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)*: **nAPP2132760865**
Contact mailing address: **614 Reilly Ave, Farmington, NM 87401**	

Location of Release Source

Latitude **36.51011** Longitude **-107.601147** *(NAD 83 in decimal degrees to 5 decimal places)*

Site Name **Trunk K 16 Inch**	Site Type **Natural Gas Gathering Pipeline**
Date Release Discovered: **11/23/2021**	Serial Number *(if applicable)*: **N/A**

Unit Letter	Section	Township	Range	County
N	**5**	**26N**	**7W**	**Rio Arriba**

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☒ Condensate	Volume Released (bbls): **Estimated 31 BBLs**	Volume Recovered (bbls): **7 BBLs**
☒ Natural Gas	Volume Released (Mcf): **179 MCF**	Volume Recovered (Mcf): **None**
☐ Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

Cause of Release: On November 23, 2021, Enterprise had a release of natural gas and natural gas liquids from the Trunk K 16 Inch pipeline. The pipeline was isolated, depressurized, locked and tagged out. An area of approximately forty feet in diameter was impacted by the released fluids. No washes were affected. No fire occurred. No residences were affected. A hydrovac/spec truck was mobilized to recover the pooled liquids. Approximately 7 barrels were recovered. Remediation was completed on December 13, 2021. The final excavation dimensions measured approximately 25 feet long by 25 feet wide by six feet deep. Approximately 252 cubic yards of hydrocarbon impacted soil was excavated and transported to a New Mexico Oil Conservation Division (NMOCD) approved land farm. Permanent repairs to the pipeline have not been completed and the excavation has not yet been backfilled when document was created. Once the permanent pipeline repairs are completed, the pipeline excavation will be backfilled with imported fill and then contoured to the surrounding grade. A third party closure report is included with this "Final." C-141.

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Thomas Long Title: Senior Environmental Scientist

Signature: Thomas Long Date: 10-20-2022

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

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: Nelson Velez Date: 11/14/2022

Printed Name: Nelson Velez Title: Environmental Specialist – Adv

ENSOLUM

CLOSURE REPORT

Property:

Trunk K 16 Inch (11/23/21)
Unit Letter N, S5 T26N R7W
Rio Arriba County, New Mexico

NM EMNRD OCD Incident ID No. NAPP2132760865

September 27, 2022
Ensolum Project No. 05A1226169

Prepared for:

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

Prepared by:

Ranee Deechilly
Project Manager

Kyle Summers
Senior Managing Geologist

TABLE OF CONTENTS

LIST OF APPENDICES

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Trunk K 16 Inch (11/23/21) (Site)
NM EMNRD OCD Incident ID No.	NAPP2132760865
Location:	36.51011° North, 107.60147° West Unit Letter N, Section 5, Township 26 North, Range 7 West Rio Arriba County, New Mexico
Property:	United States Bureau of Land Management (BLM)
Regulatory:	New Mexico (NM) Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On November 23, 2021, Enterprise discovered a release of natural gas and condensate on the Trunk K pipeline. Enterprise subsequently isolated and locked the pipeline out of service. On November 30, 2021, Enterprise initiated activities to repair the pipeline and remediate petroleum hydrocarbon impact.

Remediation activities were completed at the Site in December of 2021, however, permanent pipeline repairs have still not been completed on the spiral-weld pipeline and the excavation remains partially open.

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

1.2 Project Objective

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

2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the NM EMNRD OCD. To address activities related to oil and gas releases, the NM EMNRD OCD references NM 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. Ensolum, LLC (Ensolum) utilized information provided by Enterprise, the general site characteristics, and information available from the NM Office of the State Engineer (OSE) and the NM EMNRD OCD imaging database to determine the appropriate closure criteria for the Site. Supporting figures and documentation associated with the following Siting bullets are provided in **Appendix B**.

- The 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). One POD (SJ-02402) with a recorded depth to water was identified within one mile of the Site. The records for SJ-02402 indicate a depth to water of 18 feet below grade surface (bgs). This POD is approximately 730 feet west of the Site and two feet higher in elevation than the Site. No other PODS with recorded depths to water were identified in the same Public Land Survey System (PLSS) section as the Site and in the adjacent PLSS sections. The

OSE POD Locations Online Mapping Tool identifies one POD (SJ-04196) north of the Site (approximately 0.4 miles) (**Figure A**, **Appendix B**). There is no recorded depth to water for this POD. Based on a report identified in the NM EMNRD OCD imaging database three monitoring wells are located at this location (Miles Fed 1A). The average depth to water for the monitoring wells is approximately 31 feet bgs (*2018 Annual Groundwater Monitoring Report*, Stantec Environmental Services, 2019).

- No cathodic protection wells (CPWs) were identified in the NM EMNRD OCD imaging database within the same PLSS section as the site. Three CPWs were identified in adjacent PLSS sections. The approximate locations of the CPWs are depicted on **Figure B** (**Appendix B**). One CPW is associated with the Harrington #9 and #3 oil/gas production wells and is approximately 1.2 miles northwest of the Site, with reported depths to water of 50 and 110 feet bgs. The second CPW is associated with the Harrington #6 oil/gas production well and is approximately 1.5 miles northwest of the Site, with a reported depth to water of 50 feet bgs. The third CPW is associated with the Rincon Unit No.72, 186NP, and 223A oil/gas production wells and is approximately 1.6 miles northeast of the Site, with a reported depth to water of 100 feet bgs.

- The Site is not located within 300 feet of a NM EMNRD OCD-defined continuously flowing watercourse or significant watercourse. The Site is located approximately 340 feet east of Big Rincon 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 households for domestic or stock watering purposes were identified within 500 feet of the Site. However, there is a stock watering retention pond located approximately 500 feet northeast of the site. (**Figure E**, **Appendix B**).

- Based on information provided by the OSE WRRS there is a fresh water well identified within 1,000 feet of the Site. POD SJ-02402 is located approximately 730 feet west 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 NM Mining and Minerals Division's Geographic Information System (GIS) Maps and Mine Data database, the Site is not within an area overlying a subsurface mine (**Figure G**, **Appendix B**).

- The Site is not located within an unstable area.

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

Based on available information, Enterprise estimates the depth to water at the Site to be less than 50 feet bgs, resulting in a Tier I ranking. Applicable closure criteria for soils remaining in place at the Site include:

Closure Criteria for Soils Impacted by a Release (Tier I)		
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 November 30, 2021, Enterprise initiated activities to remediate petroleum hydrocarbon impact resulting from the release. During the remediation and corrective action activities, OFT Construction Inc (OFT), provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final excavation measured approximately 25 feet long and 25 feet wide at the maximum extents. The maximum depth of the excavation measured approximately six feet bgs. The lithology encountered during the completion of remediation activities consisted primarily of unconsolidated silty sand underlain by silty clay.

Approximately 252 cubic yards (yd^3) of petroleum hydrocarbon affected soils/sandstone and 50 barrels (bbls) of hydro-excavation soil cuttings and water were transported to the Envirotech, Inc., (Envirotech) landfarm near Hilltop, NM for disposal/remediation. The executed C-138 solid waste acceptance form is provided in **Appendix C**. The flow path excavation was backfilled with imported fill and was then contoured to surrounding grade. It is unclear when the proper materials will be available to complete the permanent repairs to the pipeline, therefore a portion of the excavation has not yet been backfilled at the time this document was created. Once the permanent pipeline repairs are completed, the pipeline excavation will be backfilled with imported fill and then contoured to the surrounding grade.

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

4.0 SOIL SAMPLING PROGRAM

Ensolum field screened the soil samples from the excavation utilizing a calibrated Dexsil PetroFLAG® hydrocarbon analyzer system and a photoionization detector (PID) fitted with a 10.6 eV lamp to guide excavation extents.

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

First Sampling Event
On December 8, 2021, the first sampling event was performed at the Site. The NM EMNRD OCD was notified of the sampling event although no representative was present during sampling activities. Composite soil samples FP-1 (0'-2') and FP-2 (0'-2') were collected from the excavated flow path and submitted for laboratory analysis.

Second Sampling Event
On December 13, 2021, a second sampling event was performed. The NM EMNRD OCD was notified of the sampling event although no representative was present during sampling activities. Composite soil samples S-1 (0'-6'), S-2 (0'-5.5'), S-3 (2'-5'), and S-4 (0'-5.5') were collected from the sloped walls of the excavation. Composite soil sample S-5 (5-6') was collected from the floor of the excavation.

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

5.0 SOIL LABORATORY ANALYTICAL METHODS

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

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

6.0 SOIL DATA EVALUATION

Ensolum compared the BTEX, TPH, and chloride laboratory analytical results or laboratory practical quantitation limits (PQLs) / reporting limits (RLs) associated with the composite soil samples (FP-1, FP-2, and S-1 through S-5) to the Tier I NM EMNRD OCD closure criteria.

- The laboratory analytical results for all composite soil samples indicate benzene is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the Tier I NM EMNRD OCD closure criteria of 10 mg/kg.
- The laboratory analytical results for all composite soil samples indicate total BTEX is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the Tier I NM EMNRD OCD closure criteria of 50 mg/kg.
- The laboratory analytical results for composite soil samples FP-2, S-2, S-4, and S-5 indicate combined TPH GRO/DRO/MRO concentrations ranging from 15 mg/kg (S-2) to 33 mg/kg (S-4), which are less than the Tier I New Mexico EMNRD OCD closure criteria of 100 mg/kg. The laboratory analytical results for all other composite soil samples indicate combined TPH GRO/DRO/MRO is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the Tier I New Mexico EMNRD OCD closure criteria of 100 mg/kg.
- The laboratory analytical results for the composite soil samples indicate chloride concentrations ranging from 66 mg/kg (S-3) to 370 mg/kg (FP-2), which are less than the Tier I New Mexico EMNRD OCD closure criteria of 600 mg/kg.

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

7.0 RECLAMATION AND REVEGETATION

The flow path excavation was backfilled with imported fill and was then contoured to surrounding grade. Enterprise has been unable to obtain suitable pipe to complete pipeline repairs, therefore a portion of the excavation remains open. Once the permanent pipeline repairs are completed, Enterprise will backfill the excavation with imported fill and then contour to the surrounding grade. Enterprise will re-seed the Site with an approved seeding mixture.

8.0 FINDINGS AND RECOMMENDATION

- Seven composite soil samples were collected from the Site. Based on laboratory analytical results, no benzene, BTEX, chloride, or combined TPH GRO/DRO/MRO exceedances were identified in the soils remaining at the Site.

