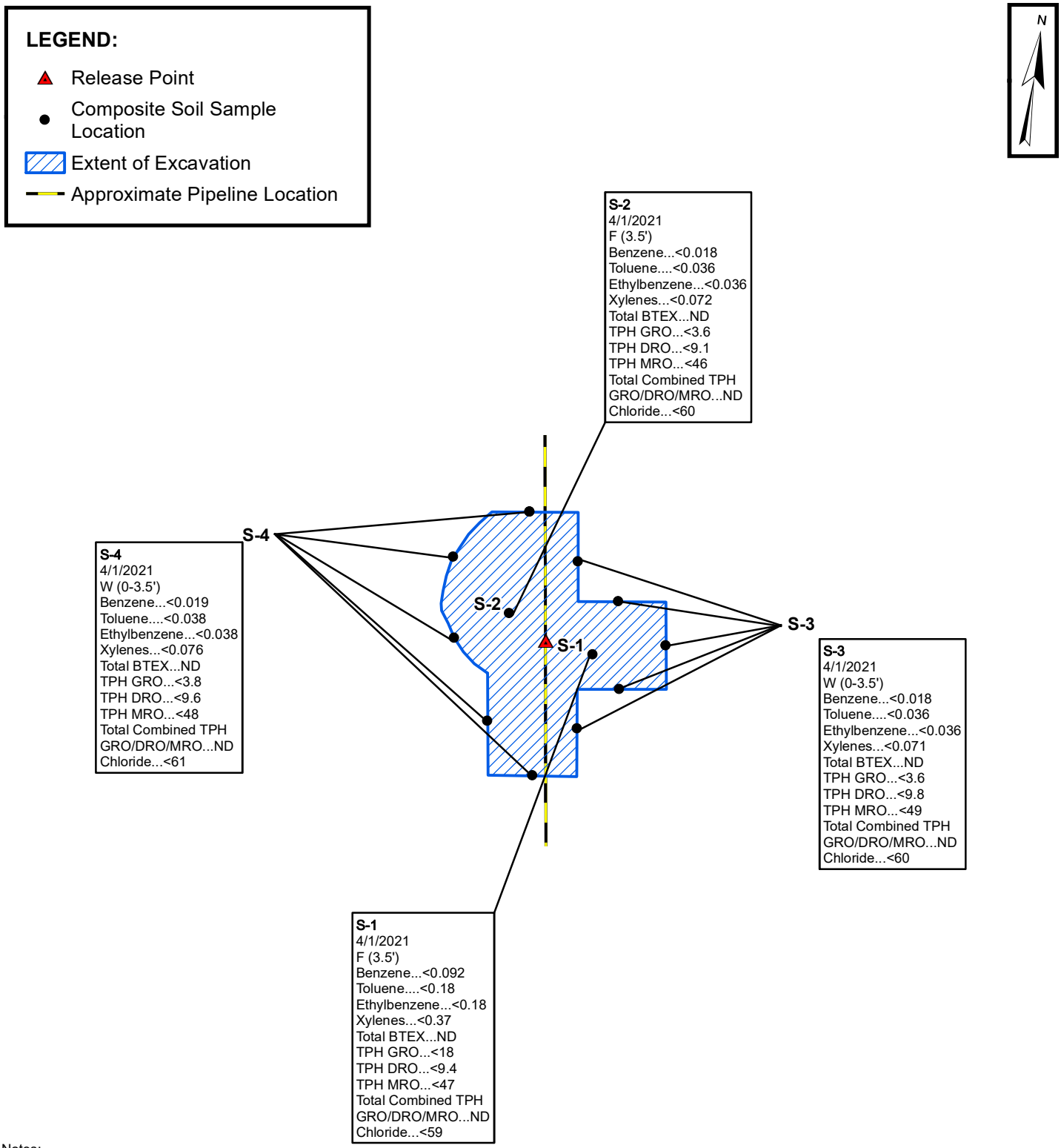
ENSOLUM
Environmental & Hydrogeologic Consultants

SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC
BLACKROCK D#1E
SW ¼, S20 T26N R11W, San Juan County, New Mexico
36.468474° N, 108.030673° W

PROJECT NUMBER: 05A1226143

FIGURE
2



Notes:
All concentrations are in mg/kg.

All depths are listed in feet bgs.

ENSOLUM
Environmental & Hydrogeologic Consultants

SITE MAP

ENTERPRISE FIELD SERVICES, LLC
BLACKROCK D#1E
SW ¼, S20 T26N R11W, San Juan County, New Mexico
36.468474° N, 108.030673° W

