

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) nAPP2222032322
Contact mailing address: 614 Reilly Ave, Farmington, NM 87401	

Location of Release Source

Latitude **36.45519** Longitude **-107.61866** (NAD 83 in decimal degrees to 5 decimal places)

Site Name Hughes #14	Site Type Natural Gas Gathering Pipeline
Date Release Discovered: 08/04/2022	Serial Number (if applicable): N/A

Unit Letter	Section	Township	Range	County
K	30	26N	7W	San Juan

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

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> Condensate	Volume Released (bbls): None	Volume Recovered (bbls): None
<input checked="" type="checkbox"/> Natural Gas	Volume Released (Mcf): 1.16 MCF	Volume Recovered (Mcf): None
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

Cause of Release: On August 4, 2022, Enterprise had a release of natural gas from the Hughes #14 pipeline. The pipeline was isolated, depressurized, locked and tagged out. No liquids were released to the ground surface. No emergency services responded. The release was located on the bank of a wash. No fire nor injuries occurred. Remediation and repairs were completed on August 17, 2022. The final excavation dimensions measured approximately 12 feet long by 6 feet wide by five (5) feet deep. The excavation was backfilled with laboratory-confirmed stockpiled soil and was then contoured to the surrounding topography. A third party closure report is included with this "Final." C-141.

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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

Printed Name: Thomas Long Title: Senior Environmental Scientist

Signature:  Date: 10-28-2022

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:  Date: 11/14/2022

Printed Name: Nelson Velez Title: Environmental Specialist – Adv



CLOSURE REPORT

Property:

Hughes #14 (08/04/22)
Unit Letter K, S30 T26N R7W
Rio Arriba County, New Mexico

New Mexico EMNRD OCD Incident ID No. NAPP2222032322

October 27, 2022

Ensolum Project No. 05A1226202

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

1.0	INTRODUCTION.....	1
1.1	Site Description & Background.....	1
1.2	Project Objective.....	1
2.0	CLOSURE CRITERIA.....	1
3.0	SOIL REMEDIATION ACTIVITIES.....	3
4.0	SOIL SAMPLING PROGRAM.....	3
5.0	SOIL LABORATORY ANALYTICAL METHODS.....	3
6.0	SOIL DATA EVALUATION.....	4
7.0	RECLAMATION AND REVEGETATION	4
8.0	FINDINGS AND RECOMMENDATION	4
9.0	STANDARDS OF CARE, LIMITATIONS, AND RELIANCE.....	4
9.1	Standard of Care.....	4
9.2	Limitations.....	5
9.3	Reliance	5

LIST OF APPENDICES

Appendix A – Figures

Figure 1: Topographic Map
Figure 2: Site Vicinity Map
Figure 3: Site Map with Soil Analytical Results

Appendix B – Siting Figures and Documentation

Figure A: 1.0 Mile Radius Water Well/POD Location Map
Figure B: Cathodic Protection Well Recorded Depth to Water
Figure C: 300 Foot Radius Watercourse and Drainage Identification
Figure D: 300 Foot Radius Occupied Structure Identification
Figure E: Water Well and Natural Spring Location
Figure F: Wetlands
Figure G: Mines, Mills, and Quarries
Figure H: 100-Year Flood Plain Map

Appendix C – Photographic Documentation

Appendix D – Regulatory Correspondence

Appendix E – Table 1 - Soil Analytical Summary

Appendix F – Laboratory Data Sheets & Chain of Custody Documentation

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Hughes #14 (08/04/22) (Site)
NM EMNRD OCD Incident ID No.	NAPP2222032322
Location:	36.45519° North, 107.61866° West Unit Letter K, Section 30, 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 August 4, 2022, a third party notified Enterprise of a potential leak on the Hughes #14 pipeline. Enterprise personnel confirmed a leak on the pipeline and subsequently isolated and locked the pipeline out of service. Additionally, the NM EMNRD OCD was notified of the release. Due to rain events, the unpaved road to the Site was inaccessible to vehicular traffic and required repair prior to the initiation of earthwork activities. On August 15, 2022, Enterprise initiated activities to remediate petroleum hydrocarbon impact.

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

1.2 Project Objective

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

2.0 CLOSURE CRITERIA

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

- The NM Office of the State Engineer (OSE) tracks the usage and assignment of water rights and water well installations and records this information in the Water Rights Reporting System (WRRS) database. Water wells and other points of diversion (PODs) are each assigned POD numbers in the database (which is searchable and includes an interactive map). One POD (SJ-02406) was identified in the same Public Land Survey System (PLSS) section as the Site. This POD is located approximately 0.2 miles northwest of the Site and approximately two feet lower in elevation than the Site. The recorded depth to water is 180 feet below grade surface (bgs). No PODS were identified in the adjacent PLSS sections (**Figure A, Appendix B**).

- No cathodic protection wells (CPWs) were identified in the same PLSS section as the Site, and no CPWs were identified in the adjacent PLSS sections in the NM EMNRD OCD imaging database (**Figure B, Appendix B**).
- The Site is located within 300 feet of a NM EMNRD OCD-defined continuously flowing watercourse or significant watercourse (**Figure C, Appendix B**).
- The Site is not located within 200 feet of a lakebed, sinkhole, or playa lake.
- The Site is not located within 300 feet of a permanent residence, school, hospital, institution, or church (**Figure D, Appendix B**).
- No springs, or private domestic freshwater wells used by less than five households for domestic or stock watering purposes were identified within 500 feet of the Site (**Figure E, Appendix B**). One POD (SJ-02406) is located approximately 900 feet northwest of the Site. According to the records this POD is utilized for livestock water purposes.
- One water well was identified within 1,000 feet of the Site (**Figure E, Appendix B**). This POD (SJ-02406) is located approximately 900 feet northwest of the Site. According to the records this POD is utilized to provide water for livestock .
- The Site is not located within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to New Mexico Statutes Annotated (NMSA) 1978, Section 3-27-3.
- Based on information identified in the U.S. Fish & Wildlife Service National Wetlands Inventory Wetlands Mapper, the Site is not within 300 feet of a wetland (**Figure F, Appendix B**).
- Based on information identified in the NM Mining and Minerals Division's Geographic Information System (GIS) Maps and Mine Data database, the Site is not within an area overlying a subsurface mine (**Figure G, Appendix B**).
- The Site is not located within an unstable area per Paragraph (6) of Subsection U of 19.15.2.7 NMAC.
- Based on information provided by the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) geospatial database, the Site is not within a 100-year floodplain (**Figure H, Appendix B**).

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

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

¹ – Constituent concentrations are in milligrams per kilogram (mg/kg).

² – Total Petroleum Hydrocarbons (TPH). Gasoline Range Organics (GRO). Diesel Range Organics (DRO). Motor Oil/Lube Oil Range Organics (MRO).

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

3.0 SOIL REMEDIATION ACTIVITIES

On August 15, 2022, Enterprise initiated activities to repair the pipeline and remediate the petroleum hydrocarbon impact resulting from the release. During the remediation and corrective action activities, Sierra Oilfield Services, Inc., provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final excavation measured approximately 12 feet long and 6 feet wide at the maximum extents. The maximum depth of the excavation measured approximately five feet bgs. The lithology encountered during the completion of remediation activities consisted primarily of silty sand.

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

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

4.0 SOIL SAMPLING PROGRAM

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

Ensolum's soil sampling program included the collection of fourteen composite soil samples (S-1 through S-4) from the excavation for laboratory analysis. In addition, one composite soil sample (SP-1) was collected from the stockpiled soils to confirm the material was suitable to use as backfill. The composite samples were comprised of five aliquots each and represent an estimated 200 square foot (ft²) sample area per guidelines outlined in Section D of 19.15.29.12 NMAC. Hand tools or the excavator bucket were utilized to obtain fresh aliquots from each area of the excavation. Regulatory correspondence is provided in **Appendix D**.