- Approximately 252 yd^3 of petroleum hydrocarbon affected soils/sandstone and 50 bbls of hydro-excavation soil cuttings and water were transported to the Envirotech landfarm for disposal/remediation. The flow path excavation was backfilled with imported fill and was then contoured to the surrounding grade. Once the pipeline repairs are completed, the pipeline excavation will be 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

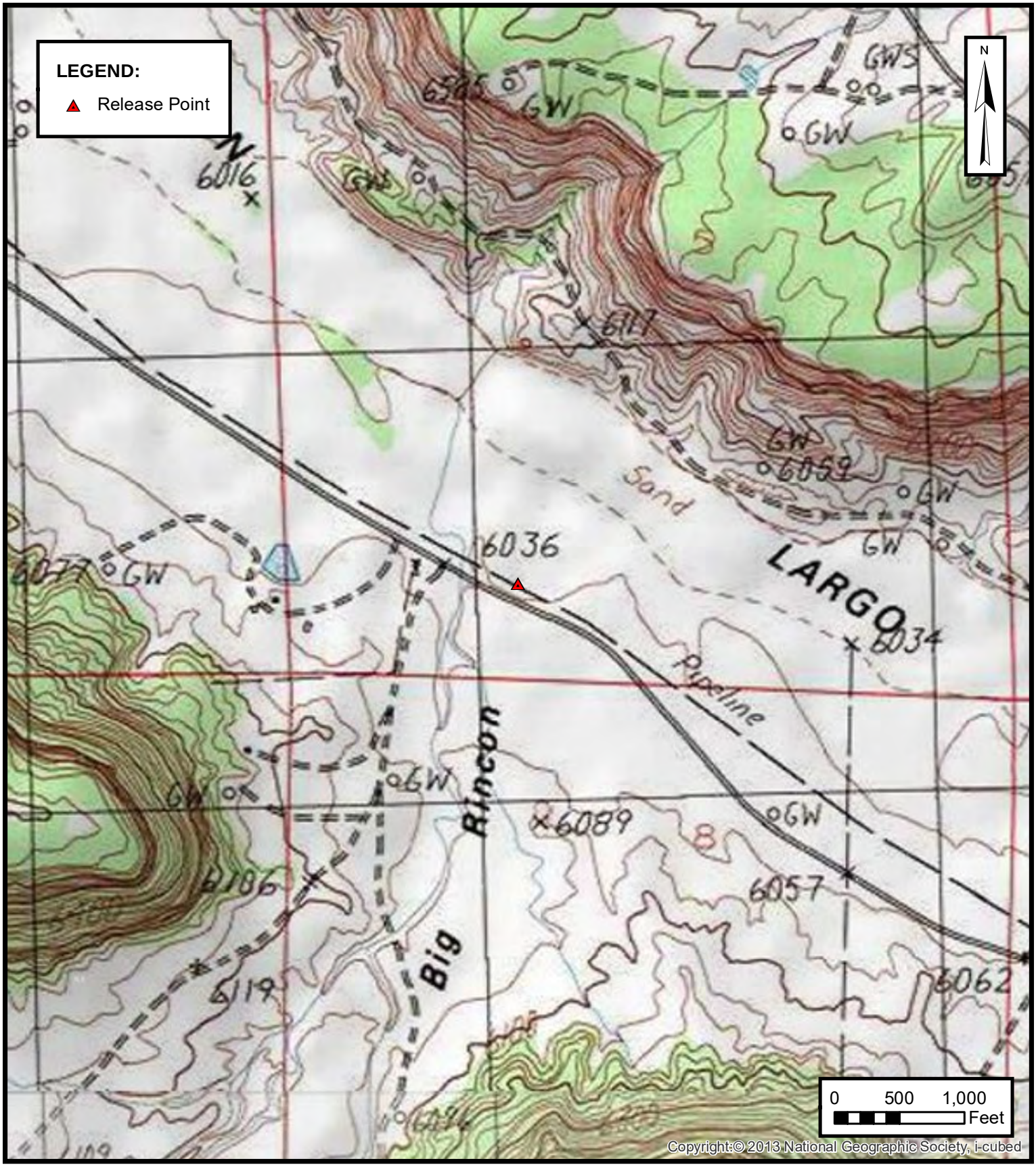
This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization of Enterprise and Ensolum. Any unauthorized distribution 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 Closure Report, and Ensolum's Master Services Agreement. The limitation of liability defined in the agreement is the aggregate limit of Ensolum's liability to the client.

ENSOLUM

APPENDIX A

Figures



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Environmental & Hydrogeologic Consultants

TOPOGRAPHIC MAP

ENTERPRISE FIELD SERVICES, LLC
TRUNK K 16 INCH (11/23/21)
Unit Letter N, S5 T26N R7W, Rio Arriba County, New Mexico
36.51011° N, 107.60147° W

PROJECT NUMBER: 05A1226169

FIGURE
1

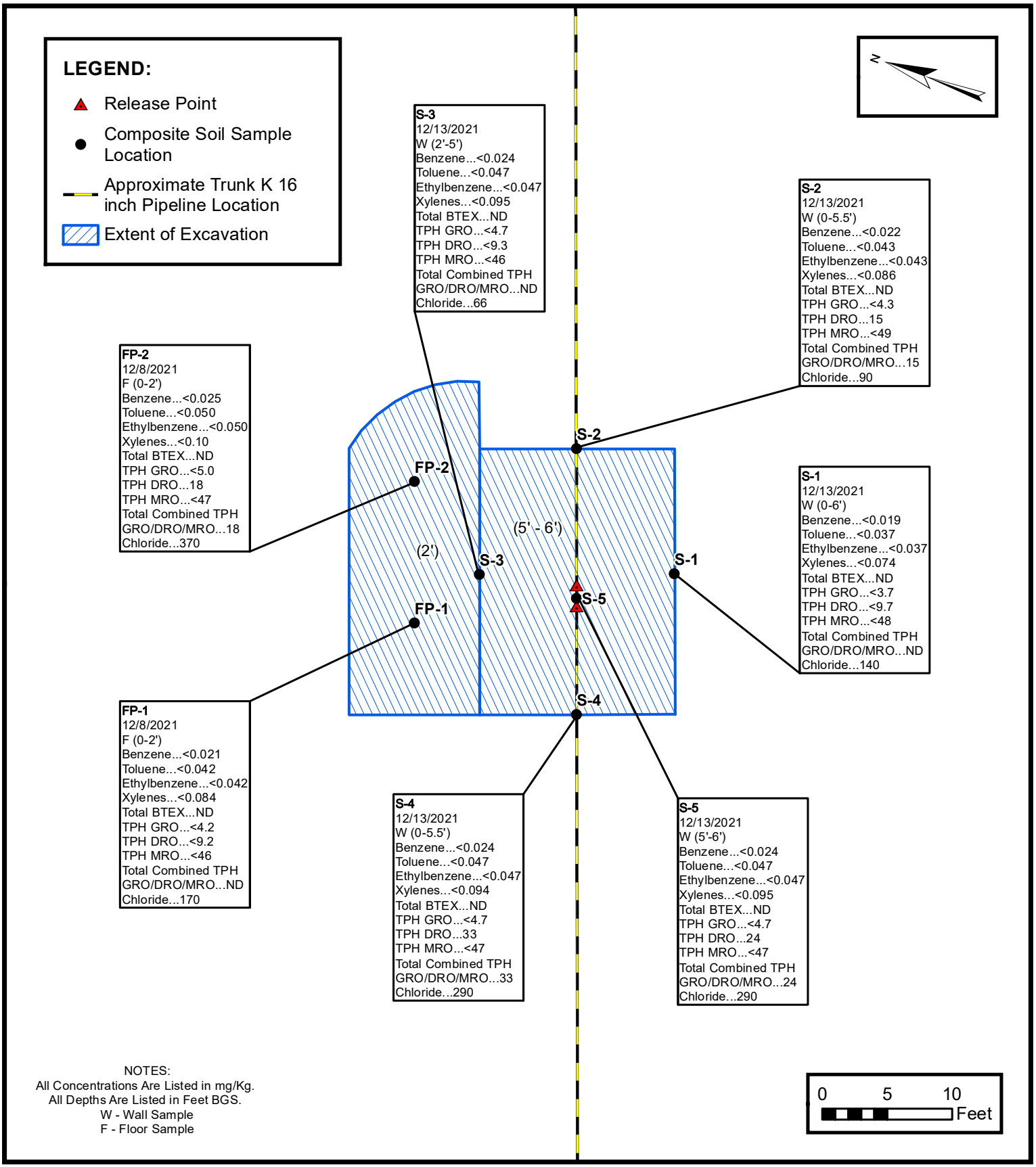
ENSOLUM
Environmental & Hydrogeologic Consultants

SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC
TRUNK K 16 INCH (11/23/21)
Unit Letter N, S5 T26N R7W, Rio Arriba County, New Mexico
36.51011° N, 107.60147° W

PROJECT NUMBER: 05A1226169

FIGURE
2



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SITE MAP WITH SOIL ANALYTICAL RESULTS

ENTERPRISE FIELD SERVICES, LLC
TRUNK K 16 INCH (11/23/21)
Unit Letter N, S5 T26N R7W, Rio Arriba County, New Mexico
36.51011° N, 107.60147° W