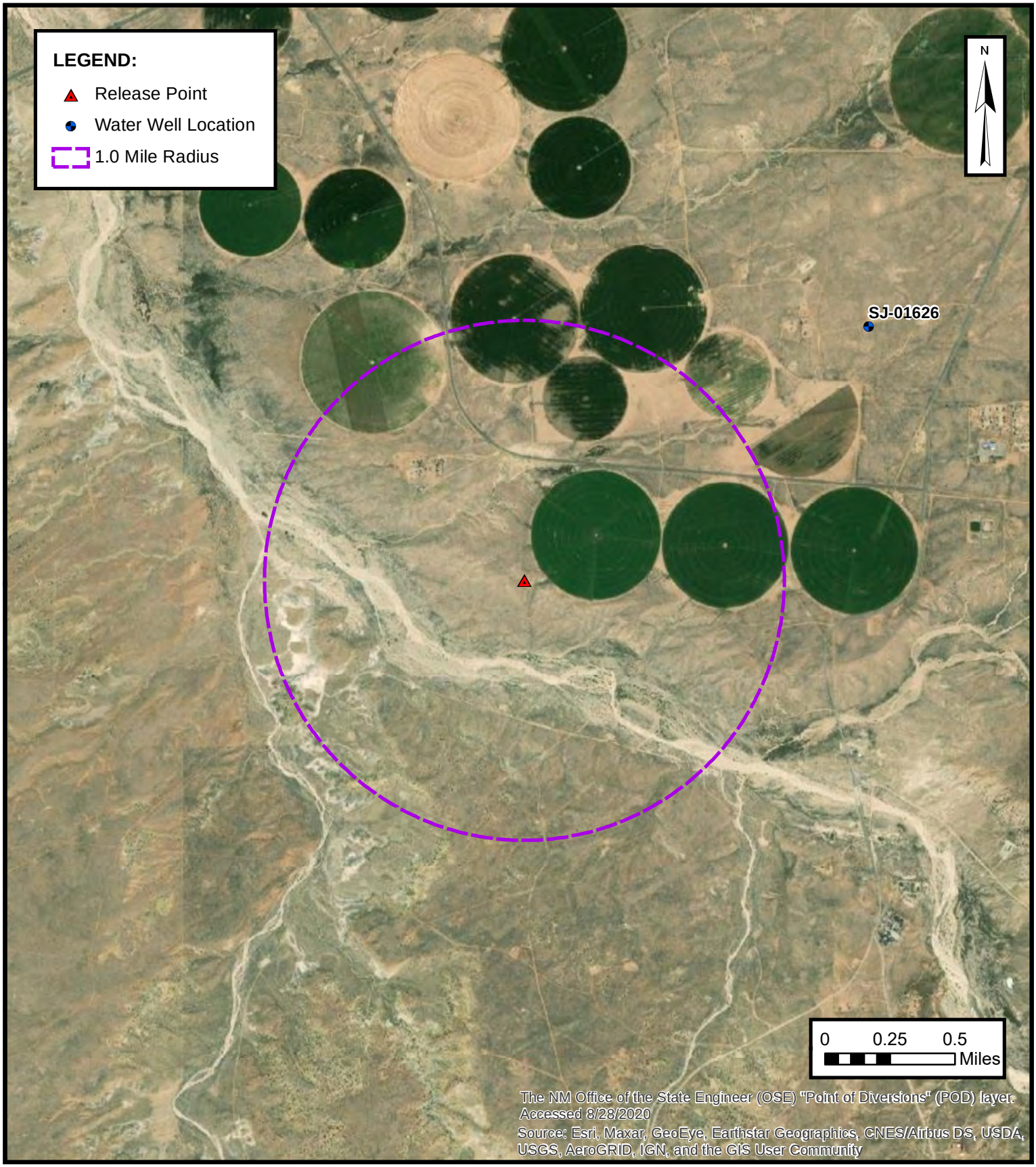
PROJECT NUMBER: 05A1226143

FIGURE
3

ENSOLUM

APPENDIX B

Siting Figures and Documentation



ENSOLUM
Environmental & Hydrogeologic Consultants

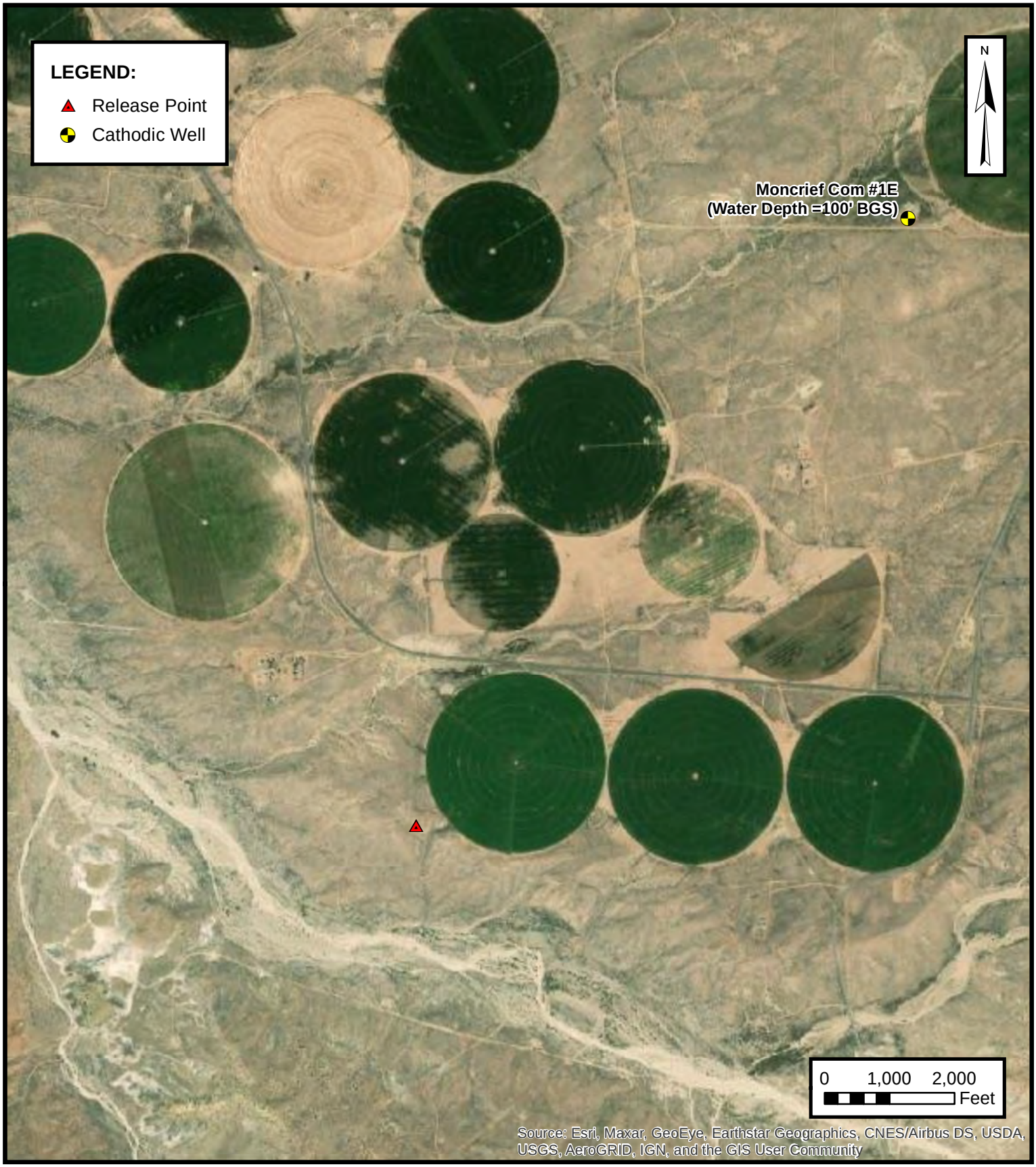
1.0 MILE RADIUS WATER WELL MAP

ENTERPRISE FIELD SERVICES, LLC
BLACKROCK D#1E
SW ¼, S20 T26N R11W, San Juan County, New Mexico
36.468474° N, 108.030673° W