First Sampling Event

On August 16, 2022, 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 sample S-1 (5') was collected from the floor of the excavation. Composite soil samples S-2 (0'-5'), S-3 (0'-5'), and S-4 (0'-5') were collected from the walls of the excavation. Composite soil sample SP-1 was collected from the stockpiled soil to demonstrate that the soil did not exhibit COC impact and that it was suitable for use as backfill.

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 E)**. The laboratory data sheets and executed chain-of-custody forms are provided in **Appendix F**.

6.0 SOIL DATA EVALUATION

Ensolum compared the benzene, BTEX, TPH, and chloride laboratory analytical results or laboratory practical quantitation limits (PQLs) / reporting limits (RLs) associated with the composite soil samples (S-1 through S-4 and SP-1) to the applicable NM EMNRD OCD closure criteria. The laboratory analytical results are summarized in **Table 1 (Appendix E)**.

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

7.0 RECLAMATION AND REVEGETATION

The excavation was backfilled with laboratory-confirmed stockpiled soil and was then contoured to the surrounding topography. Enterprise will re-seed the Site with an approved seeding mixture.

8.0 FINDINGS AND RECOMMENDATION

- Five composite soil samples were collected from the Site. Based on laboratory analytical results, no benzene, BTEX, chloride, or combined TPH GRO/DRO or TPH GRO/DRO/MRO exceedances were identified in the soils at the Site.
- The excavation was backfilled with laboratory-confirmed stockpiled soil and was then contoured to the surrounding topography.

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

9.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

9.1 Standard of Care

Ensolum's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Ensolum makes no warranties, express or implied, as to the services performed hereunder. Additionally, Ensolum

does not warrant the work of third parties supplying information used in the report (e.g., laboratories, regulatory agencies, or other third parties).

9.2 Limitations

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

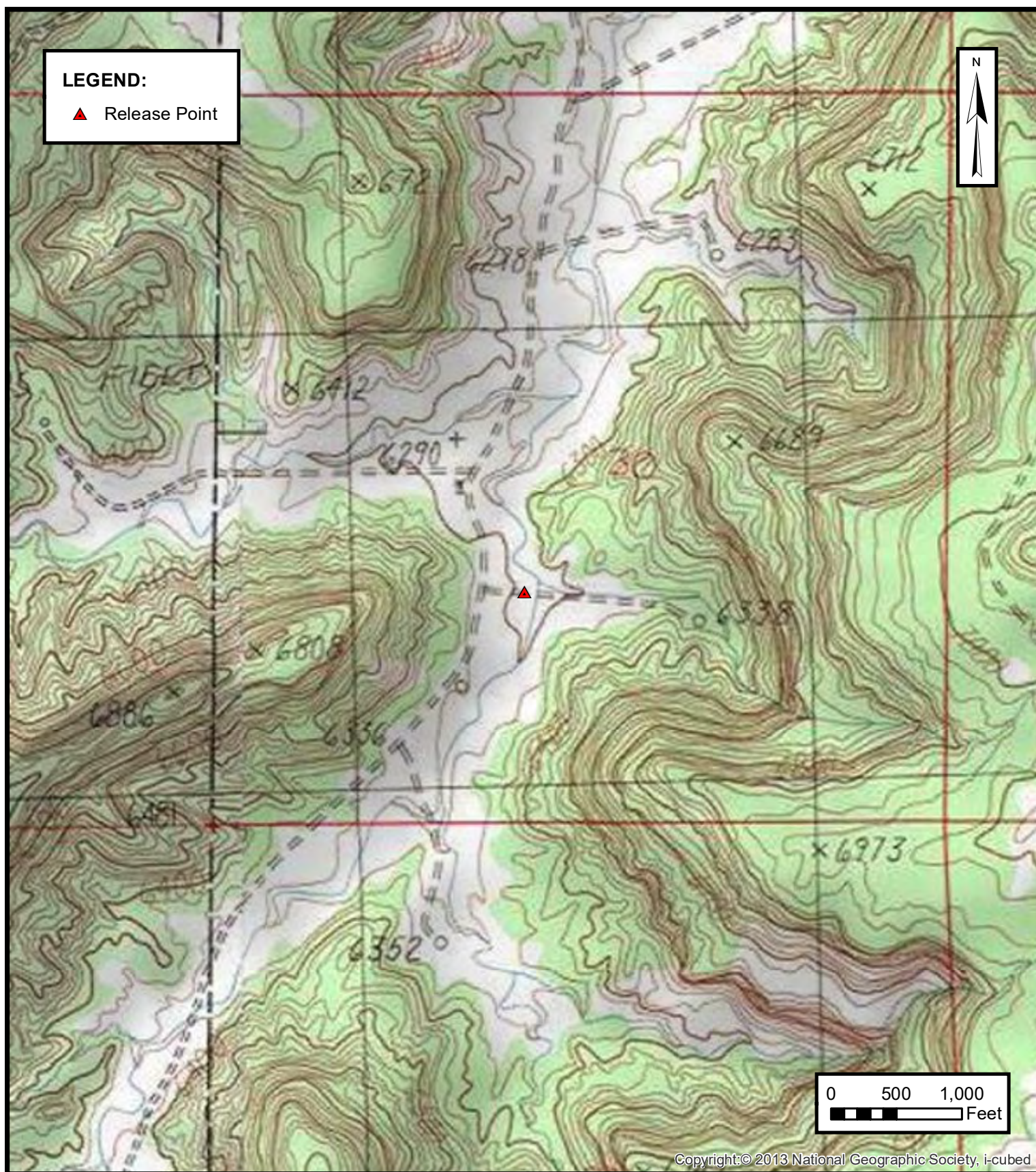
9.3 Reliance

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



APPENDIX A

Figures





SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC

HUGHES #14 (08/04/22)

Unit Letter K, S30 T26N R7W, Rio Arriba County, New Mexico

36.45519° N, 107.61866° W

PROJECT NUMBER: 05A1226202

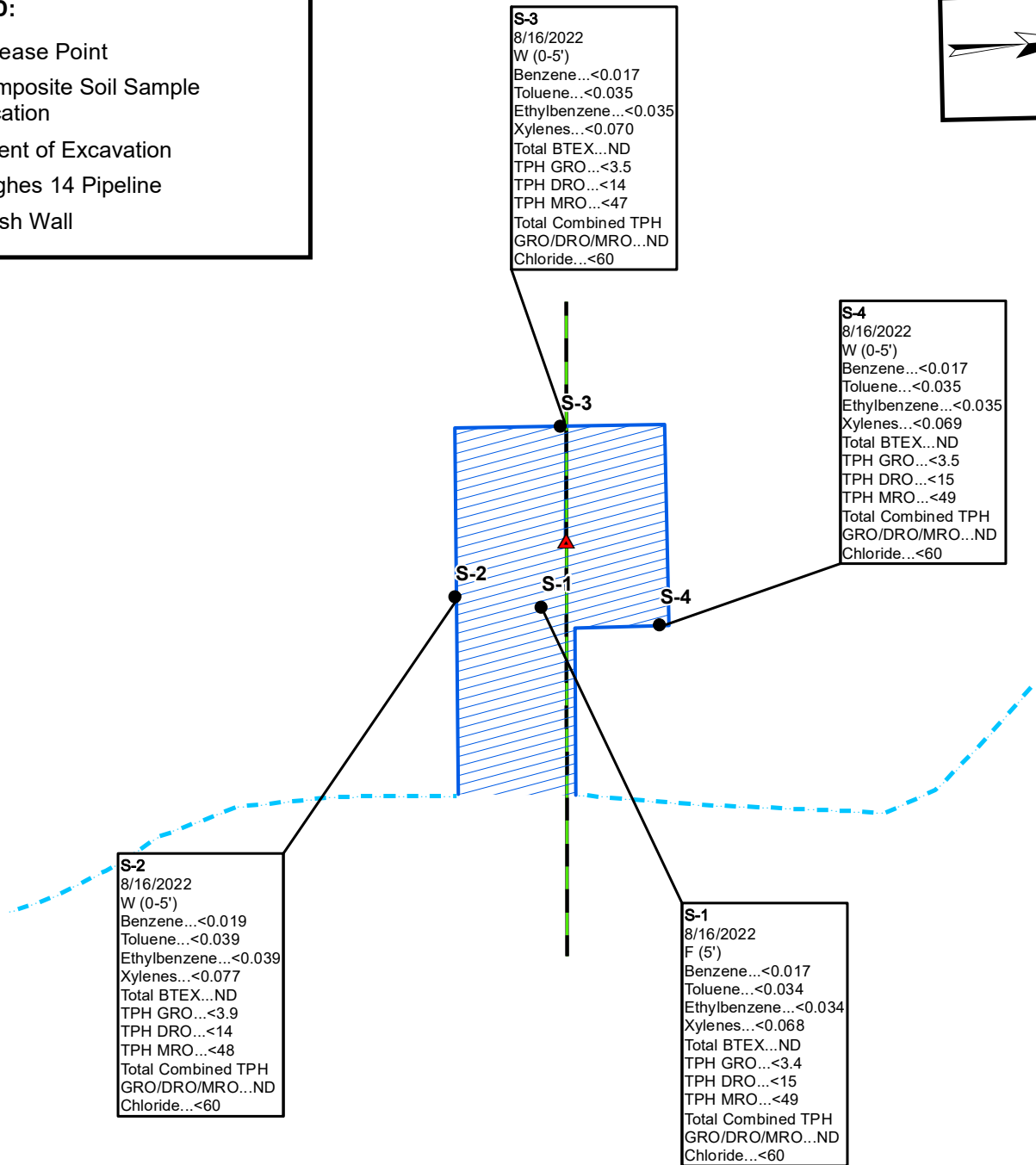
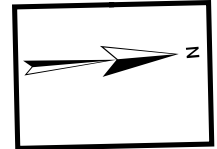
FIGURE