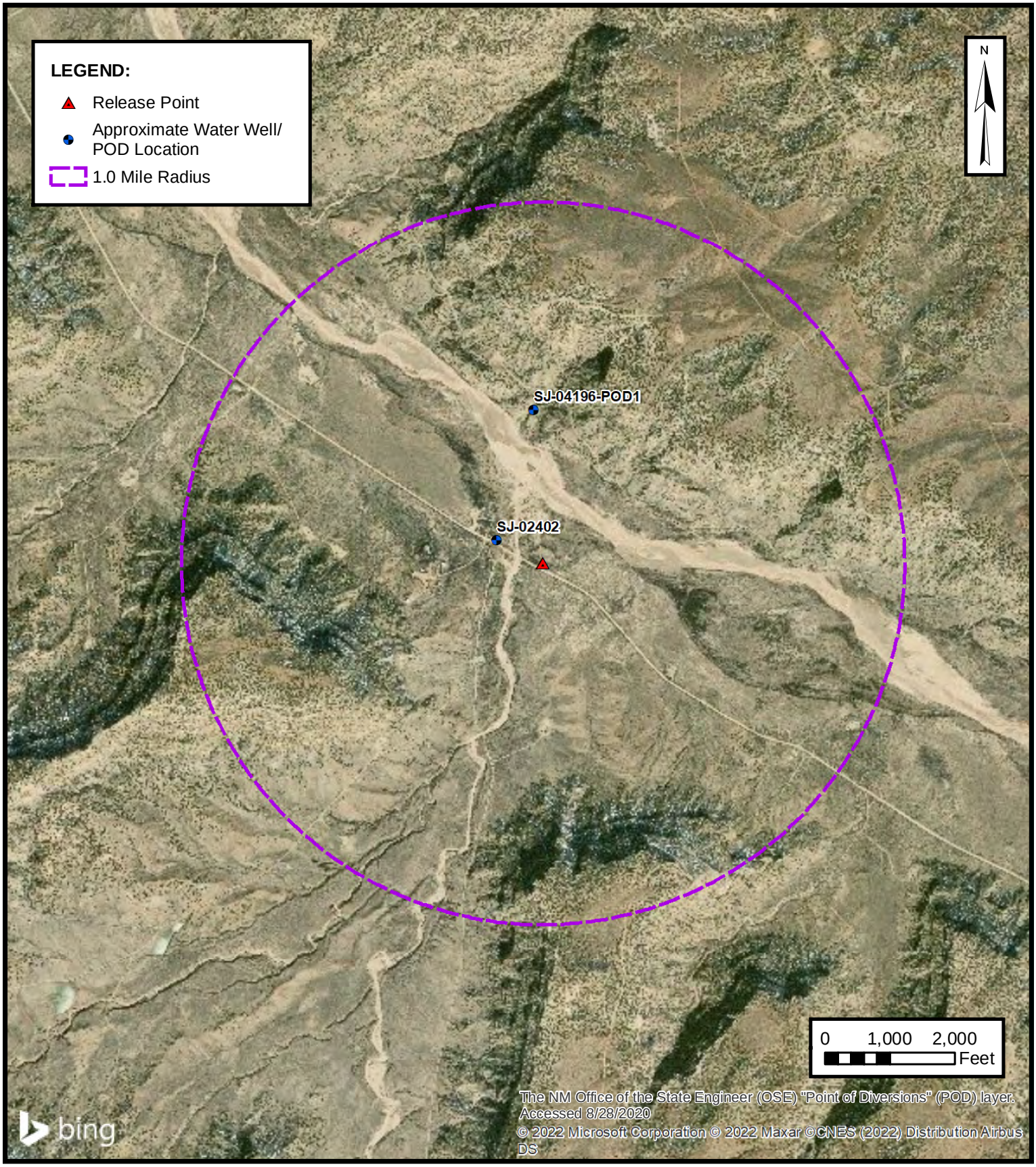
PROJECT NUMBER: 05A1226169

FIGURE
3

ENSOLUM

APPENDIX B

Siting Figures and Documentation



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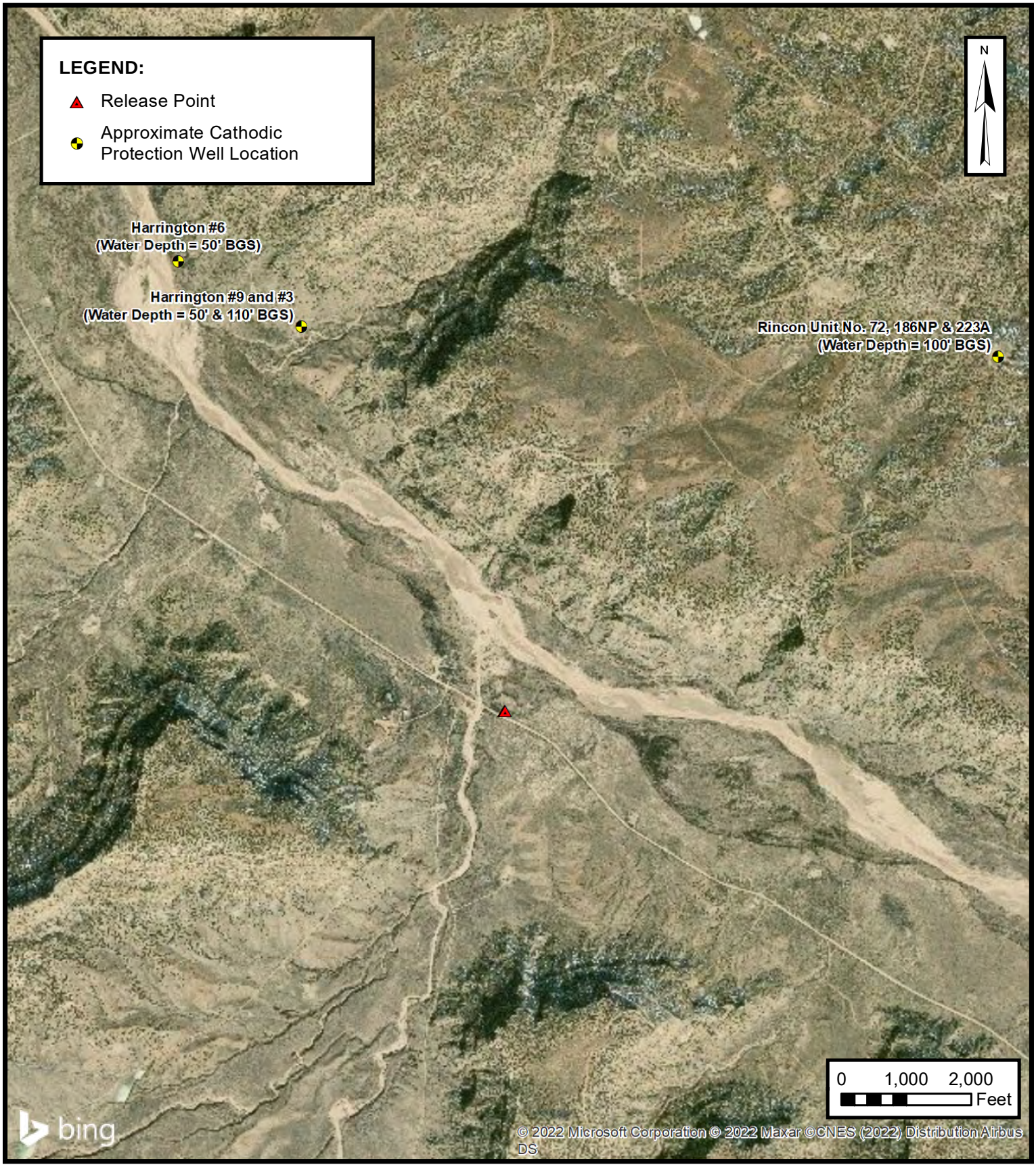
1.0 MILE RADIUS WATER WELL/ POD LOCATION MAP

ENTERPRISE FIELD SERVICES, LLC
TRUNK K 16 INCH (11/23/21)
Unit Letter N, S5 T26N R7W, Rio Arriba County, New Mexico
36.51011° N, 107.60147° W

PROJECT NUMBER: 05A1226169

FIGURE

A



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CATHODIC PROTECTION WELL RECORDED DEPTH TO WATER

ENTERPRISE FIELD SERVICES, LLC
TRUNK K 16 INCH (11/23/21)
Unit Letter N, S5 T26N R7W, Rio Arriba County, New Mexico
36.51011° N, 107.60147° W

PROJECT NUMBER: 05A1226169

FIGURE

B

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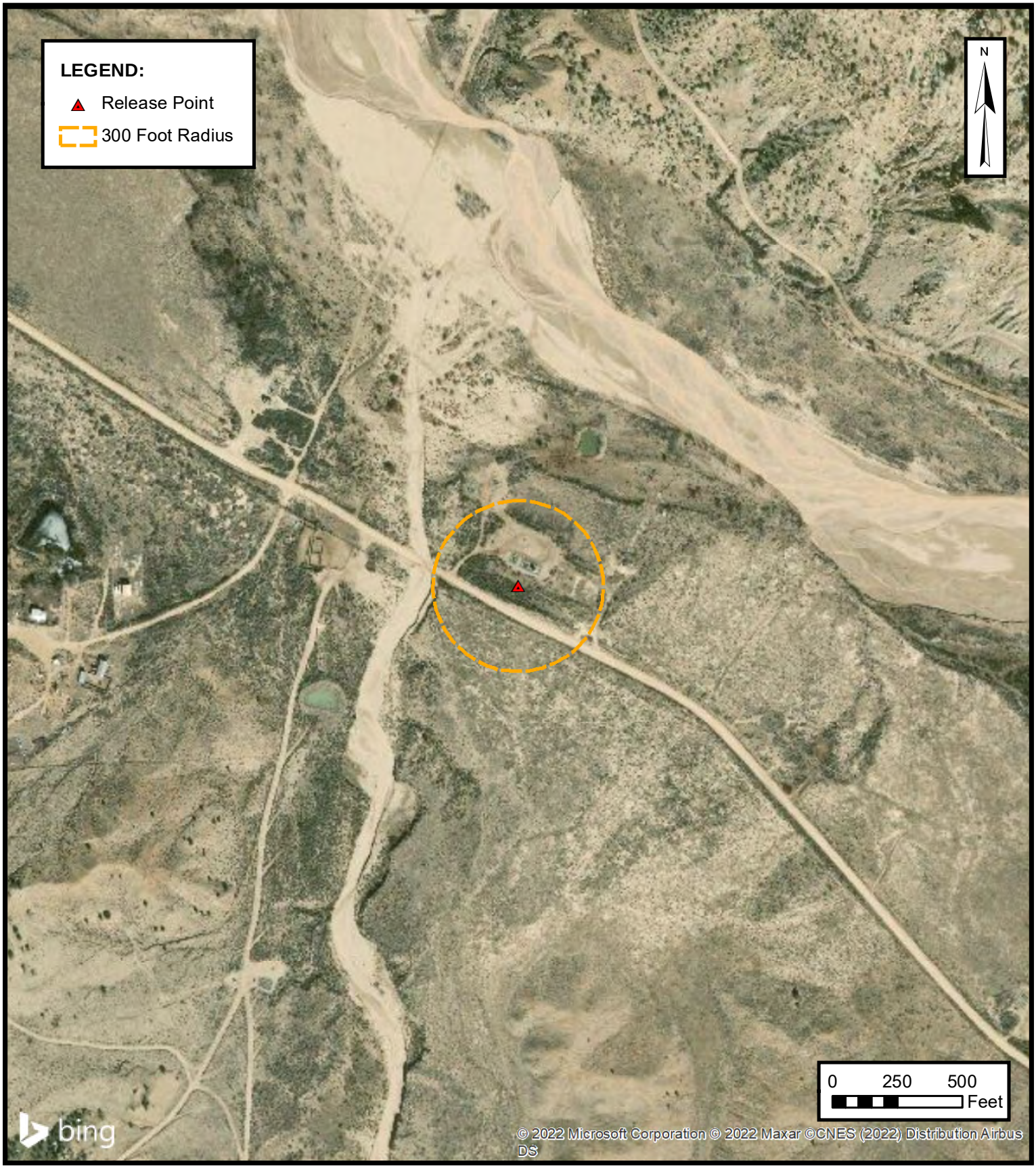
300 FOOT RADIUS
WATERCOURSE AND DRAINAGE IDENTIFICATION
ENTERPRISE FIELD SERVICES, LLC
TRUNK K 16 INCH (11/23/21)
Unit Letter N, S5 T26N R7W, Rio Arriba County, New Mexico
36.51011° N, 107.60147° W