PROJECT NUMBER: 05A1226143

FIGURE

A



ENSOLUM
Environmental & Hydrogeologic Consultants

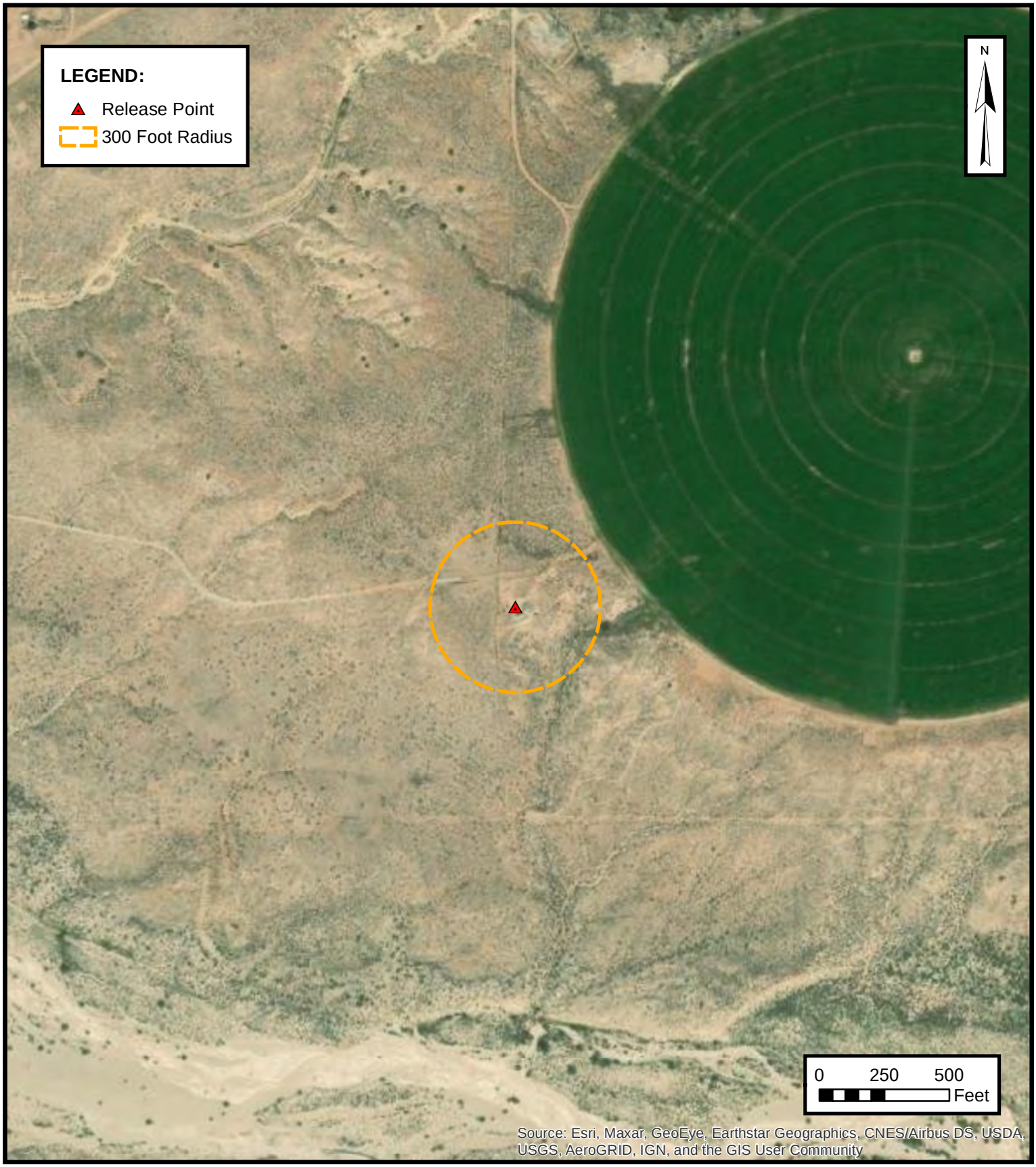
CATHODIC PROTECTION WELL RECORDED DEPTH TO WATER

ENTERPRISE FIELD SERVICES, LLC
BLACKROCK D#1E
SW ¼, S20 T26N R11W, San Juan County, New Mexico
36.468474° N, 108.030673° W

PROJECT NUMBER: 05A1226143

FIGURE

B

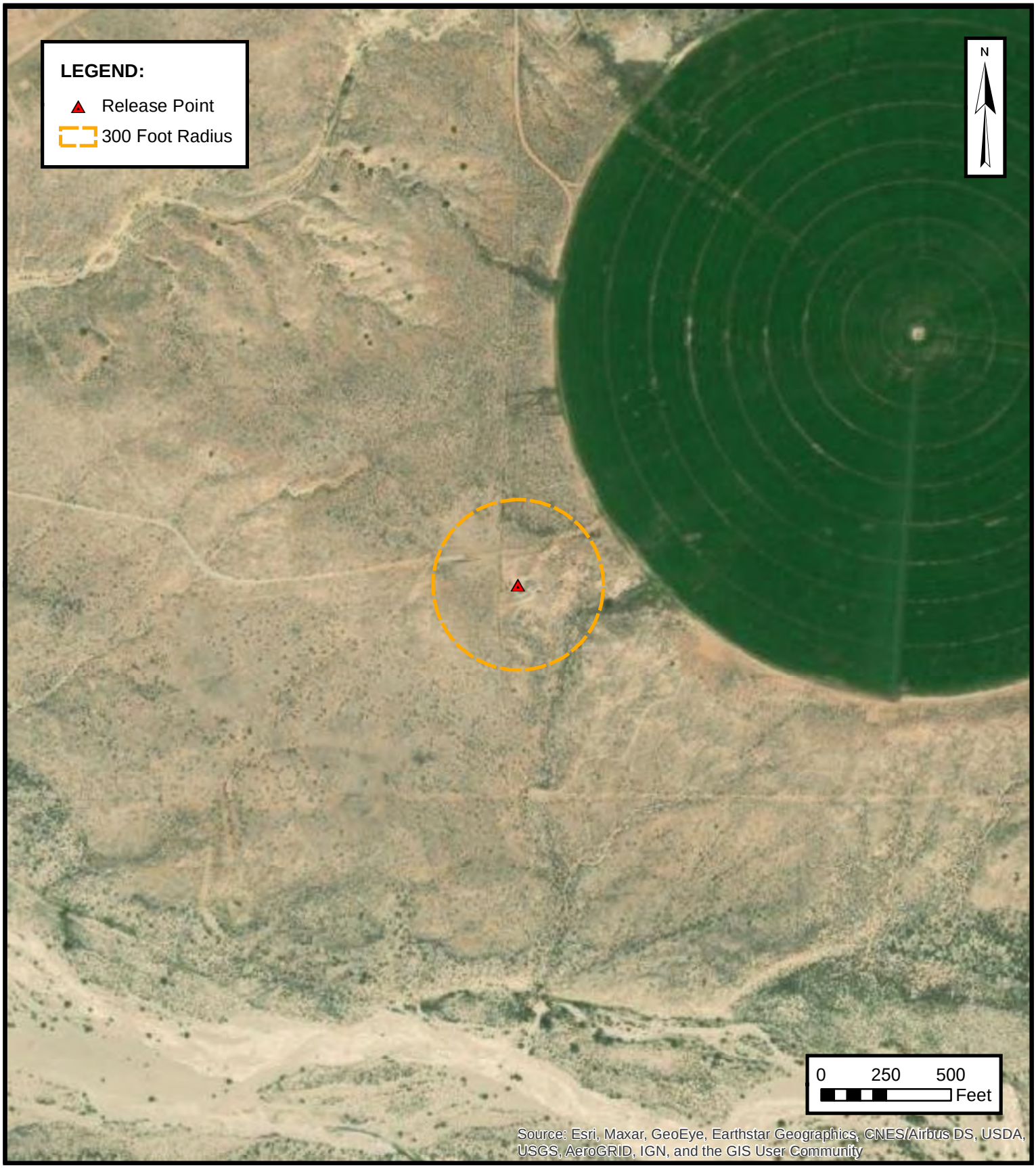


ENSOLUM
Environmental & Hydrogeologic Consultants

300 FOOT RADIUS
WATERCOURSE AND DRAINAGE IDENTIFICATION
ENTERPRISE FIELD SERVICES, LLC
BLACKROCK D#1E
SW ¼, S20 T26N R11W, San Juan County, New Mexico
36.468474° N, 108.030673° W