2

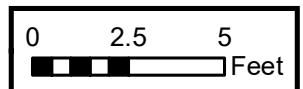
ENSOLUM
Environmental, Engineering and
Hydrogeologic Consultants

LEGEND:

- ▲ Release Point
- Composite Soil Sample Location
- ▨ Extent of Excavation
- Hughes 14 Pipeline
- - - Wash Wall



NOTES:
F - Floor Sample
W - Wall Sample
All concentrations are in mg/Kg.
All depths are listed in feet below grade surface (bgs).

**SITE MAP WITH SOIL ANALYTICAL RESULTS**

ENTERPRISE FIELD SERVICES, LLC
HUGHES #14 (08/04/22)
Unit Letter K, S30 T26N R7W, Rio Arriba County, New Mexico
36.45519° N, 107.61866° W

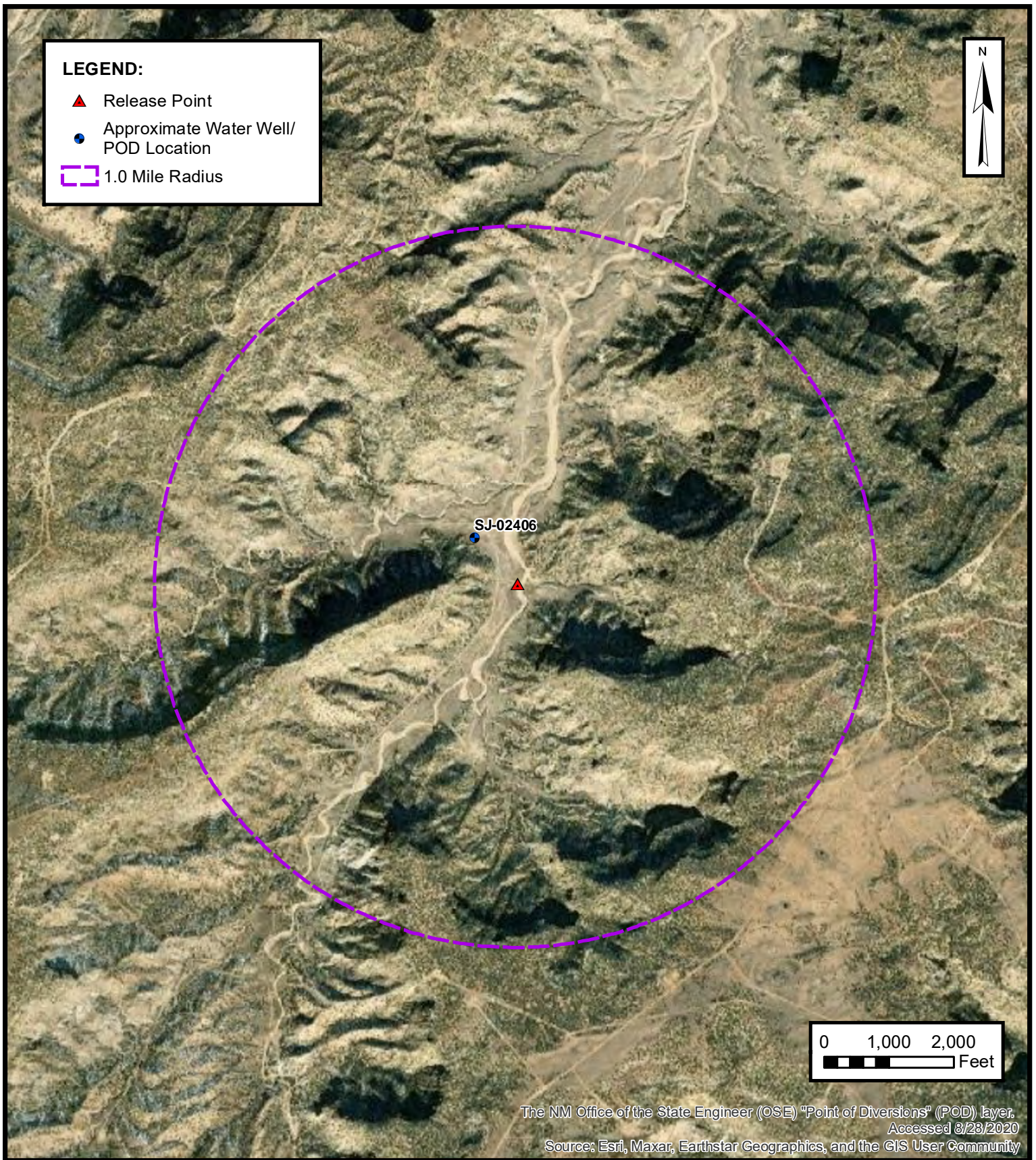
PROJECT NUMBER: 05A1226202

FIGURE
3



APPENDIX B

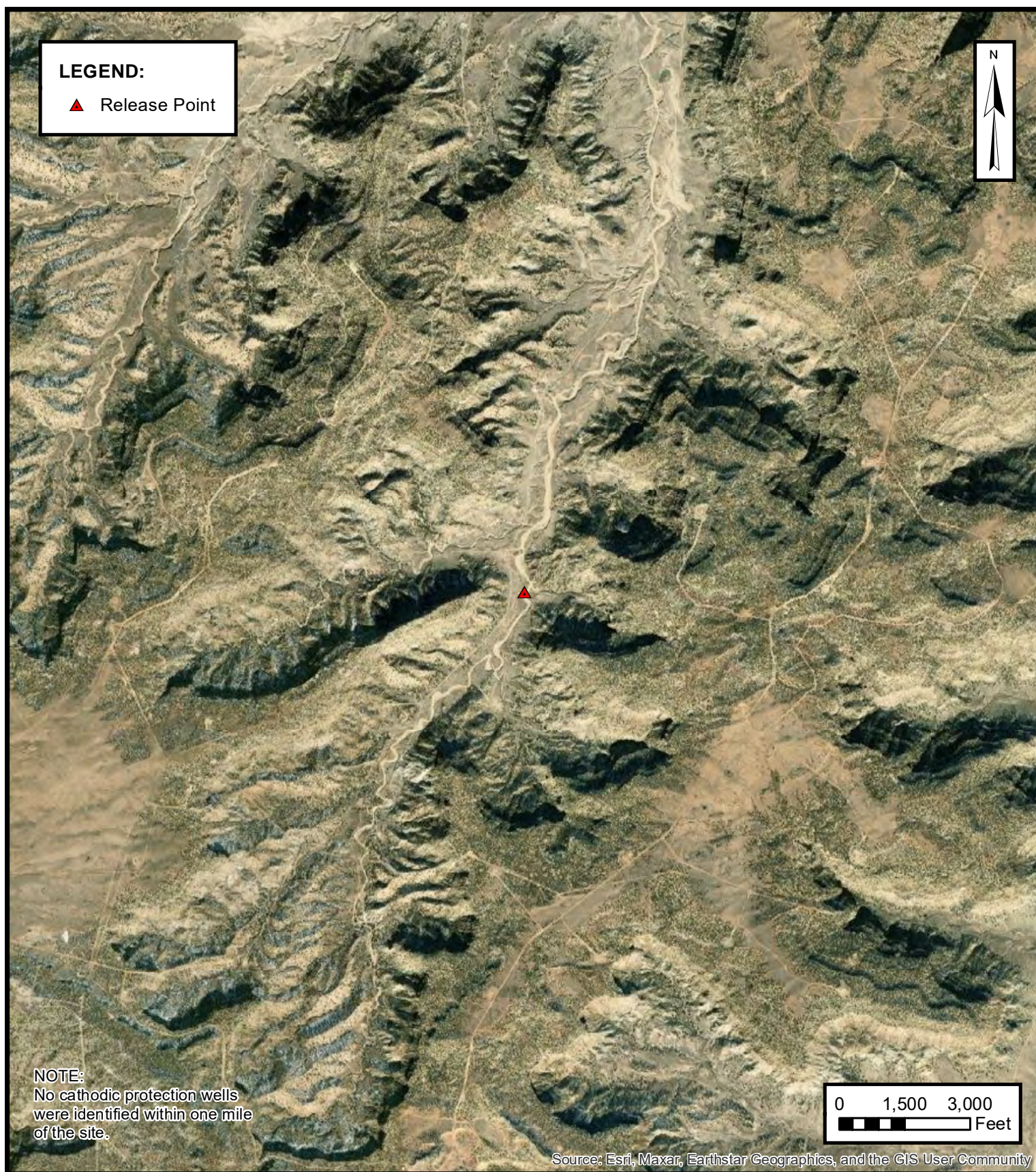