PROJECT NUMBER: 05A1226169

FIGURE
C



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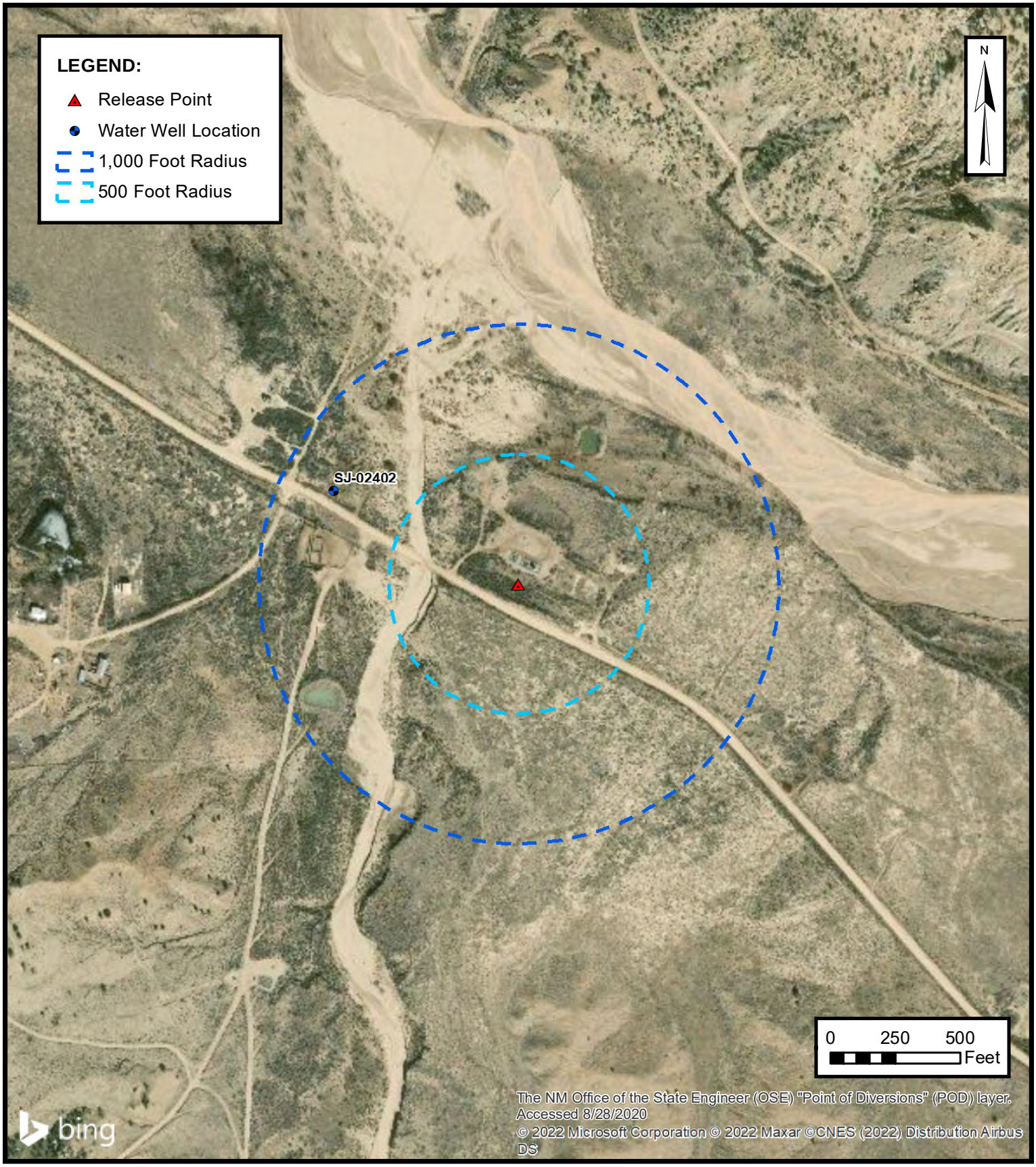
300 FOOT RADIUS
OCCUPIED STRUCTURE IDENTIFICATION
ENTERPRISE FIELD SERVICES, LLC
TRUNK K 16 INCH (11/23/21)
Unit Letter N, S5 T26N R7W, Rio Arriba County, New Mexico
36.51011° N, 107.60147° W

PROJECT NUMBER: 05A1226169

FIGURE
D



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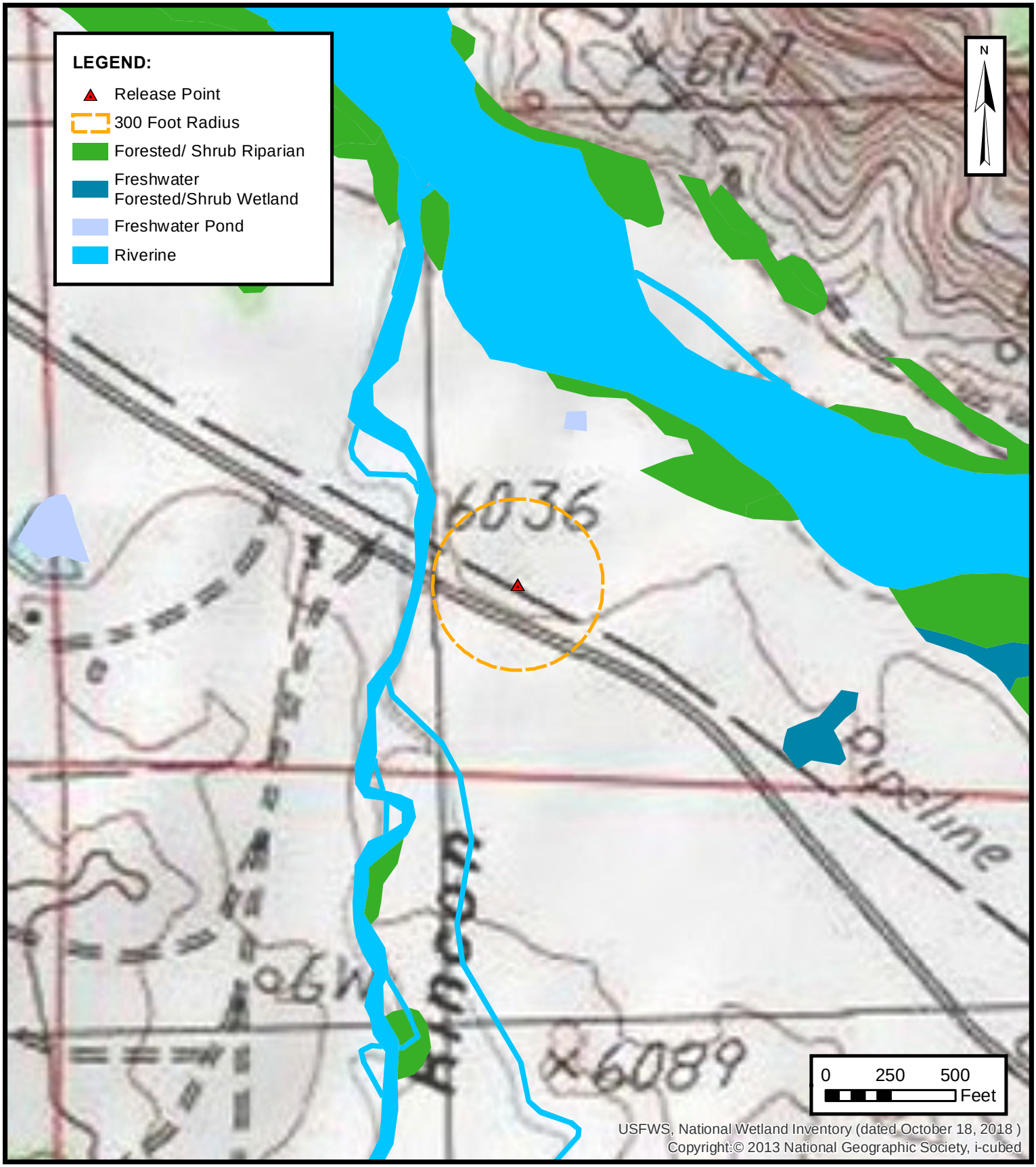
Environmental & Hydrogeologic Consultants

WATER WELL AND NATURAL SPRING LOCATION

ENTERPRISE FIELD SERVICES, LLC
TRUNK K 16 INCH (11/23/21)
Unit Letter N, S5 T26N R7W, Rio Arriba County, New Mexico
36.51011° N, 107.60147° W