PROJECT NUMBER: 05A1226143

FIGURE
C

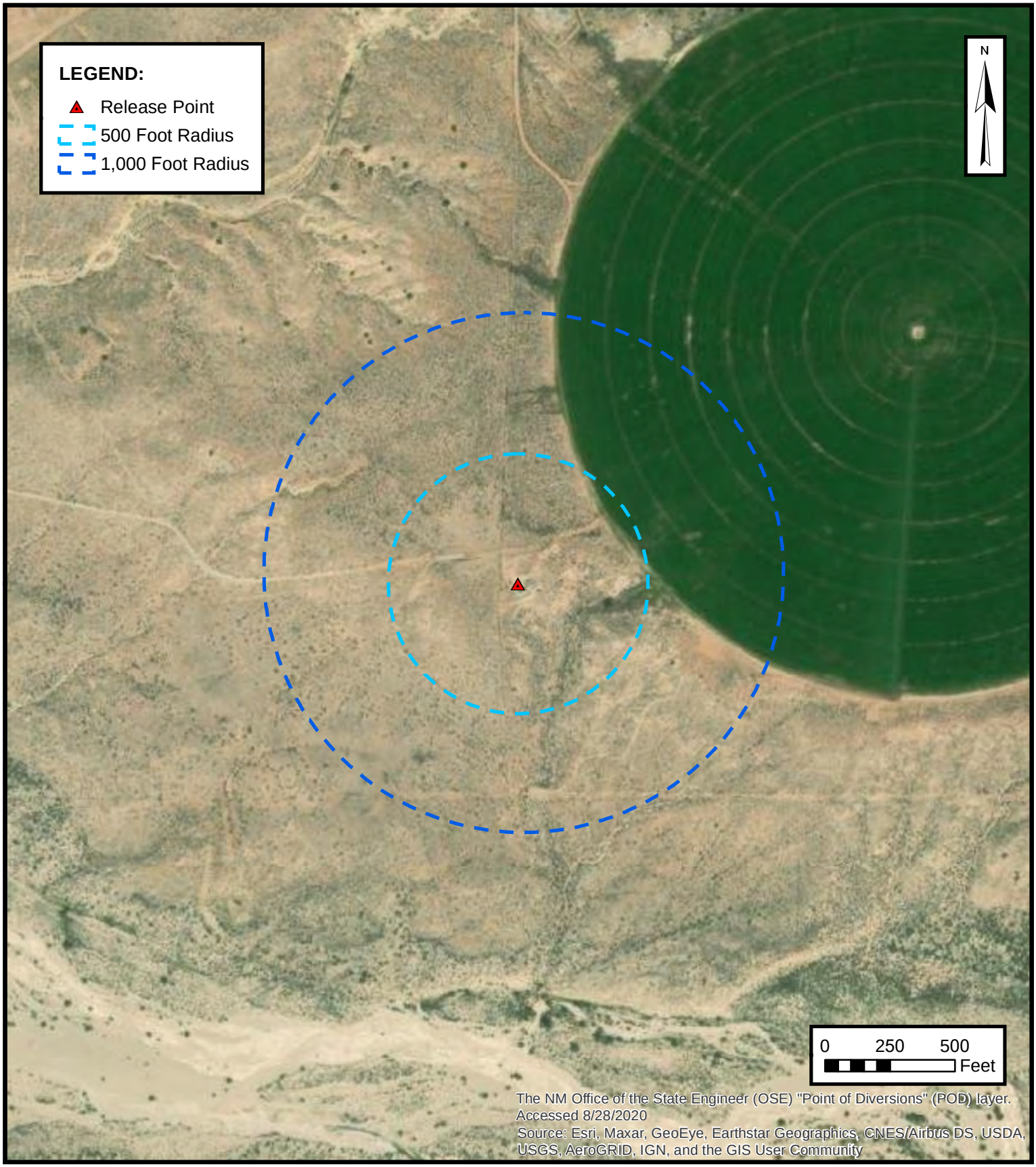


ENSOLUM
Environmental & Hydrogeologic Consultants

300 FOOT RADIUS
OCCUPIED STRUCTURE IDENTIFICATION
ENTERPRISE FIELD SERVICES, LLC
BLACKROCK D#1E
SW ¼, S20 T26N R11W, San Juan County, New Mexico
36.468474° N, 108.030673° W

PROJECT NUMBER: 05A1226143

FIGURE
D



ENSOLUM
Environmental & Hydrogeologic Consultants

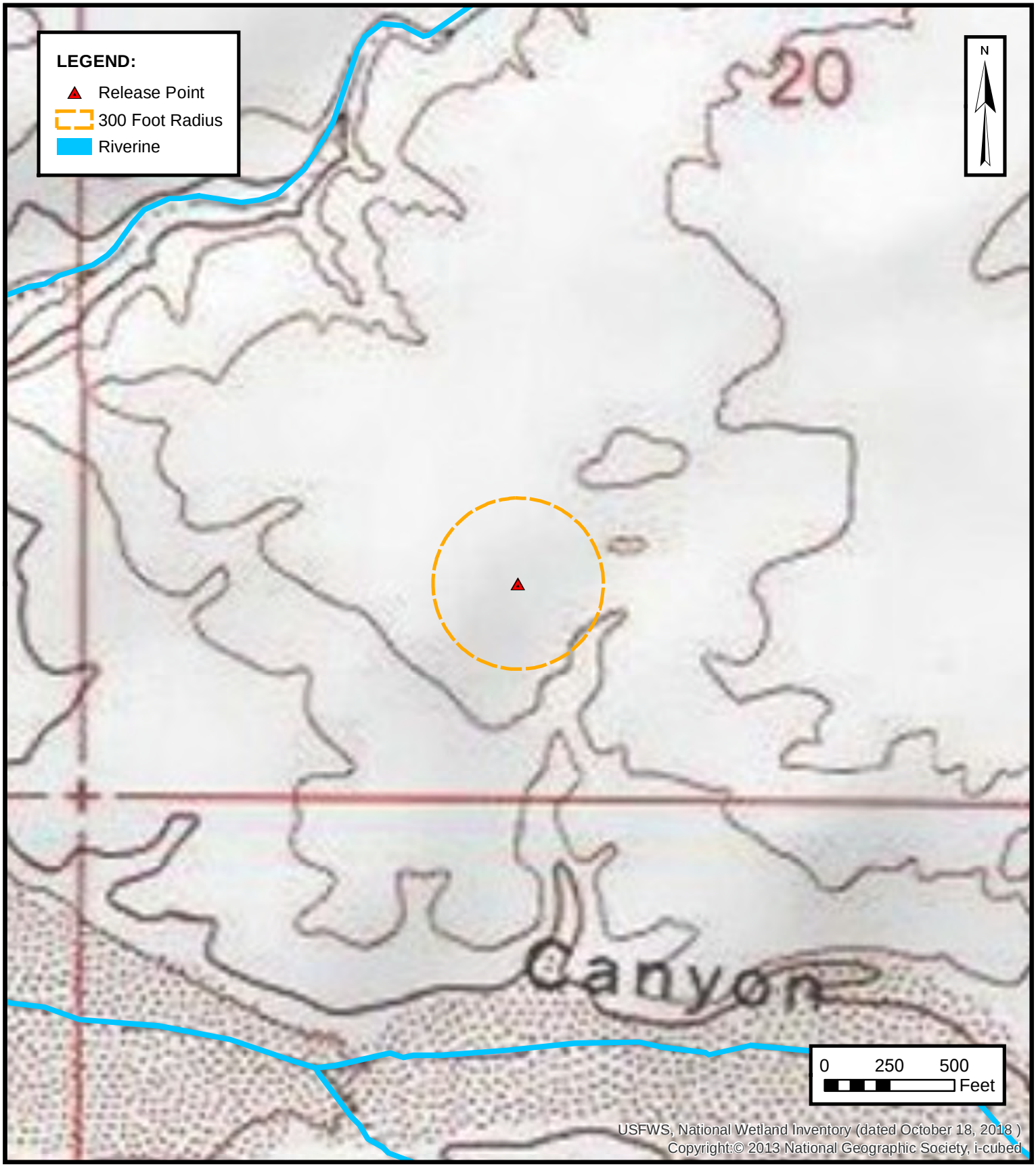
WATER WELL AND NATURAL SPRING LOCATION

ENTERPRISE FIELD SERVICES, LLC
BLACKROCK D#1E
SW ¼, S20 T26N R11W, San Juan County, New Mexico
36.468474° N, 108.030673° W