Siting Figures and Documentation

**1.0 MILE RADIUS WATER WELL/ POD LOCATION MAP**

ENTERPRISE FIELD SERVICES, LLC
HUGHES #14 (08/04/22)
Unit Letter K, S30 T26N R7W, Rio Arriba County, New Mexico
36.45519° N, 107.61866° W

PROJECT NUMBER: 05A1226202

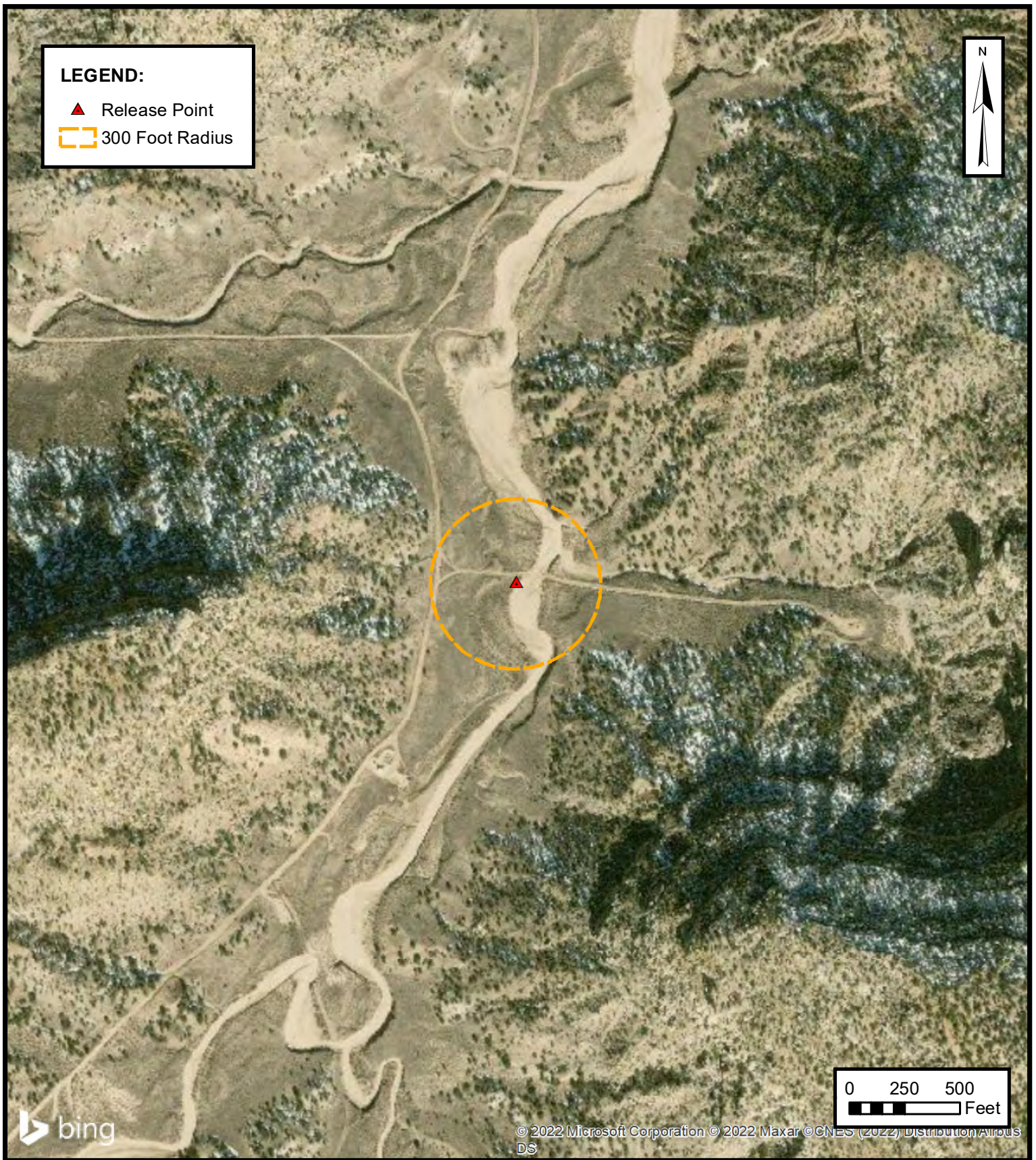
FIGURE
A



**CATHODIC PROTECTION WELL RECORDED
DEPTH TO WATER**
ENTERPRISE FIELD SERVICES, LLC
HUGHES #14 (08/04/22)
Unit Letter K, S30 T26N R7W, Rio Arriba County, New Mexico
36.45519° N, 107.61866° W

PROJECT NUMBER: 05A1226202

**FIGURE
B**



Environmental, Engineering and
Hydrogeologic Consultants

**300 FOOT RADIUS
WATERCOURSE AND DRAINAGE IDENTIFICATION**

ENTERPRISE FIELD SERVICES, LLC

HUGHES #14 (08/04/22)