PROJECT NUMBER: 05A1226169

FIGURE
E



ENSOLUM
Environmental & Hydrogeologic Consultants

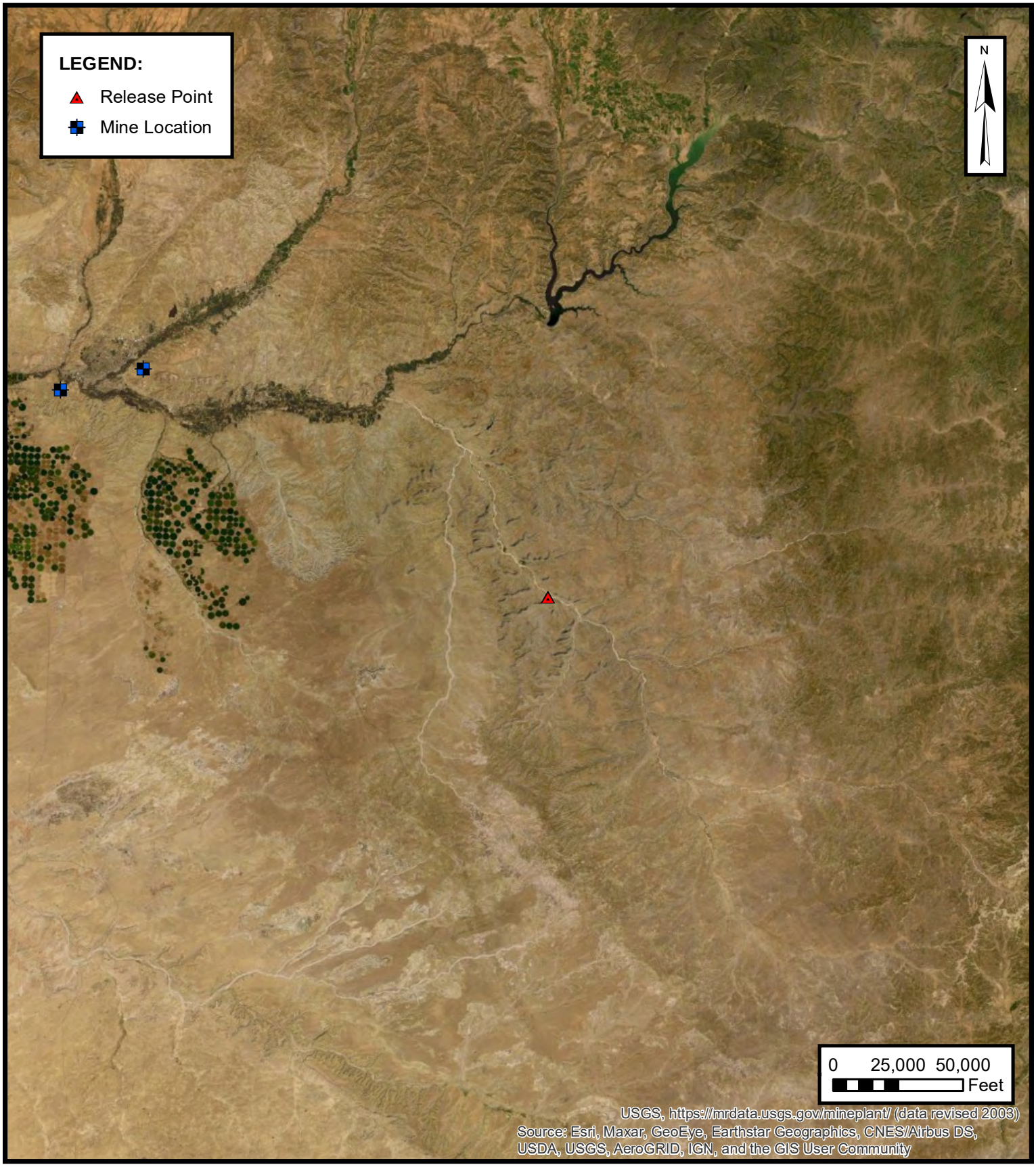
WETLANDS

ENTERPRISE FIELD SERVICES, LLC
TRUNK K 16 INCH (11/23/21)
Unit Letter N, S5 T26N R7W, Rio Arriba County, New Mexico
36.51011° N, 107.60147° W

PROJECT NUMBER: 05A1226169

FIGURE

F



ENSOLUM
Environmental & Hydrogeologic Consultants

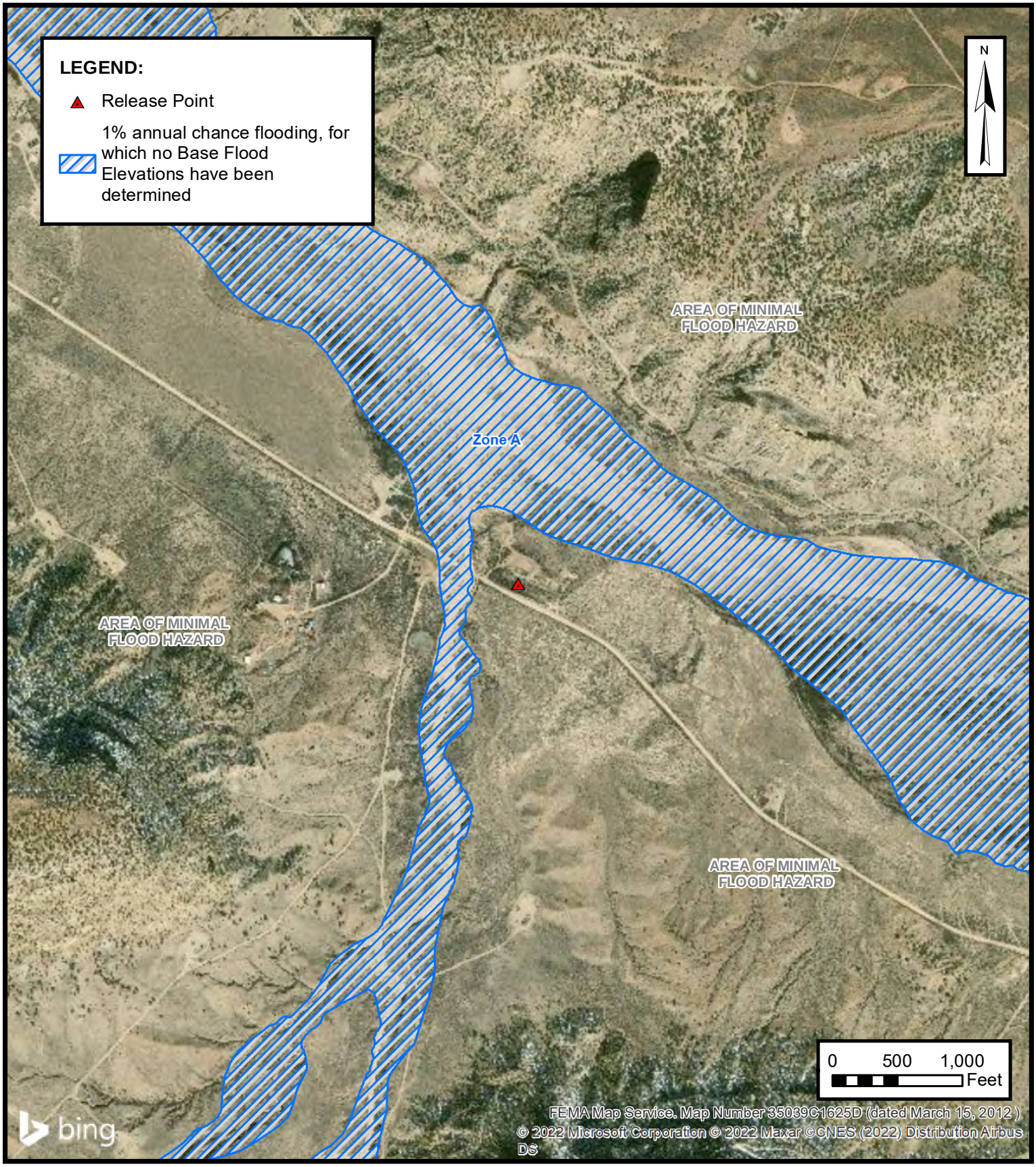
MINES, MILLS AND QUARRIES

ENTERPRISE FIELD SERVICES, LLC
TRUNK K 16 INCH (11/23/21)
Unit Letter N, S5 T26N R7W, Rio Arriba County, New Mexico
36.51011° N, 107.60147° W

PROJECT NUMBER: 05A1226169

FIGURE

G



ENSOLUM
Environmental & Hydrogeologic Consultants

100-YEAR FLOOD PLAIN MAP

ENTERPRISE FIELD SERVICES, LLC
TRUNK K 16 INCH (11/23/21)
Unit Letter N, S5 T26N R7W, Rio Arriba County, New Mexico
36.51011° N, 107.60147° W

PROJECT NUMBER: 05A1226169

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	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 02402	SJ	RA	2	3	3	05	26N	07W	266831	4043786*	36	18	18

Average Depth to Water: **18 feet**

Minimum Depth: **18 feet**

Maximum Depth: **18 feet**

Record Count: 1

PLSS Search:

Section(s): 5, 6, 7, 8, 9, 4 **Township:** 26N **Range:** 07W

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

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

No records found.

PLSS Search:

Section(s): 32, 31, 33 **Township:** 27N **Range:** 07W

12- 30-039-06780

186-30-039-06783

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

223A- 30-039-22646

Operator UNOCAL Location: Unit ___ Sec. 33 Twp 27 Rng 7

Name of Well/Wells or Pipeline Serviced RINCON UNIT NO. 72, 186NP & 223A

Elevation 6638 Completion Date 8-9-90 Total Depth 300' Land Type* F

Casing, Sizes, Types & Depths NONE

If Casing is cemented, show amounts & types used NONE

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

NONE

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

Fresh, Clear, Salty, Sulphur, Etc. 100' deep less thant 5'thick, fresh water

Depths gas encountered: NONE

Type & amount of coke breeze used: 300' deep with carbo 60=99.9% carbon = 2000 lbs.

Depths anodes placed: 190', 200', 210', 220', 230', 240'

Depths vent pipes placed: 0-300 feet deep

Vent pipe perforations: From 100' to 300' deep = all vent - laser

Remarks: Cut slots.

1st ground bed installed at this location.

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.

RECEIVED
JAN 30 1991
OIL CON. DIV.
DIST. 3

DATA SHEET NO. 1 of 1

COMPANY Unocal JOB No. 751-00084 DATE: 8-9-90

WELL: Rincon Unit No 72, 186 + 223A PIPELINE:

LOCATION: SEC. 33 TWP. 27 RGE. 7 CO. Rio Arriba STATE NM

ELEV. 6638' G FT: ROTARY 300 FT: CABLE TOOL _____ FT: CASING _____ FT.