PROJECT NUMBER: 05A1226143

FIGURE

E



ENSOLUM
Environmental & Hydrogeologic Consultants

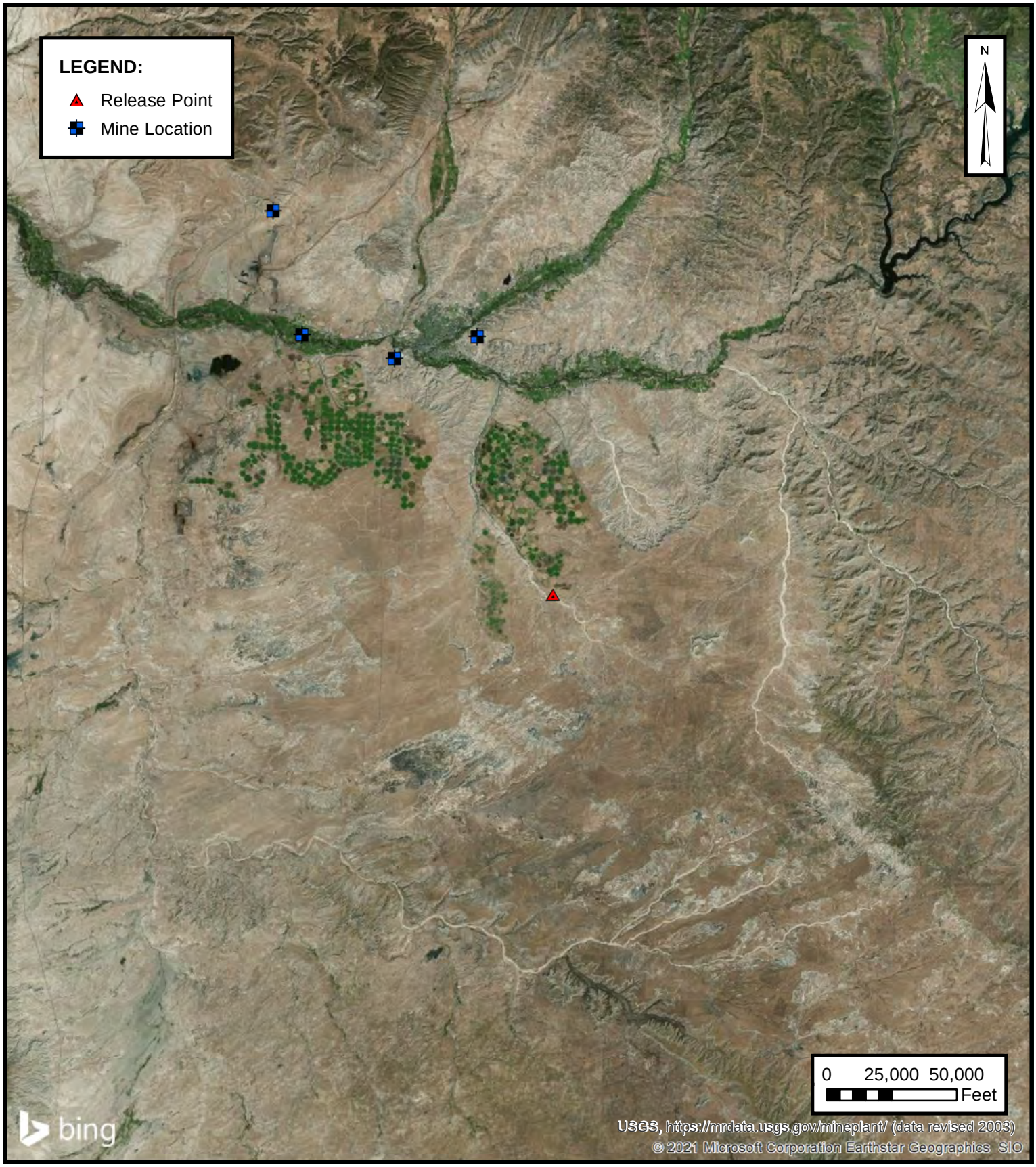
WETLANDS

ENTERPRISE FIELD SERVICES, LLC
BLACKROCK D#1E
SW ¼, S20 T26N R11W, San Juan County, New Mexico
36.468474° N, 108.030673° W

PROJECT NUMBER: 05A1226143

FIGURE

F



ENSOLUM
Environmental & Hydrogeologic Consultants

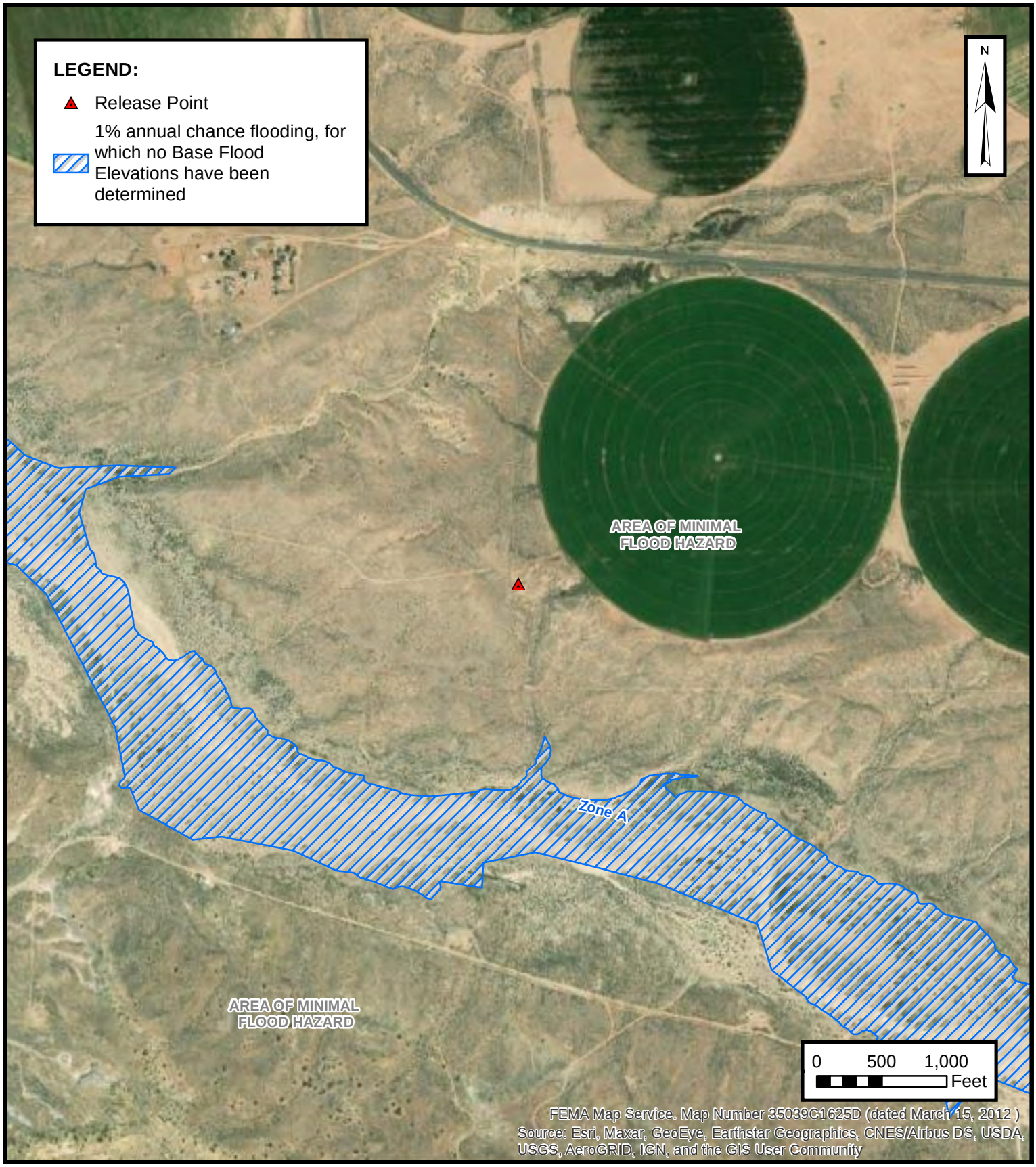
MINES, MILLS AND QUARRIES

ENTERPRISE FIELD SERVICES, LLC
BLACKROCK D#1E
SW ¼, S20 T26N R11W, San Juan County, New Mexico
36.468474° N, 108.030673° W