Unit Letter K, S30 T26N R7W, Rio Arriba County, New Mexico

36.45519° N, 107.61866° W

PROJECT NUMBER: 05A1226202

FIGURE

C



**300 FOOT RADIUS
OCCUPIED STRUCTURE IDENTIFICATION**

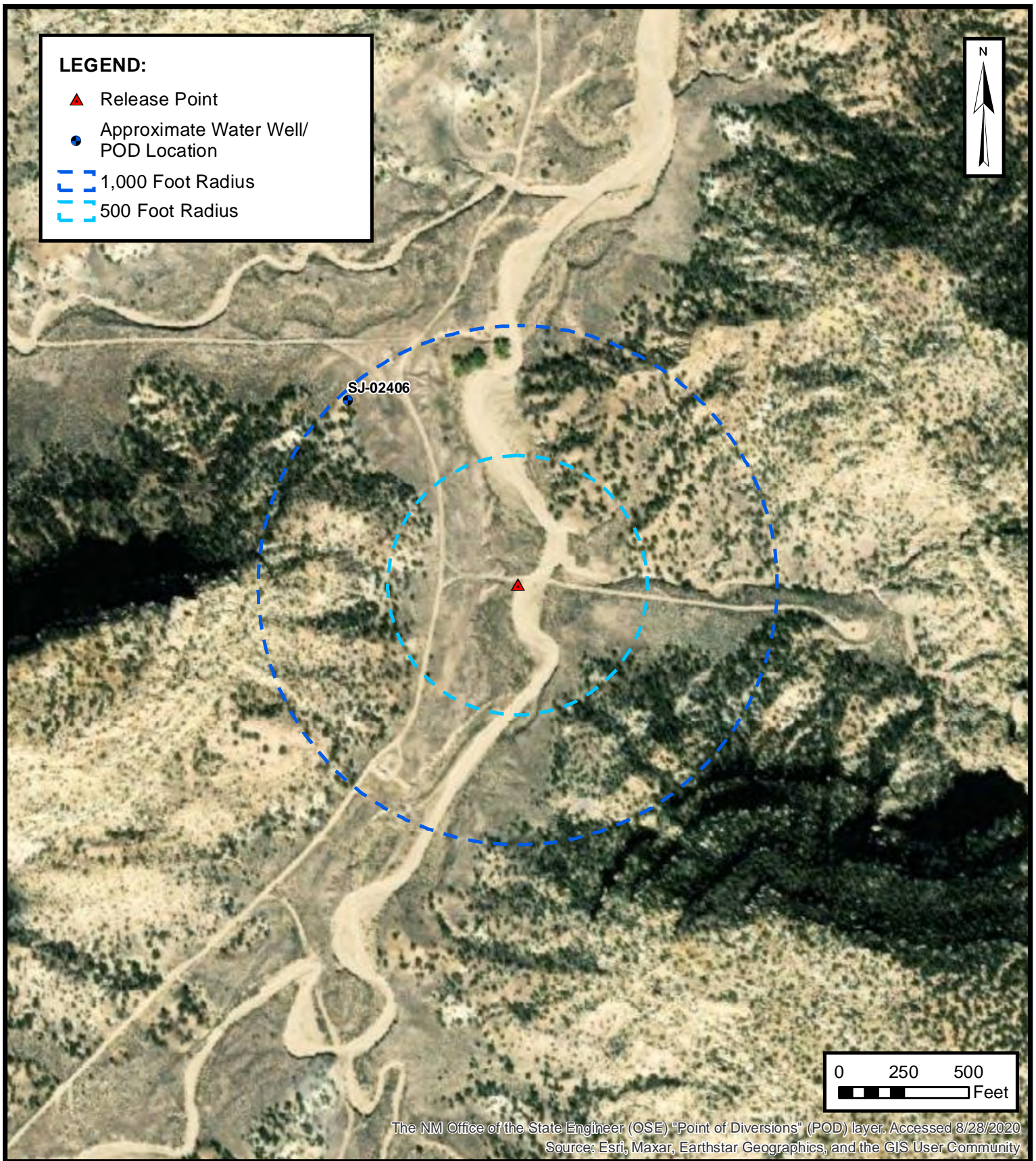
ENTERPRISE FIELD SERVICES, LLC

HUGHES #14 (08/04/22)

Unit Letter K, S30 T26N R7W, Rio Arriba County, New Mexico
36.45519° N, 107.61866° W

PROJECT NUMBER: 05A1226202

**FIGURE
D**

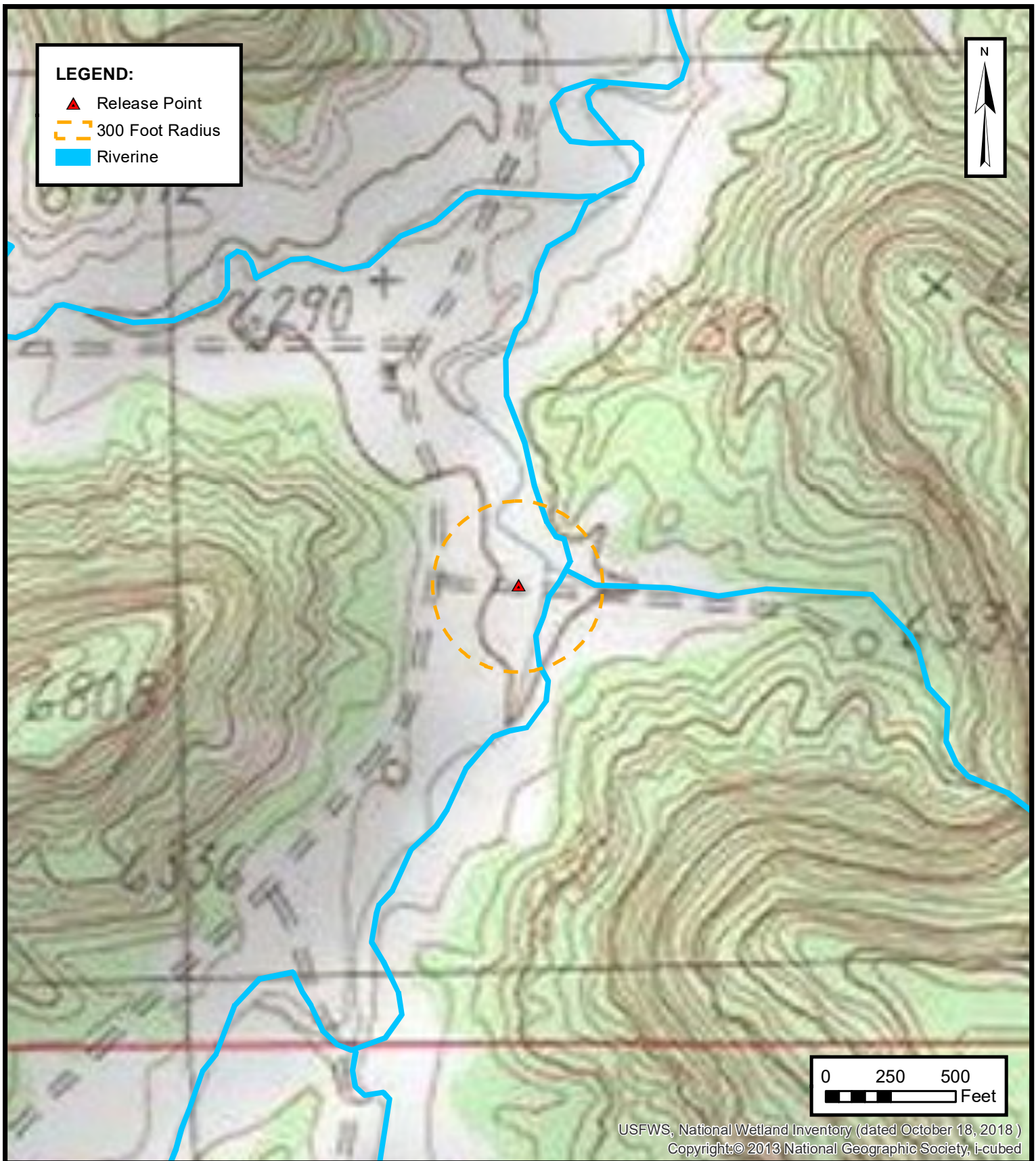


WATER WELL AND NATURAL SPRING LOCATION

ENTERPRISE FIELD SERVICES, LLC
HUGHES #14 (08/04/22)
Unit Letter K , S30 T26N R7W, Rio Arriba County, New Mexico
36.45519° N, 107.61866° W