GROUNDBED: DEPTH 300' FT. DIA. 6" IN. GAS 2000 LBS. ANODES 6 Lida ST 1.6/50#

DEPTH, FT.	DRILLER'S LOG	EXPLORING ANODE TO STRUCTURE E	I	R	NO COKE I	WITH COKE I	ANODE NO.	DEPTH, TOP OF ANODES
0-20'	Brown sand + clay, 20'-40' Brown Shale + clay							
40-90'	Frist water 100' Dark Grey shale w/ some sandstone							
90-100	ALL Vent Pipe, Grey Sandstone							
5								
10								
15			2.0*					
20			2.0					
25			1.8					
130	Grey Shale		1.9					
35			2.0					
40			1.9					
145			1.9					
150			1.5					
155	Grey Sandstone		1.3					
60			1.2					
65			1.1					
70			1.8					
75			1.1					
180			1.9					
85			1.1					
190			1.1				6	190
95			1.5					
200			1.7				5	200
205			1.5					
210	Hard Grey to Dark Grey Shale, some Sandstone		1.7				4	210
15			1.6			6.5		
220			1.9				3	220
25			1.6					
230			2.0				2	230
35			1.5					
240			1.8				1	240
45			1.5					
50			1.7					
55			1.0					
60			1.0					
65			1.0					
70			1.0					
75			1.1					
80			1.0					
85			1.0					
90			1.0					
95			.9					
300			.9					
5								

GROUNDBED RESISTANCE: (1) VOLTS 12.57 - AMPS 6.5 - 1.93 OHMS

(2) VIBROGROUND _____ OHMS

GENERAL CATHODIC PROTECTION SERVICES CO.

A LUKENS COMPANY

MOTE DRILLING, INC.

DAY Thursday

DRILLER [illegible]		LEFT TOWN	ARRIVED FIELD
HELPER [illegible]		LEFT FIELD	ARRIVED TOWN
HELPER [illegible]		TOTAL FOOTAGE TODAY	

RIG NO. 2 DATE 8-9-72 CLIENT Amoco Cal

BEGIN WORK ON HOLE NO. Rincon #73 AT _____ FEET

BEGIN WORK ON HOLE NO. _____ AT _____ FEET

TIME FROM	TIME TO	ACTIVITY
0	9:30	Brown sand & Clay
30	40	Brown shale w/Clay
40	90	Grey shale w/some sandstone
90	1-0	Grey sandstone
1-30	1-50	Grey shale
1-50	2-10	Grey sandstone
2-10	3-10	Hard grey to dark grey shale w/ some sandstone

BIT RECORD

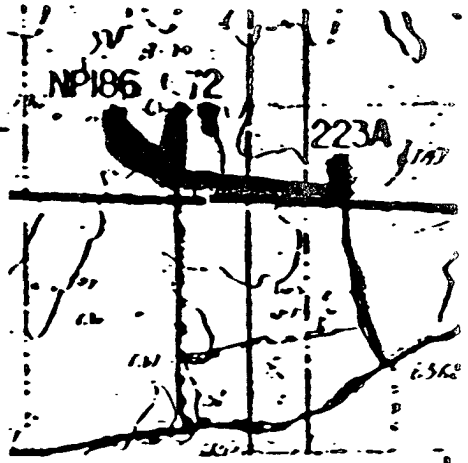
SIZE & MAKE	SERIAL NO.	FOOTAGE	
7 7/8"	Smith Rock - new -		

CIRCULATION MATERIAL

QUAN.	UNIT	MATERIAL	

NO. OF LOADS OF WATER 1 SOURCE Lowery Camp

san juan repr farm,nm Form 219-6



N

GB + DC to GB

RECT

DC to 72

35°

PIT

DRIP

GAS WELL

MP

EXISTING PIPELINE DC to 186

ROAD

DC to 223A

BURIED DC CABLE IN MIDDLE OF ROAD

BURIED CABLE CROSS COUNTRY

RECTIFIER GROUND BED, & METER POLE LOCATION

REMARKS

RINCON UNIT # 72 PC
SE/SE SEC 33 T27NR7W NMPM
METER NO. 71561
SF-080213

SCALE: NONE

UNOCAL

#9 30-039-25502
#3 30-039-06848

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

Operator Meridian Oil Inc. Location: Unit SE Sec. 31 Twp 27 Rng 07

Name of Well/Wells or Pipeline Serviced
Hattington #9 And #3

Elevation — Completion Date 11/16/95 Total Depth 408' Land Type F

Casing Strings, Sizes, Types & Depths 11/14 Set 100' of 8" PVC Casing. No Gas or Boulders, But Water Was Encountered at 50', During Casing.

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

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

Depths & thickness of water zones with description of water: Fresh, Clear, Salty, Sulphur, Etc. Hit Large Quantities of Fresh Water at 50' and 110'.

Depths gas encountered: None

Ground bed depth with type & amount of coke breeze used: 408' Depth. Used 101 Sacks of Asbury 218R (5050#)

Depths anodes placed: 395', 388', 381', 374', 367', 360', 353', 346', 339', 332', 325', 318', 311', 304', +297'

Depths vent pipes placed: Surface To 408'.

Vent pipe perforations: Bottom 280'.

Remarks:

RECEIVED
JAN 11 1996
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.

3493

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

30-039-23871

Operator MERIDIAN OIL INC. Location: Unit K Sec. 31 Twp 27 Rng 7

Name of Well/Wells or Pipeline Serviced HARRINGTON #6

cps 2008w

Elevation 6001' Completion Date 10/6/88 Total Depth 280' Land Type* N/A

Casing, Sizes, Types & Depths N/A

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

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

N/A

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

Fresh, Clear, Salty, Sulphur, Etc. 50' NO SAMPLE

Depths gas encountered: N/A

Type & amount of coke breeze used: N/A

Depths anodes placed: 235', 228', 220', 175', 168', 155', 135', 112', 105', 95'

Depths vent pipes placed: 278'

Vent pipe perforations: 240'

Remarks: gb #1

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

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

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

FM-07-0238 (Rev 10-82)

MERIDIAN OIL INC.
WELL CASING
CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOG

Comp 10-6-88

Drilling Log (Attach Hereto) ☐

Completion Date 10/6/88

CPS #	Well Name, Line or Plant:	Work Order #	Status:	Ins. Union Check
2008 W	HARRINGTON #6	54257A		☐ Good ☒ Bad Need 2 UNIONS INSTALLED AT WELL

Location:	Anode Size:	Anode Type:	Size Bar:
15-31-27-7	2" X 60"	DURION	6 3/4"

Depth Drilled	Depth Logged	Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used
280'	278'				

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Anode Depth	235	228	220	175	168	155	135	112	105	95
Anode Output (Amps)	2.0	2.9	2.0	3.0	3.0	2.4	2.5	2.4	4.6	4.5
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 12.4	Amps 14.8	Ohms .84		

Remarks: HAD LOTS of WATER AT 50', DID NOT GET WATER SAMPLE Because we Drilled with Mud. (IN LARGE) INSTALLED 278' of 1" P.V.C. VENT pipe, Perforated @ 240'. LAYED ½" Fuel gas Line IN wire ditch.

G.B. B 4170.00

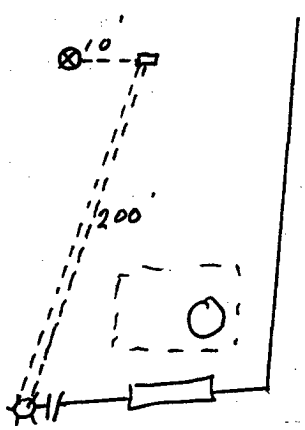
~~Rectifier Size:~~ T.E.G. V ____ A 7695.00

Addn'l Depth		
Depth Credit:	— 222' x 3.50	— 777.00
Extra Cable:	230' x 2.5	57.50
Ditch & 1 Cable:	210' x .75	157.50
~~Ditch & 2 Cable:~~		
25' Meter Pole:	—	
20' Meter Pole:	—	
10' Stub Pole:	—	
Junction Box:	1	249.00

11552.00
TAX @ 5% 577.60
TOTAL 12129.60 OK JZ

All Construction Completed

JE Statler
(Signature)



6001

2008

Darrell Crass Drilling

Drill No. 3

Well No. Harrington #6-MV

Client Meridian Oil Co. Date 10-6-88

County San Juan State New Mexico

0-30	Sand
30-55	Gravel
55-65	Clay
65-80	Sandstone
80-140	Clay
140-155	Sandstone
155-200	Clay
200-220	Sandstone
220-235	Clay
235-280	Sandstone

Driller Ronnie Brown

Water @ 50'

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: RB21200
PM:Dwayne Dixon
AFE: Pending

2. Originating Site:
Trunk K 16 Inch

3. Location of Material (Street Address, City, State or ULSTR):
UL N Section 5 T26N RW; 36.51011, -107.60147

Nov / Dec 2021

4. Source and Description of Waste:
Source: Remediation activities associated with a natural gas pipeline leak.
Description: Hydrocarbon/Condensate impacted soil and liquids associated natural gas pipeline release.
Estimated Volume 50 (yd³) / bbls Known Volume (to be entered by the operator at the end of the haul) 252/50 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 11-23-2021, 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: TBD C&E, Bailey's, Rosenbaum, Stan Horn, Riley

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: 11/24/21
SIGNATURE: TELEPHONE NO.: 505-632-0615
Surface Waste Management Facility Authorized Agent

ENSOLUM

APPENDIX D

Photographic Documentation

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Trunk K 16 Inch (11/23/21)
Ensolum Project No. 05A1226169

ENSOLUM

Photograph 1 Photograph Description: View of the release.	
Photograph 2 Photograph Description: View of the excavated flow path.	
Photograph 3 Photograph Description: View of the final excavation.	

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Trunk K 16 Inch (11/23/21)
Ensolum Project No. 05A1226169

ENSOLUM

Photograph 4 Photograph Description: View of the final excavation.	