PROJECT NUMBER: 05A1226143

FIGURE

G



ENSOLUM
Environmental & Hydrogeologic Consultants

100-YEAR FLOOD PLAIN MAP

ENTERPRISE FIELD SERVICES, LLC
BLACKROCK D#1E
SW ¼, S20 T26N R11W, San Juan County, New Mexico
36.468474° N, 108.030673° W

PROJECT NUMBER: 05A1226143

FIGURE

H

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

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

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

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 01626	SJ	SJ	3	4		16	26N	11W	230607	4041673*	255	200	55

Average Depth to Water: **200 feet**

Minimum Depth: **200 feet**

Maximum Depth: **200 feet**

Record Count: 1

PLSS Search:

Section(s): 20, 16, 17, 18, 19, 30, 29, 28, 21 **Township:** 26N **Range:** 11W

***UTM location was derived from PLSS - see Help**

3724

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

Operator Meridian Oil Co. Location: Unit B Sec. 16 Twp 26 Rng 11

Name of Well/Wells or Pipeline Serviced

Moncrief Com #1E 30-045-26221

Elevation 6285 Completion Date 2/25/93 Total Depth 395' Land Type

Casing Strings, Sizes, Types & Depths 2/23 Set 98' of 8" PVC Casing.

No Gas, Water, or Boulders were Encountered During Casing.

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

with 20 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. 100' Fresh

Depths gas encountered: None

Ground bed depth with type & amount of coke breeze used: 395'

Depths anodes placed: 380, 360, 350, 295, 288, 280, 273, 265, 258, 175, 167, 160, 153, 146, 139

Depths vent pipes placed: 395'

Vent pipe perforations: bottom 290'

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. 25-930315-10

Company		Sample No.	Date Sampled
MERIDIAN OIL			2/25/93
Field	**Legal Description**	**County or Parish**	**State**
2458W	B-16-26-11	San Juan	NM
Lease or Unit	**Well**	**Depth**	**Formation**	**Water, B/D**
	Manicf Com #7E			
Type of Water (Produced, Supply, etc.)	**Sampling Point**		**Sampled By**
	Ground Bed		K. Bishop

DISSOLVED SOLIDS

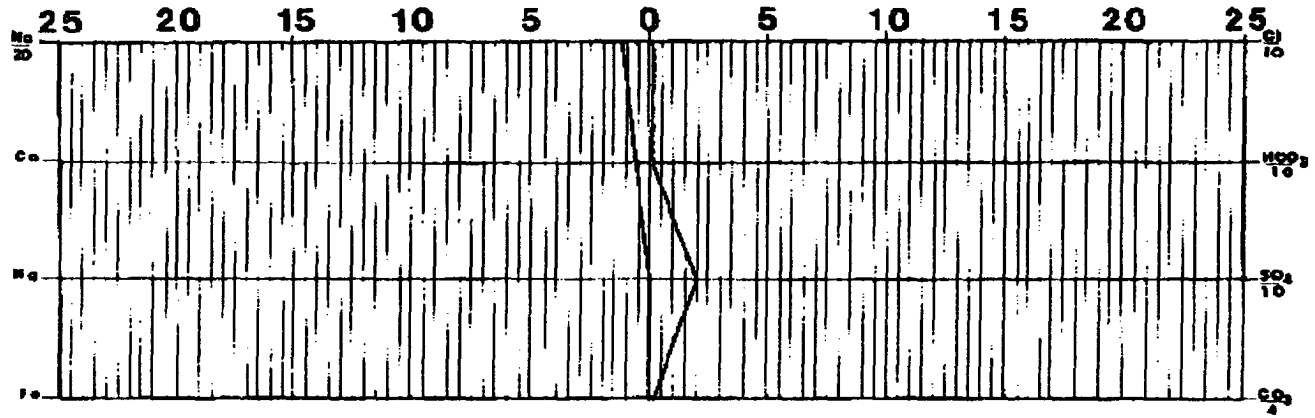
CATIONS	mg/l	me/l
Sodium, Na (calc.)	500	22
Calcium, Ca	12	0.6
Magnesium, Mg	-	-
Barium, Ba		

ANIONS		
Chloride, Cl	30	0.9
Sulfate, So_4	930	20
Carbonate, CO_3	10	0.4
Bicarbonate, HCO_3	70	1

OTHER PROPERTIES

pH	8.6
Specific Gravity, 60/60 F.	1.0073
Resistivity (ohm-meters) 71 F.	9.6
Total Dissolved Solids (calc.)	1600
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.

ENSOLUM

APPENDIX C

Executed C-138 Solid Waste Acceptance Form

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

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

Form C-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.
97057-1125

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

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

PayKey: AM14058
PM: Jim Marquis
AFE: N53013

2. Originating Site:
Blackrock D#1E

3. Location of Material (Street Address, City, State or ULSTR):
UL N Section 20 T26N R11W; 36.468474, -108.030673

Mar/April 2021

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 20 yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 70/26 yd³ / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

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

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

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

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

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long Thomas Long 3-29-2021, 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: Riley Industrial/OFT and Subcontractors

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 TITLE: Enviro Manager DATE: 3/29/21
SIGNATURE: TELEPHONE NO.:
Surface Waste Management Facility Authorized Agent 505-632-0615

ENSOLUM

APPENDIX D

Photographic Documentation

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Blackrock D#1E (03/15/21)
Ensolum Project No. 05A1226143

ENSOLUM

Photograph 1 Photograph Description: View of the release area.	
Photograph 2 Photograph Description: View of the release area.	
Photograph 3 Photograph Description: View of in-process excavation activities.	

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Blackrock D#1E (03/15/21)
Ensolum Project No. 05A1226143

ENSOLUM

Photograph 4 Photograph Description: View of in-process excavation activities. Note removed meter house and above-grade piping in the background.	
Photograph 5 Photograph Description: View of the final excavation.	
Photograph 6 Photograph Description: View of the excavation after initial restoration. The meter house was re-installed.	

ENSOLUM

APPENDIX E

Regulatory Correspondence

From: Steve Austin
To: "Smith, Cory, EMNRD"; Long, Thomas
Cc: Stone, Brian
Subject: RE: [EXTERNAL] RE: Blackrock D#1E - UL N Section 20 T26N R11W; 36.468474, -108.030673
Date: Thursday, April 1, 2021 12:57:36 PM

[Use caution with links/attachments]

Hi Tom,

The time change is acceptable to NNEPA as well.

--Steve

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

From: Smith, Cory, EMNRD [mailto:Cory.Smith@state.nm.us]
Sent: Thursday, April 01, 2021 8:54 AM
To: Long, Thomas <tjlong@eprod.com>; Steve Austin <nnepawq@frontiernet.net>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: RE: [EXTERNAL] RE: Blackrock D#1E - UL N Section 20 T26N R11W; 36.468474, -108.030673

Tom,

I have no issues of the time change.

Cory Smith • Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1000 Rio Brazos | Aztec, NM 87410
505.334.6178 x115 | Cory.Smith@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Long, Thomas <tjlong@eprod.com>
Sent: Wednesday, March 31, 2021 2:02 PM
To: Steve Austin <nnepawq@frontiernet.net>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXT] RE: [EXTERNAL] RE: Blackrock D#1E - UL N Section 20 T26N R11W; 36.468474, -108.030673

Cory/Steve,

This is an update to the sampling at the Blackrock D#1E. We will be sampling tomorrow at 1:00 p.m. instead of today. This email is also a variance request from the 48 hour notification requirement and as that we will be collecting soil samples tomorrow at 1:00 p.m. We had to remove the meter tube

and it slowed activities down. 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

From: Steve Austin <nnepawq@frontiernet.net>
Sent: Wednesday, March 31, 2021 1:54 PM
To: 'Smith, Cory, EMNRD' <Cory.Smith@state.nm.us>; Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: RE: [EXTERNAL] RE: Blackrock D#1E - UL N Section 20 T26N R11W; 36.468474, -108.030673

[Use caution with links/attachments]
NNEPA approves as well.