PROJECT NUMBER: 05A1226202

FIGURE
E



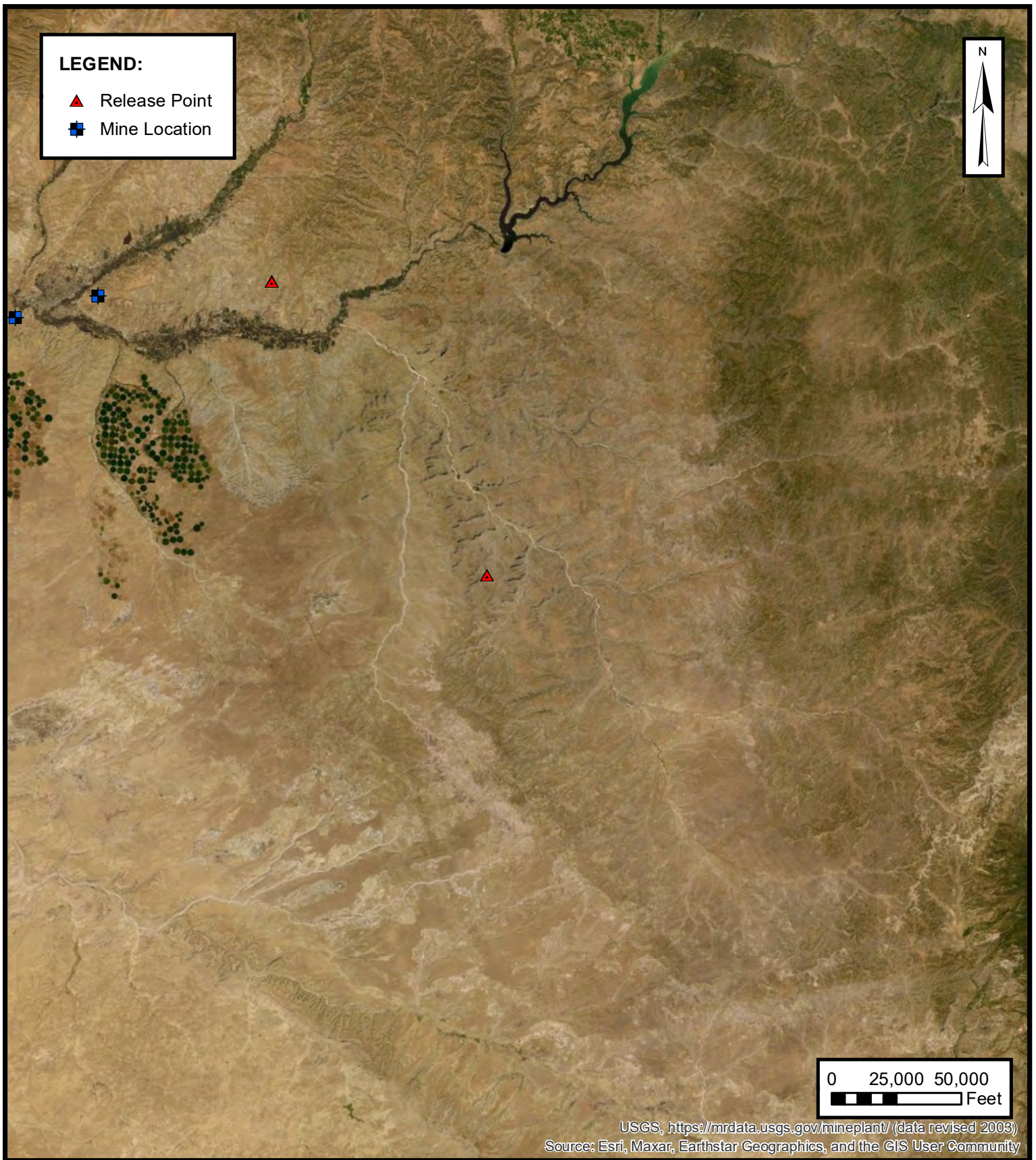
ENSOLUM
Environmental, Engineering and
Hydrogeologic Consultants

WETLANDS

ENTERPRISE FIELD SERVICES, LLC
HUGHES #14 (08/04/22)
Unit Letter K, S30 T26N R7W, Rio Arriba County, New Mexico
36.45519° N, 107.61866° W

PROJECT NUMBER: 05A1226202

FIGURE
F

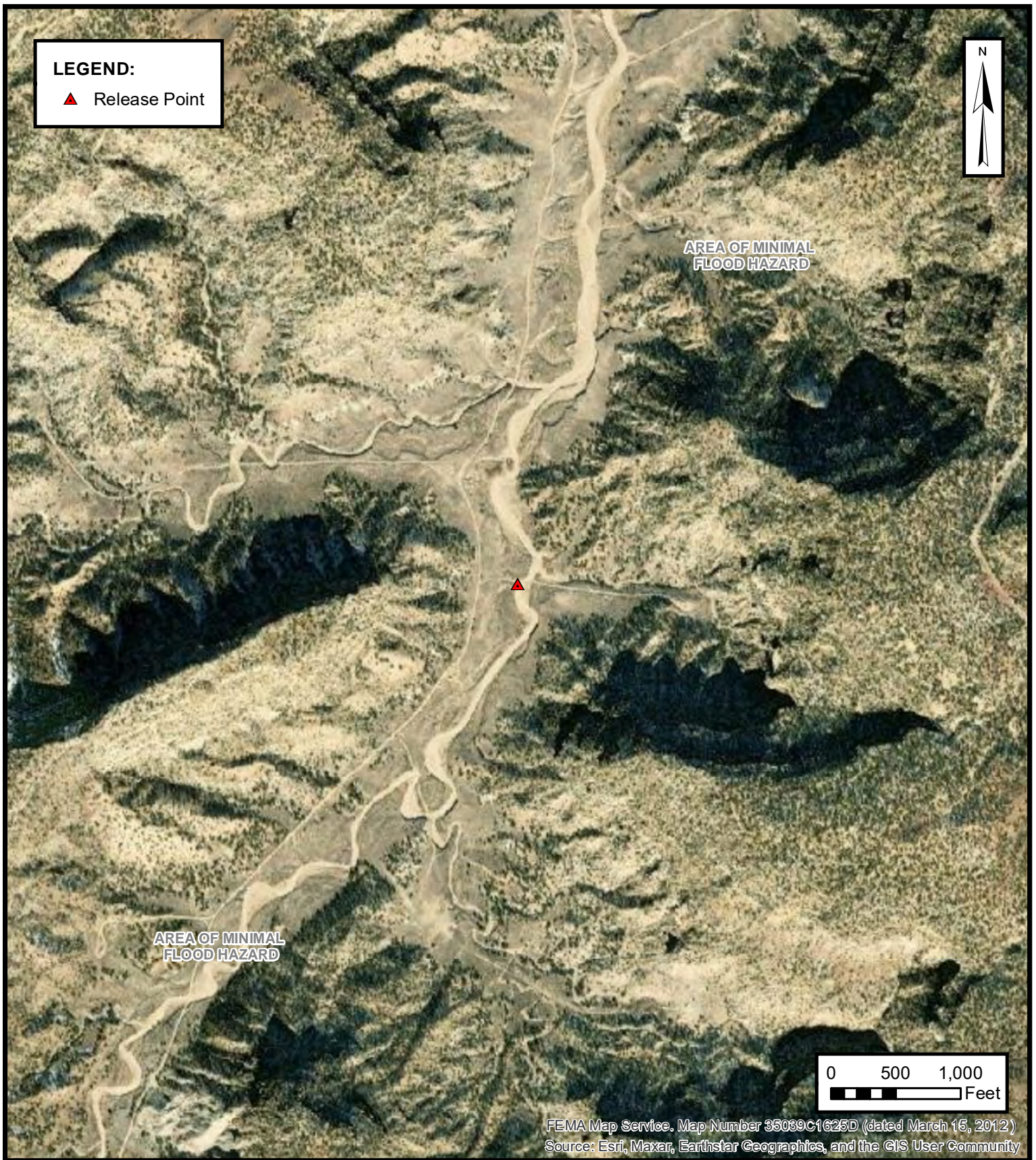
**MINES, MILLS AND QUARRIES**

ENTERPRISE FIELD SERVICES, LLC
HUGHES #14 (08/04/22)