ENSOLUM

APPENDIX E

Regulatory Correspondence

From: Long, Thomas
To: "Smith, Cory, EMNRD (Cory.Smith@state.nm.us)"; rjoyner@blm.gov
Cc: Stone, Brian
Subject: FW: Trunk K 16 Inch - UL N Section 5 T26N R 7W; 36.51011, -107.60147
Date: Thursday, December 9, 2021 1:15:00 PM

Cory/Ryan,

This email is a notification that Enterprise will be collecting soil samples for laboratory analysis at the Trunk K 16 Inch excavation on Monday, December 13, 2021 at 9:00 a.m. 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: Long, Thomas
Sent: Monday, December 6, 2021 12:17 PM
To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>; rjoyner@blm.gov
Cc: Stone, Brian <bmstone@eprod.com>
Subject: FW: Trunk K 16 Inch - UL N Section 5 T26N R 7W; 36.51011, -107.60147

Cory/Ryan,

This email is a notification that Enterprise will be collecting soil samples for laboratory analysis at the Trunk K 16 Inch excavation on Wednesday, December 8, 2021 at 9:00 a.m. 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, November 23, 2021 4:54 PM
To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>; rjoyner@blm.gov
Cc: Stone, Brian <bmstone@eprod.com>
Subject: Trunk K 16 Inch - UL N Section 5 T26N R 7W; 36.51011, -107.60147

Cory/Ryan,

This email is a follow up to our phone conversation and a notification that Enterprise had a release of natural gas, condensate and produced water on the Trunk K 16 Inch pipeline this afternoon at approximately 4:00 p.m. An estimated 31 barrels of condensate and produced water was observed on the ground surface. The release is located in UL N Section 5 T26N R 7W; 36.51011, -107.60147. No washes have been affected. No fire nor injuries. No emergency services responded. The pipeline has been blown down, isolated, locked and tagged out. The gas loss was calculated at 179 MCF. A hydrovac/spec truck has been mobilized to recover the pooled liquids. I will submit a NOR and later submit a C-141. 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
Trunk K 16 Inch (11/23/21)
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)[1] (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria (Tier I)				**10**	**NE**	**NE**	**NE**	**50**				**100**	**600**
Composite Soil Samples Collected from the Flow Path													
FP-1	12.8.21	C	0 to 2	<0.021	<0.042	<0.042	<0.084	ND	<4.2	<9.2	<46	ND	170
FP-2	12.8.21	C	0 to 2	<0.025	<0.050	<0.050	<0.10	ND	<5.0	18	<47	18	370
Excavation Composite Soil Samples													
S-1	12.13.21	C	0 to 6	<0.019	<0.037	<0.037	<0.074	ND	<3.7	<9.7	<48	ND	140
S-2	12.13.21	C	0 to 5.5	<0.022	<0.043	<0.043	<0.086	ND	<4.3	15	<49	15	90
S-3	12.13.21	C	2 to 5	<0.024	<0.047	<0.047	<0.095	ND	<4.7	<9.3	<46	ND	66
S-4	12.13.21	C	0 to 5.5	<0.024	<0.047	<0.047	<0.094	ND	<4.7	33	<47	33	290
S-5	12.13.21	C	5 to 6	<0.024	<0.047	<0.047	<0.095	ND	<4.7	24	<47	24	290

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

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

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

NA = Not Analyzed

NE = Not established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPH = Total Petroleum Hydrocarbons

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics

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

December 14, 2021

Kyle Summers

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

RE: Trunk K OrderNo.: 2112588

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 2 sample(s) on 12/9/2021 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 **2112588**
Date Reported: **12/14/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** FP-1
Project: Trunk K **Collection Date:** 12/8/2021 9:00:00 AM
Lab ID: 2112588-001 **Matrix:** MEOH (SOIL) **Received Date:** 12/9/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LRN**	
Chloride	170	60		mg/Kg	20	12/10/2021 10:48:40 AM	64396
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	12/9/2021 10:28:37 AM	64391
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/9/2021 10:28:37 AM	64391
Surr: DNOP	84.1	70-130		%Rec	1	12/9/2021 10:28:37 AM	64391
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	12/9/2021 9:09:59 AM	G84409
Surr: BFB	104	70-130		%Rec	1	12/9/2021 9:09:59 AM	G84409
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.021		mg/Kg	1	12/9/2021 9:09:59 AM	B84409
Toluene	ND	0.042		mg/Kg	1	12/9/2021 9:09:59 AM	B84409
Ethylbenzene	ND	0.042		mg/Kg	1	12/9/2021 9:09:59 AM	B84409
Xylenes, Total	ND	0.084		mg/Kg	1	12/9/2021 9:09:59 AM	B84409
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	12/9/2021 9:09:59 AM	B84409

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 interference		

Analytical Report
Lab Order **2112588**
Date Reported: **12/14/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** FP-2
Project: Trunk K **Collection Date:** 12/8/2021 9:05:00 AM
Lab ID: 2112588-002 **Matrix:** MEOH (SOIL) **Received Date:** 12/9/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LRN**	
Chloride	370	60		mg/Kg	20	12/10/2021 11:01:01 AM	64396
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	18	9.5		mg/Kg	1	12/9/2021 10:39:07 AM	64391
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/9/2021 10:39:07 AM	64391
Surr: DNOP	83.5	70-130		%Rec	1	12/9/2021 10:39:07 AM	64391
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/9/2021 9:33:28 AM	G84409
Surr: BFB	101	70-130		%Rec	1	12/9/2021 9:33:28 AM	G84409
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	12/9/2021 9:33:28 AM	B84409
Toluene	ND	0.050		mg/Kg	1	12/9/2021 9:33:28 AM	B84409
Ethylbenzene	ND	0.050		mg/Kg	1	12/9/2021 9:33:28 AM	B84409
Xylenes, Total	ND	0.10		mg/Kg	1	12/9/2021 9:33:28 AM	B84409
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	12/9/2021 9:33:28 AM	B84409

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 interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2112588**

14-Dec-21

Client: ENSOLUM

Project: Trunk K

Sample ID: **MB-64396**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **64396**	RunNo: **84474**
Prep Date: **12/9/2021**	Analysis Date: **12/10/2021**	SeqNo: **2968204** Units: **mg/Kg**

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

Sample ID: **LCS-64396**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **64396**	RunNo: **84474**
Prep Date: **12/9/2021**	Analysis Date: **12/10/2021**	SeqNo: **2968205** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	96.8	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 interference
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#: **2112588**

14-Dec-21

Client: ENSOLUM

Project: Trunk K

Sample ID: **LCS-64391** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **64391** RunNo: **84388**

Prep Date: **12/9/2021** Analysis Date: **12/9/2021** SeqNo: **2964799** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.1	68.9	135			
Surr: DNOP	3.8		5.000		76.5	70	130			

Sample ID: **MB-64391** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **64391** RunNo: **84388**

Prep Date: **12/9/2021** Analysis Date: **12/9/2021** SeqNo: **2964801** 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	8.2		10.00		82.0	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 interference
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#: **2112588**

14-Dec-21

Client: ENSOLUM

Project: Trunk K

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **G84409**	RunNo: **84409**
Prep Date:	Analysis Date: **12/9/2021**	SeqNo: **2965633** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		103	70	130			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **G84409**	RunNo: **84409**
Prep Date:	Analysis Date: **12/9/2021**	SeqNo: **2965634** 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	99.1	78.6	131			
Surr: BFB	1200		1000		116	70	130			

Sample ID: **2112588-001ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **FP-1**	Batch ID: **G84409**	RunNo: **84409**
Prep Date:	Analysis Date: **12/9/2021**	SeqNo: **2965635** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.2	20.97	0	93.7	61.3	114			
Surr: BFB	970		838.9		115	70	130			

Sample ID: **2112588-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **FP-1**	Batch ID: **G84409**	RunNo: **84409**
Prep Date:	Analysis Date: **12/9/2021**	SeqNo: **2965636** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.2	20.97	0	101	61.3	114	7.20	20	
Surr: BFB	950		838.9		113	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 interference
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#: **2112588**

14-Dec-21

Client: ENSOLUM

Project: Trunk K

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **B84409**	RunNo: **84409**
Prep Date:	Analysis Date: **12/9/2021**	SeqNo: **2965662** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		104	70	130			

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **B84409**	RunNo: **84409**
Prep Date:	Analysis Date: **12/9/2021**	SeqNo: **2965663** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	93.8	80	120			
Toluene	0.94	0.050	1.000	0	94.5	80	120			
Ethylbenzene	0.94	0.050	1.000	0	93.5	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.5	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	70	130			

Sample ID: **2112588-002ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **FP-2**	Batch ID: **B84409**	RunNo: **84409**
Prep Date:	Analysis Date: **12/9/2021**	SeqNo: **2965667** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	0.9970	0	90.2	80	120			
Toluene	0.91	0.050	0.9970	0.01515	89.4	80	120			
Ethylbenzene	0.90	0.050	0.9970	0	90.2	80	120			
Xylenes, Total	2.7	0.10	2.991	0	89.5	80	120			
Surr: 4-Bromofluorobenzene	1.0		0.9970		105	70	130			

Sample ID: **2112588-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **FP-2**	Batch ID: **B84409**	RunNo: **84409**
Prep Date:	Analysis Date: **12/9/2021**	SeqNo: **2965668** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	0.9970	0	98.8	80	120	9.07	20	
Toluene	1.0	0.050	0.9970	0.01515	99.0	80	120	10.1	20	
Ethylbenzene	0.99	0.050	0.9970	0	99.6	80	120	9.88	20	
Xylenes, Total	2.9	0.10	2.991	0	98.0	80	120	9.08	20	
Surr: 4-Bromofluorobenzene	1.0		0.9970		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 interference
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: **2112588** RcptNo: **1**

Received By: **Desiree Dominguez** **12/9/2021 7:25:00 AM** DD

Completed By: **Desiree Dominguez** **12/9/2021 7:27:25 AM** DD

Reviewed By: JR 12/9/21

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 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: TME 12/9/21

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.7	Good	Yes			

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S Rio Grande Suit A 87410

Phone #:

email or Fax#:

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 1402o
☐ Standard ☒ Rush 12-9-21

Project Name: Trunk-K

Project #:

Project Manager: K. Summers

Sampler: C DApenti

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 1.6 +0.1 = 1.7 (°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. 2112588	BTEX / MTBE / TMBs (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, NO3, NO2, PO4, SO4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
12/8	900	S	FP-1	1 4oz Jar	Cool	-001	X	X					X			
12/8	905	S	FP-2	1 4oz Jar	Cool	-002	X	X					X			

Analysis Request

Relinquished by:	Date	Time	Received by:	Via:	Date	Time
	12/8/21	1438				
Mert Ward	12/8/21	1847		Courier	12/9/21	7:25

Remarks: Pm - Tom Long
PayKey RB21200

Sample Dry

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.

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

December 21, 2021

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

RE: Trunk K OrderNo.: 2112832

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 12/14/2021 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued December 20, 2021.

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. 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. All samples are reported as received unless otherwise indicated.