--Steve

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

From: Smith, Cory, EMNRD [mailto:Cory.Smith@state.nm.us]
Sent: Wednesday, March 31, 2021 1:13 PM
To: Long, Thomas <tjlong@eprod.com>; Steve Austin <nnepawq@frontiernet.net>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: RE: [EXTERNAL] RE: Blackrock D#1E - UL N Section 20 T26N R11W; 36.468474, -108.030673

Tom,

OCD approves the alternative sampling time frame so long as the Surface Owner also approves the timeline. If not please follow the 48 hours sample notification requirements of 19.15.29 NMAC

Please include this approval in your final C-141 report.

Cory Smith • Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1000 Rio Brazos | Aztec, NM 87410
505.334.6178 x115 | Cory.Smith@state.nm.us
http://wwwemnrd.state.nm.us/OCD/

From: Long, Thomas <tjlong@eprod.com>
Sent: Wednesday, March 31, 2021 12:28 PM
To: Steve Austin <nnepawq@frontiernet.net>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXT] RE: [EXTERNAL] RE: Blackrock D#1E - UL N Section 20 T26N R11W; 36.468474, -108.030673

Steve/Cory,

This email is inform you that we began remediation activities today and this release has become a reportable event as of 3-31-2021. This email is also a variance request from the 48 hour notification requirement and we will be collecting soil samples this afternoon. 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

Enterprise Products

From: Steve Austin <nnepawq@frontiernet.net>
Sent: Tuesday, March 16, 2021 4:15 PM
To: Long, Thomas <tjlong@eprod.com>
Subject: [EXTERNAL] RE: Blackrock D#1E - UL N Section 20 T26N R11W; 36.468474, -108.030673

[Use caution with links/attachments]
Hi Tom,

I got it, but not with attachments.

--Steve

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

From: Long, Thomas [mailto:tjlong@eprod.com]
Sent: Tuesday, March 16, 2021 12:45 PM
To: nnepawq@frontiernet.net
Subject: FW: Blackrock D#1E - UL N Section 20 T26N R11W; 36.468474, -108.030673

Steve,

This bounced back. Please acknowledge receipt.

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, March 16, 2021 12:42 PM
To: nnepawq@frontier.net
Subject: FW: Blackrock D#1E - UL N Section 20 T26N R11W; 36.468474, -108.030673

Steve,

This bounced back. Please acknowledge receipt.

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, March 16, 2021 8:03 AM
To: Long, Thomas <tjlong@eprod.com>; Steve Austin <nnepawq@frontiernet.net>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXTERNAL] RE: Blackrock D#1E - UL N Section 20 T26N R11W; 36.468474, -108.030673

[Use caution with links/attachments]
Tom,

Thank you for the notification when do you expect Enterprise to have the gas loss calculation?

Cory Smith • Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1000 Rio Brazos | Aztec, NM 87410
505.3346178 x115 | Cory.Smith@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Long, Thomas <tjlong@eprod.com>
Sent: Tuesday, March 16, 2021 7:41 AM
To: Steve Austin <nnepawq@frontiernet.net>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXT] Blackrock D#1E - UL N Section 20 T26N R11W; 36.468474, -108.030673

Steve/Cory,

This is a courtesy notification. Enterprise had a release of natural gas and condensate yesterday on the Blackrock D#1E meter tube. No washes were affected. No fires occurred. An area of approximately 25 feet by 10 feet was affected. It is estimated that 2-3 barrels was released to the ground surface. I have attached some pictures. The release is located at UL N Section 20 T26N R11W; 36.468474, -108.030673. I will keep you informed of the reporting status and remediation 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

ENSOLUM

APPENDIX F

Table 1 – Soil Analytical Summary

ENSOLUM

TABLE 1
Blackrock D#1E (03/15/21)
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample Depth (Feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX[1] (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO/MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria				**10**	**NE**	**NE**	**NE**	**50**				**100**	**600**
Excavation Composite Soil Samples													
S-1	4.01.21	C	3.5	<0.092	<0.18	<0.18	<0.37	ND	<18	<9.4	<47	ND	<59
S-2	4.01.21	C	3.5	<0.018	<0.036	<0.036	<0.072	ND	<3.6	<9.1	<46	ND	<60
S-3	4.01.21	C	0 to 3.5	<0.018	<0.036	<0.036	<0.071	ND	<3.6	<9.8	<49	ND	<60
S-4	4.01.21	C	0 to 3.5	<0.019	<0.038	<0.038	<0.076	ND	<3.8	<9.6	<48	ND	<61

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

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

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

ENSOLUM

APPENDIX G

Laboratory Data Sheets & Chain of Custody Documentation

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

April 06, 2021

Kyle Summers

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

RE: Blackrock D Com 1E OrderNo.: 2104067

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 4/2/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2104067**
Date Reported: **4/6/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-1
Project: Blackrock D Com 1E **Collection Date:** 4/1/2021 9:00:00 AM
Lab ID: 2104067-001 **Matrix:** MEOH (SOIL) **Received Date:** 4/2/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**VP**
Chloride	ND	59		mg/Kg	20	4/2/2021 11:02:07 AM	59154
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	4/2/2021 10:14:29 AM	59150
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/2/2021 10:14:29 AM	59150
Surr: DNOP	98.5	70-130		%Rec	1	4/2/2021 10:14:29 AM	59150
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	18		mg/Kg	5	4/2/2021 8:23:48 AM	G76412
Surr: BFB	99.8	70-130		%Rec	5	4/2/2021 8:23:48 AM	G76412
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.092		mg/Kg	5	4/2/2021 8:23:48 AM	B76412
Toluene	ND	0.18		mg/Kg	5	4/2/2021 8:23:48 AM	B76412
Ethylbenzene	ND	0.18		mg/Kg	5	4/2/2021 8:23:48 AM	B76412
Xylenes, Total	ND	0.37		mg/Kg	5	4/2/2021 8:23:48 AM	B76412
Surr: 4-Bromofluorobenzene	98.7	70-130		%Rec	5	4/2/2021 8:23:48 AM	B76412

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 **2104067**
Date Reported: **4/6/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-2
Project: Blackrock D Com 1E **Collection Date:** 4/1/2021 9:05:00 AM
Lab ID: 2104067-002 **Matrix:** MEOH (SOIL) **Received Date:** 4/2/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	4/2/2021 11:14:32 AM	59154
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	4/2/2021 10:23:51 AM	59150
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/2/2021 10:23:51 AM	59150
Surr: DNOP	97.5	70-130		%Rec	1	4/2/2021 10:23:51 AM	59150
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	4/2/2021 8:47:12 AM	G76412
Surr: BFB	98.5	70-130		%Rec	1	4/2/2021 8:47:12 AM	G76412
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	4/2/2021 8:47:12 AM	B76412
Toluene	ND	0.036		mg/Kg	1	4/2/2021 8:47:12 AM	B76412
Ethylbenzene	ND	0.036		mg/Kg	1	4/2/2021 8:47:12 AM	B76412
Xylenes, Total	ND	0.072		mg/Kg	1	4/2/2021 8:47:12 AM	B76412
Surr: 4-Bromofluorobenzene	98.4	70-130		%Rec	1	4/2/2021 8:47:12 AM	B76412