Unit Letter K, S30 T26N R7W, Rio Arriba County, New Mexico
36.45519° N, 107.61866° W

PROJECT NUMBER: 05A1226202

FIGURE**G**



100-YEAR FLOOD PLAIN MAP

ENTERPRISE FIELD SERVICES, LLC
HUGHES #14 (08/04/22)

Unit Letter K, S30 T26N R7W, Rio Arriba County, New Mexico
36.45519° N, 107.61866° W

PROJECT NUMBER: 05A1226202

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-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 02406	SJ	RA		1	2	3	30	26N	07W	265144	4037834*	280	180	100

Average Depth to Water: **180 feet**

Minimum Depth: **180 feet**

Maximum Depth: **180 feet**

Record Count: 1

PLSS Search:

Section(s): 30, 19, 20, 29, 31, 32 **Township:** 26N **Range:** 07W

*UTM location was derived from PLSS - see Help

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

8/9/22 11:33 AM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER



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

No records found.

PLSS Search:

Section(s): 24, 25, 36

Township: 26N

Range: 08W

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

8/9/22 11:34 AM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER



APPENDIX C

Photographic Documentation

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Hughes #14 (08/04/22)
Ensolum Project No. 05A1226202

**Photograph 1**

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

**Photograph 2**

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

**Photograph 3**

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



SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Hughes #14 (08/04/22)
Ensolum Project No. 05A1226202



Photograph 4

Photograph Description: View of the site after initial restoration.





APPENDIX D

Regulatory Correspondence

From: [Velez, Nelson, EMNRD](#)
To: [Long, Thomas](#); rjoyner@blm.gov
Cc: [Stone, Brian](#)
Subject: RE: [EXTERNAL] RE: Hughes #14 - UL K Section 30 T26N R7W; 36.45519, -107.61866; Incident #nAPP2222032322
Date: Monday, August 15, 2022 1:00:48 PM

[Use caution with links/attachments]

Tom,

Thank you for the notice. Your variance request is approved.

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

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

Regards

Nelson Velez • Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@state.nm.us

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

From: Long, Thomas <tjlong@eprod.com>
Sent: Monday, August 15, 2022 12:51 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>; rjoyner@blm.gov
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXTERNAL] RE: Hughes #14 - UL K Section 30 T26N R7W; 36.45519, -107.61866; Incident #nAPP2222032322

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

Nelson/Ryan

This email is a notification and a variance request. Enterprise is requesting a variance for required 48 hour notification per 19.15.29.12D (1a) NMAC. Enterprise would like to collect closure samples tomorrow August 16, 2022 at 9:00 a.m. Enterprise began remediation today and very little signs of contamination have been observed. 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: Long, Thomas
Sent: Thursday, August 4, 2022 6:37 PM
To: 'Velez, Nelson, EMNRD' <Nelson.Velez@state.nm.us>; rjoyner@blm.gov
Cc: Stone, Brian <bmstone@eprod.com>
Subject: Hughes #14 - UL K Section 30 T26N R7W; 36.45519, -107.61866

Nelson/Ryan,

This email is a notification that Enterprise had a release of natural gas on the Hughes #14 pipeline this afternoon at approximately 6:00 p.m. The release is located is a tributary of the Rincon. The release is located in UL K Section 30 T26N R7W; 36.45519, -107.61866. The pipeline is being isolated, depressurized, locked and tagged out. No fires nor injuries resulted from the release. No emergency services responded. No liquids were released to the ground surface. I will keep you informed as to when the repairs and remediation are scheduled. If you have any questions, please call or email.

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



This message (including any attachments) is confidential and intended for a specific individual and

purpose. If you are not the intended recipient, please notify the sender immediately and delete this message.



APPENDIX E

Table 1 – Soil Analytical Summary



TABLE 1
Hughes #14 (08/04/22)
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX ¹ (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO/MRO) ¹ (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria (Tier I)				10	NE	NE	NE	50	NE	NE	NE	100	600
Composite Soil Sample Collected from Stockpiled Soil													
SP-1	8.16.22	C	Stockpile	<0.017	<0.035	<0.035	<0.069	ND	<3.5	<14	<48	ND	<60
Excavation Composite Soil Samples													
S-1	8.16.22	C	5	<0.017	<0.034	<0.034	<0.068	ND	<3.4	<15	<49	ND	<60
S-2	8.16.22	C	0 to 5	<0.019	<0.039	<0.039	<0.077	ND	<3.9	<14	<48	ND	<60
S-3	8.16.22	C	0 to 5	<0.017	<0.035	<0.035	<0.070	ND	<3.5	<14	<47	ND	<60
S-4	8.16.22	C	0 to 5	<0.017	<0.035	<0.035	<0.069	ND	<3.5	<15	<49	ND	<60

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

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

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

NA = Not Analyzed

NE = Not established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPH = Total Petroleum Hydrocarbons

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics



APPENDIX F

Laboratory Data Sheets & Chain of Custody Documentation



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

August 22, 2022

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Hughes 14

OrderNo.: 2208A02

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 8/17/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2208A02

Date Reported: 8/22/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-1

Project: Hughes 14

Collection Date: 8/16/2022 9:00:00 AM

Lab ID: 2208A02-001

Matrix: SOIL

Received Date: 8/17/2022 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	8/17/2022 9:32:00 AM	69557
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/17/2022 1:00:31 PM	69549
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/17/2022 1:00:31 PM	69549
Surr: DNOP	92.2	21-129		%Rec	1	8/17/2022 1:00:31 PM	69549
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	8/17/2022 10:30:00 AM	A90339
Surr: BFB	102	37.7-212		%Rec	1	8/17/2022 10:30:00 AM	A90339
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.017		mg/Kg	1	8/17/2022 10:30:00 AM	B90339
Toluene	ND	0.034		mg/Kg	1	8/17/2022 10:30:00 AM	B90339
Ethylbenzene	ND	0.034		mg/Kg	1	8/17/2022 10:30:00 AM	B90339
Xylenes, Total	ND	0.068		mg/Kg	1	8/17/2022 10:30:00 AM	B90339
Surr: 4-Bromofluorobenzene	98.8	70-130		%Rec	1	8/17/2022 10:30:00 AM	B90339

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

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

Page 1 of 9

Analytical Report

Lab Order 2208A02

Date Reported: 8/22/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-2

Project: Hughes 14

Collection Date: 8/16/2022 9:05:00 AM

Lab ID: 2208A02-002

Matrix: SOIL

Received Date: 8/17/2022 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	8/17/2022 9:44:24 AM	69557
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/17/2022 1:14:26 PM	69549
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/17/2022 1:14:26 PM	69549
Surr: DNOP	90.1	21-129		%Rec	1	8/17/2022 1:14:26 PM	69549
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	8/17/2022 10:50:00 AM	A90339
Surr: BFB	102	37.7-212		%Rec	1	8/17/2022 10:50:00 AM	A90339
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.019		mg/Kg	1	8/17/2022 10:50:00 AM	B90339
Toluene	ND	0.039		mg/Kg	1	8/17/2022 10:50:00 AM	B90339
Ethylbenzene	ND	0.039		mg/Kg	1	8/17/2022 10:50:00 AM	B90339
Xylenes, Total	ND	0.077		mg/Kg	1	8/17/2022 10:50:00 AM	B90339
Surr: 4-Bromofluorobenzene	98.1	70-130		%Rec	1	8/17/2022 10:50:00 AM	B90339