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 **2112832**
Date Reported: **12/21/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-1
Project: Trunk K **Collection Date:** 12/13/2021 9:00:00 AM
Lab ID: 2112832-001 **Matrix:** MEOH (SOIL) **Received Date:** 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	140	60		mg/Kg	20	12/14/2021 2:45:06 PM	64488
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/14/2021 10:16:02 AM	64478
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/14/2021 10:16:02 AM	64478
Surr: DNOP	86.1	70-130		%Rec	1	12/14/2021 10:16:02 AM	64478
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	12/14/2021 10:09:00 AM	R84502
Surr: BFB	96.3	70-130		%Rec	1	12/14/2021 10:09:00 AM	R84502
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.019		mg/Kg	1	12/14/2021 10:09:00 AM	BS84502
Toluene	ND	0.037		mg/Kg	1	12/14/2021 10:09:00 AM	BS84502
Ethylbenzene	ND	0.037		mg/Kg	1	12/14/2021 10:09:00 AM	BS84502
Xylenes, Total	ND	0.074		mg/Kg	1	12/14/2021 10:09:00 AM	BS84502
Surr: 4-Bromofluorobenzene	85.1	70-130		%Rec	1	12/14/2021 10:09:00 AM	BS84502

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 interference		

Analytical Report
Lab Order **2112832**
Date Reported: **12/21/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-2
Project: Trunk K **Collection Date:** 12/13/2021 9:05:00 AM
Lab ID: 2112832-002 **Matrix:** MEOH (SOIL) **Received Date:** 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	90	60		mg/Kg	20	12/14/2021 2:57:31 PM	64488
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	15	9.8		mg/Kg	1	12/14/2021 10:26:34 AM	64478
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/14/2021 10:26:34 AM	64478
Surr: DNOP	88.2	70-130		%Rec	1	12/14/2021 10:26:34 AM	64478
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.3		mg/Kg	1	12/14/2021 10:29:00 AM	R84502
Surr: BFB	96.1	70-130		%Rec	1	12/14/2021 10:29:00 AM	R84502
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.022		mg/Kg	1	12/14/2021 10:29:00 AM	BS84502
Toluene	ND	0.043		mg/Kg	1	12/14/2021 10:29:00 AM	BS84502
Ethylbenzene	ND	0.043		mg/Kg	1	12/14/2021 10:29:00 AM	BS84502
Xylenes, Total	ND	0.086		mg/Kg	1	12/14/2021 10:29:00 AM	BS84502
Surr: 4-Bromofluorobenzene	81.9	70-130		%Rec	1	12/14/2021 10:29:00 AM	BS84502

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 interference		

Analytical Report
Lab Order **2112832**
Date Reported: **12/21/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-3
Project: Trunk K **Collection Date:** 12/13/2021 9:10:00 AM
Lab ID: 2112832-003 **Matrix:** MEOH (SOIL) **Received Date:** 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	66	60		mg/Kg	20	12/14/2021 3:09:55 PM	64488
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/14/2021 10:37:06 AM	64478
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/14/2021 10:37:06 AM	64478
Surr: DNOP	89.5	70-130		%Rec	1	12/14/2021 10:37:06 AM	64478
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/14/2021 10:48:00 AM	R84502
Surr: BFB	89.2	70-130		%Rec	1	12/14/2021 10:48:00 AM	R84502
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.024		mg/Kg	1	12/14/2021 10:48:00 AM	BS84502
Toluene	ND	0.047		mg/Kg	1	12/14/2021 10:48:00 AM	BS84502
Ethylbenzene	ND	0.047		mg/Kg	1	12/14/2021 10:48:00 AM	BS84502
Xylenes, Total	ND	0.095		mg/Kg	1	12/14/2021 10:48:00 AM	BS84502
Surr: 4-Bromofluorobenzene	79.4	70-130		%Rec	1	12/14/2021 10:48:00 AM	BS84502

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 interference		

Analytical Report
Lab Order **2112832**
Date Reported: **12/21/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-4
Project: Trunk K **Collection Date:** 12/13/2021 9:15:00 AM
Lab ID: 2112832-004 **Matrix:** MEOH (SOIL) **Received Date:** 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	290	60		mg/Kg	20	12/14/2021 3:22:20 PM	64488
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	33	9.4		mg/Kg	1	12/14/2021 10:47:36 AM	64478
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/14/2021 10:47:36 AM	64478
Surr: DNOP	86.7	70-130		%Rec	1	12/14/2021 10:47:36 AM	64478
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/14/2021 11:08:00 AM	R84502
Surr: BFB	90.6	70-130		%Rec	1	12/14/2021 11:08:00 AM	R84502
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.024		mg/Kg	1	12/14/2021 11:08:00 AM	BS84502
Toluene	ND	0.047		mg/Kg	1	12/14/2021 11:08:00 AM	BS84502
Ethylbenzene	ND	0.047		mg/Kg	1	12/14/2021 11:08:00 AM	BS84502
Xylenes, Total	ND	0.094		mg/Kg	1	12/14/2021 11:08:00 AM	BS84502
Surr: 4-Bromofluorobenzene	81.4	70-130		%Rec	1	12/14/2021 11:08:00 AM	BS84502

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 interference		

Analytical Report
Lab Order **2112832**
Date Reported: **12/21/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-5
Project: Trunk K **Collection Date:** 12/13/2021 9:20:00 AM
Lab ID: 2112832-005 **Matrix:** MEOH (SOIL) **Received Date:** 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	290	60		mg/Kg	20	12/14/2021 3:34:44 PM	64488
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	24	9.4		mg/Kg	1	12/14/2021 10:58:08 AM	64478
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/14/2021 10:58:08 AM	64478
Surr: DNOP	88.2	70-130		%Rec	1	12/14/2021 10:58:08 AM	64478
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/14/2021 11:27:00 AM	R84502
Surr: BFB	89.1	70-130		%Rec	1	12/14/2021 11:27:00 AM	R84502
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.024		mg/Kg	1	12/14/2021 11:27:00 AM	BS84502
Toluene	ND	0.047		mg/Kg	1	12/14/2021 11:27:00 AM	BS84502
Ethylbenzene	ND	0.047		mg/Kg	1	12/14/2021 11:27:00 AM	BS84502
Xylenes, Total	ND	0.095		mg/Kg	1	12/14/2021 11:27:00 AM	BS84502
Surr: 4-Bromofluorobenzene	82.0	70-130		%Rec	1	12/14/2021 11:27:00 AM	BS84502

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 interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2112832**

21-Dec-21

Client: ENSOLUM

Project: Trunk K

Sample ID: **MB-64488** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **64488** RunNo: **84525**

Prep Date: **12/14/2021** Analysis Date: **12/14/2021** SeqNo: **2971244** Units: **mg/Kg**

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

Sample ID: **LCS-64488** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **64488** RunNo: **84525**

Prep Date: **12/14/2021** Analysis Date: **12/14/2021** SeqNo: **2971245** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.2	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 interference
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#: **2112832**

21-Dec-21

Client: ENSOLUM

Project: Trunk K

Sample ID: **LCS-64478** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **64478** RunNo: **84516**

Prep Date: **12/14/2021** Analysis Date: **12/14/2021** SeqNo: **2970114** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	85.6	68.9	135			
Surr: DNOP	4.3		5.000		86.3	70	130			

Sample ID: **MB-64478** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **64478** RunNo: **84516**

Prep Date: **12/14/2021** Analysis Date: **12/14/2021** SeqNo: **2970115** 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	9.0		10.00		90.1	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 interference
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#: **2112832**

21-Dec-21

Client: ENSOLUM

Project: Trunk K

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R84502**	RunNo: **84502**
Prep Date:	Analysis Date: **12/14/2021**	SeqNo: **2969459** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		105	70	130			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R84502**	RunNo: **84502**
Prep Date:	Analysis Date: **12/14/2021**	SeqNo: **2969460** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	110	78.6	131			
Surr: BFB	1200		1000		118	70	130			

Sample ID: **mb-64467**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **64467**	RunNo: **84502**
Prep Date: **12/13/2021**	Analysis Date: **12/14/2021**	SeqNo: **2970567** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	900		1000		89.8	70	130			

Sample ID: **lcs-64467**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **64467**	RunNo: **84502**
Prep Date: **12/13/2021**	Analysis Date: **12/14/2021**	SeqNo: **2970568** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		106	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 interference
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#: **2112832**

21-Dec-21

Client: ENSOLUM

Project: Trunk K

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **BS84502**	RunNo: **84502**
Prep Date:	Analysis Date: **12/14/2021**	SeqNo: **2969467** 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	0.96		1.000		95.5	70	130			

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **BS84502**	RunNo: **84502**
Prep Date:	Analysis Date: **12/14/2021**	SeqNo: **2969468** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.025	1.000	0	87.4	80	120			
Toluene	0.90	0.050	1.000	0	90.0	80	120			
Ethylbenzene	0.93	0.050	1.000	0	92.6	80	120			
Xylenes, Total	2.7	0.10	3.000	0	91.1	80	120			
Surr: 4-Bromofluorobenzene	0.98		1.000		98.1	70	130			

Sample ID: **mb-64467**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **64467**	RunNo: **84502**
Prep Date: **12/13/2021**	Analysis Date: **12/14/2021**	SeqNo: **2970588** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.82		1.000		82.2	70	130			

Sample ID: **lcs-64467**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **64467**	RunNo: **84502**
Prep Date: **12/13/2021**	Analysis Date: **12/14/2021**	SeqNo: **2970589** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.82		1.000		81.6	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 interference
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: 2112832 | RcptNo: 1

Received By: **Desiree Dominguez** 12/14/2021 8:10:00 AM DD

Completed By: **Sean Livingston** 12/14/2021 8:20:49 AM SL

Reviewed By: CMC 12/14/21

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 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 12/14/21

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.9	Good				

Chain-of-Custody Record

Client: Ensolum, LLC.

Mailing Address: 606 S Rio Grande Aztec 87410

Phone #: 970-216-5735

email or Fax#:

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 100%
☐ Standard ☒ Rush 12-14-21

Project Name: Trunk - K

Project #:

Project Manager: K. Summers

Sampler: C DAponti

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 1.9+0.0=1.9 (°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. 2112432	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)
12/13	900	S	S-1	1 4oz Jar	Cool	001	✓	✓					✓			
12/13	905	S	S-2	1 4oz Jar	Cool	002	✓	✓					✓			
12/13	910	S	S-3	1 4oz Jar	Cool	003	✓	✓					✓			
12/13	915	S	S-4	1 4oz Jar	Cool	004	✓	✓					✓			
12/13	920	S	S-5	1 4oz Jar	Cool	005	✓	✓					✓			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
12/13/21	1146		Chris Ward		12/13/21	1146
12/13/21	1802			courier	12/14/21	8:10

Remarks: pm Tom Long
Ray Ruy RB21200
AFE #

Sample Ray

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

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

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

CONDITIONS

Action 152276

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 152276
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	11/14/2022