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 **2104067**
Date Reported: **4/6/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-3
Project: Blackrock D Com 1E **Collection Date:** 4/1/2021 9:10:00 AM
Lab ID: 2104067-003 **Matrix:** MEOH (SOIL) **Received Date:** 4/2/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**VP**
Chloride	ND	60		mg/Kg	20	4/2/2021 11:26:57 AM	59154
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/2/2021 10:33:15 AM	59150
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/2/2021 10:33:15 AM	59150
Surr: DNOP	94.5	70-130		%Rec	1	4/2/2021 10:33:15 AM	59150
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	4/2/2021 9:10:54 AM	G76412
Surr: BFB	99.6	70-130		%Rec	1	4/2/2021 9:10:54 AM	G76412
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.018		mg/Kg	1	4/2/2021 9:10:54 AM	B76412
Toluene	ND	0.036		mg/Kg	1	4/2/2021 9:10:54 AM	B76412
Ethylbenzene	ND	0.036		mg/Kg	1	4/2/2021 9:10:54 AM	B76412
Xylenes, Total	ND	0.071		mg/Kg	1	4/2/2021 9:10:54 AM	B76412
Surr: 4-Bromofluorobenzene	97.7	70-130		%Rec	1	4/2/2021 9:10:54 AM	B76412

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 **2104067**
Date Reported: **4/6/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-4
Project: Blackrock D Com 1E **Collection Date:** 4/1/2021 9:15:00 AM
Lab ID: 2104067-004 **Matrix:** MEOH (SOIL) **Received Date:** 4/2/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	61		mg/Kg	20	4/2/2021 11:39:22 AM	59154
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/2/2021 10:42:41 AM	59150
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/2/2021 10:42:41 AM	59150
Surr: DNOP	96.5	70-130		%Rec	1	4/2/2021 10:42:41 AM	59150
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	4/2/2021 9:34:31 AM	G76412
Surr: BFB	103	70-130		%Rec	1	4/2/2021 9:34:31 AM	G76412
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	4/2/2021 9:34:31 AM	B76412
Toluene	ND	0.038		mg/Kg	1	4/2/2021 9:34:31 AM	B76412
Ethylbenzene	ND	0.038		mg/Kg	1	4/2/2021 9:34:31 AM	B76412
Xylenes, Total	ND	0.076		mg/Kg	1	4/2/2021 9:34:31 AM	B76412
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	4/2/2021 9:34:31 AM	B76412

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#: **2104067**

06-Apr-21

Client: ENSOLUM

Project: Blackrock D Com 1E

Sample ID: **MB-59154**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **59154**	RunNo: **76398**							
Prep Date: **4/2/2021**	Analysis Date: **4/2/2021**	SeqNo: **2706509**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-59154**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **59154**	RunNo: **76398**							
Prep Date: **4/2/2021**	Analysis Date: **4/2/2021**	SeqNo: **2706510**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.6	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#: **2104067**
06-Apr-21

Client: ENSOLUM
Project: Blackrock D Com 1E

Sample ID: **MB-59150**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **59150**	RunNo: **76409**
Prep Date: **4/2/2021**	Analysis Date: **4/2/2021**	SeqNo: **2706263** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.6		10.00		96.0	70	130			

Sample ID: **LCS-59150**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **59150**	RunNo: **76409**
Prep Date: **4/2/2021**	Analysis Date: **4/2/2021**	SeqNo: **2706264** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.7	68.9	141			
Surr: DNOP	4.8		5.000		96.8	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical 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#: **2104067**
06-Apr-21

Client: ENSOLUM
Project: Blackrock D Com 1E

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **G76412**	RunNo: **76412**
Prep Date:	Analysis Date: **4/2/2021**	SeqNo: **2706660** 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	990		1000		99.3	70	130			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **G76412**	RunNo: **76412**
Prep Date:	Analysis Date: **4/2/2021**	SeqNo: **2706661** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	98.5	78.6	131			
Surr: BFB	1100		1000		108	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical 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#: **2104067**

06-Apr-21

Client: ENSOLUM

Project: Blackrock D Com 1E

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **B76412**	RunNo: **76412**
Prep Date:	Analysis Date: **4/2/2021**	SeqNo: **2706706** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		99.7	70	130			

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **B76412**	RunNo: **76412**
Prep Date:	Analysis Date: **4/2/2021**	SeqNo: **2706707** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	96.6	80	120			
Toluene	0.97	0.050	1.000	0	97.1	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.5	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.6	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			

Sample ID: **2104067-001AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-1**	Batch ID: **B76412**	RunNo: **76412**
Prep Date:	Analysis Date: **4/2/2021**	SeqNo: **2706762** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.6	0.092	3.663	0	97.5	76.3	120			
Toluene	3.6	0.18	3.663	0	98.9	78.5	120			
Ethylbenzene	3.6	0.18	3.663	0	97.1	78.1	124			
Xylenes, Total	11	0.37	10.99	0	96.8	79.3	125			
Surr: 4-Bromofluorobenzene	3.8		3.663		103	70	130			

Sample ID: **2104067-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-1**	Batch ID: **B76412**	RunNo: **76412**
Prep Date:	Analysis Date: **4/2/2021**	SeqNo: **2706763** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.7	0.092	3.663	0	102	80	120	4.66	20	
Toluene	3.8	0.18	3.663	0	103	80	120	3.94	20	
Ethylbenzene	3.7	0.18	3.663	0	101	80	120	4.20	20	
Xylenes, Total	11	0.37	10.99	0	102	80	120	5.56	20	
Surr: 4-Bromofluorobenzene	3.9		3.663		105	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of 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#: **2104067**

06-Apr-21

Client: ENSOLUM

Project: Blackrock D Com 1E

Sample ID: **mb-59072**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**							
Client ID: **PBS**	Batch ID: **59072**	RunNo: **76412**							
Prep Date: **3/30/2021**	Analysis Date: **4/2/2021**	SeqNo: **2706779**	Units: **%Rec**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		99.6	70	130			

Sample ID: **lcs-59072**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**							
Client ID: **LCSS**	Batch ID: **59072**	RunNo: **76412**							
Prep Date: **3/30/2021**	Analysis Date: **4/2/2021**	SeqNo: **2706780**	Units: **%Rec**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical 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: **2104067** RcptNo: 1

Received By: **Juan Rojas** **4/2/2021 8:00:00 AM**

Completed By: **Sean Livingston** **4/2/2021 8:08:17 AM**

Reviewed By: JR 4/2/21

Chain of Custody

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

Log In

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

10

# of preserved bottles checked for pH: 4/2/21

(<2 or >12 unless noted)

Adjusted?

Checked by:

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	4.8	Good				

Chain-of-Custody Record

Client: Ensolum, LLC.

Mailing Address: 606 S Rio Grande Suite A 87410

Phone #:

email or Fax#:

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 100%
☐ Standard ☒ Rush 4-2-21

Project Name: Blackrock D Com 1E

Project #: 05A1226143

Project Manager: K Summers

Sampler: C D Aponti

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 4.9-0.1=4.8 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2104067	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)
4/1	900	S	S-1	1 4oz Jar	Cool	001	X	X					X			
4/1	905	S	S-2		Cool	002	X	X					X			
4/1	910	S	S-3		Cool	003	X	X					X			
4/1	915	S	S-4		Cool	004	X	X					X			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
4/1/21	1446				4/1/21	1446
4/1/21	1823			courier	4/2/21	8:00

Remarks: PM Tom Long
AFE # NS-3013

Sam Dey

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: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 53609
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	3/4/2022