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

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

Page 2 of 9

Analytical Report

Lab Order 2208A02

Date Reported: 8/22/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-3

Project: Hughes 14

Collection Date: 8/16/2022 9:10:00 AM

Lab ID: 2208A02-003

Matrix: SOIL

Received Date: 8/17/2022 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	8/17/2022 9:56:49 AM	69557
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/17/2022 1:28:22 PM	69549
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/17/2022 1:28:22 PM	69549
Surr: DNOP	91.6	21-129		%Rec	1	8/17/2022 1:28:22 PM	69549
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	8/17/2022 11:10:00 AM	A90339
Surr: BFB	105	37.7-212		%Rec	1	8/17/2022 11:10:00 AM	A90339
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.017		mg/Kg	1	8/17/2022 11:10:00 AM	B90339
Toluene	ND	0.035		mg/Kg	1	8/17/2022 11:10:00 AM	B90339
Ethylbenzene	ND	0.035		mg/Kg	1	8/17/2022 11:10:00 AM	B90339
Xylenes, Total	ND	0.070		mg/Kg	1	8/17/2022 11:10:00 AM	B90339
Surr: 4-Bromofluorobenzene	98.0	70-130		%Rec	1	8/17/2022 11:10:00 AM	B90339

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

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

Page 3 of 9

Analytical Report

Lab Order 2208A02

Date Reported: 8/22/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-4

Project: Hughes 14

Collection Date: 8/16/2022 9:15:00 AM

Lab ID: 2208A02-004

Matrix: SOIL

Received Date: 8/17/2022 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	8/17/2022 10:09:14 AM	69557
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/17/2022 1:42:26 PM	69549
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/17/2022 1:42:26 PM	69549
Surr: DNOP	94.4	21-129		%Rec	1	8/17/2022 1:42:26 PM	69549
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	8/17/2022 11:29:00 AM	A90339
Surr: BFB	102	37.7-212		%Rec	1	8/17/2022 11:29:00 AM	A90339
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.017		mg/Kg	1	8/17/2022 11:29:00 AM	B90339
Toluene	ND	0.035		mg/Kg	1	8/17/2022 11:29:00 AM	B90339
Ethylbenzene	ND	0.035		mg/Kg	1	8/17/2022 11:29:00 AM	B90339
Xylenes, Total	ND	0.069		mg/Kg	1	8/17/2022 11:29:00 AM	B90339
Surr: 4-Bromofluorobenzene	97.2	70-130		%Rec	1	8/17/2022 11:29:00 AM	B90339

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

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

Page 4 of 9

Analytical Report

Lab Order 2208A02

Date Reported: 8/22/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: SP-1

Project: Hughes 14

Collection Date: 8/16/2022 9:20:00 AM

Lab ID: 2208A02-005

Matrix: SOIL

Received Date: 8/17/2022 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	8/17/2022 10:21:39 AM	69557
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/17/2022 10:51:25 AM	69549
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/17/2022 10:51:25 AM	69549
Surr: DNOP	95.2	21-129		%Rec	1	8/17/2022 10:51:25 AM	69549
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	8/17/2022 11:49:00 AM	A90339
Surr: BFB	105	37.7-212		%Rec	1	8/17/2022 11:49:00 AM	A90339
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.017		mg/Kg	1	8/17/2022 11:49:00 AM	B90339
Toluene	ND	0.035		mg/Kg	1	8/17/2022 11:49:00 AM	B90339
Ethylbenzene	ND	0.035		mg/Kg	1	8/17/2022 11:49:00 AM	B90339
Xylenes, Total	ND	0.069		mg/Kg	1	8/17/2022 11:49:00 AM	B90339
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	8/17/2022 11:49:00 AM	B90339

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

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

Page 5 of 9

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2208A02

22-Aug-22

Client: ENSOLUM

Project: Hughes 14

Sample ID: MB-69557		SampType: mblk		TestCode: EPA Method 300.0: Anions						
Client ID: PBS		Batch ID: 69557		RunNo: 90334						
Prep Date: 8/17/2022		Analysis Date: 8/17/2022		SeqNo: 3224202			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-69557		SampType: lcs		TestCode: EPA Method 300.0: Anions						
Client ID: LCSS		Batch ID: 69557		RunNo: 90334						
Prep Date: 8/17/2022		Analysis Date: 8/17/2022		SeqNo: 3224203			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.4	90	110			

Qualifiers:

- *

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix interference
- B

Analyte detected in the associated Method Blank
- E

Estimated value
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit

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

WO#: 2208A02

22-Aug-22

Client: ENSOLUM**Project:** Hughes 14

Sample ID: MB-69549	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 69549	RunNo: 90349								
Prep Date: 8/17/2022	Analysis Date: 8/17/2022	SeqNo: 3223174	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.9		10.00		78.7	21	129			

Sample ID: LCS-69549	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 69549	RunNo: 90349								
Prep Date: 8/17/2022	Analysis Date: 8/17/2022	SeqNo: 3223175	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	15	50.00	0	95.9	64.4	127			
Surr: DNOP	3.9		5.000		78.6	21	129			

Qualifiers:

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

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

WO#: 2208A02

22-Aug-22

Client: ENSOLUM**Project:** Hughes 14

Sample ID: 2.5ug gro lcs	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: A90339			RunNo: 90339						
Prep Date:	Analysis Date: 8/17/2022			SeqNo: 3223655		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	72.3	137			
Surr: BFB	2100		1000		212	37.7	212			S

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: A90339			RunNo: 90339						
Prep Date:	Analysis Date: 8/17/2022			SeqNo: 3223656		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		99.1	37.7	212			

Qualifiers:

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

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

WO#: 2208A02

22-Aug-22

Client: ENSOLUM**Project:** Hughes 14

Sample ID: 100ng btex lcs	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: B90339			RunNo: 90339						
Prep Date:	Analysis Date: 8/17/2022			SeqNo: 3223685		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.025	1.000	0	85.8	80	120			
Toluene	0.88	0.050	1.000	0	87.6	80	120			
Ethylbenzene	0.88	0.050	1.000	0	88.5	80	120			
Xylenes, Total	2.6	0.10	3.000	0	88.0	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		99.8	70	130			

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: B90339			RunNo: 90339						
Prep Date:	Analysis Date: 8/17/2022			SeqNo: 3223686		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: 2208a02-001ams	SampType: MS			TestCode: EPA Method 8021B: Volatiles						
Client ID: S-1	Batch ID: B90339			RunNo: 90339						
Prep Date:	Analysis Date: 8/17/2022			SeqNo: 3223692		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	88.5	68.8	120			
Toluene	0.91	0.050	1.000	0	91.0	73.6	124			
Ethylbenzene	0.93	0.050	1.000	0	92.6	72.7	129			
Xylenes, Total	2.8	0.10	3.000	0	92.8	75.7	126			
Surr: 4-Bromofluorobenzene	0.95		1.000		95.2	70	130			

Sample ID: 2208a02-001amsd	SampType: MSD			TestCode: EPA Method 8021B: Volatiles						
Client ID: S-1	Batch ID: B90339			RunNo: 90339						
Prep Date:	Analysis Date: 8/17/2022			SeqNo: 3223693		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.025	1.000	0	85.9	68.8	120	2.89	20	
Toluene	0.88	0.050	1.000	0	88.1	73.6	124	3.22	20	
Ethylbenzene	0.90	0.050	1.000	0	90.1	72.7	129	2.75	20	
Xylenes, Total	2.7	0.10	3.000	0	89.8	75.7	126	3.26	20	
Surr: 4-Bromofluorobenzene	0.96		1.000		96.1	70	130	0	0	

Qualifiers:

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



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

Sample Log-In Check List

Client Name: ENSOLUM

Work Order Number: 2208A02

RcptNo: 1

Received By: Juan Rojas

8/17/2022 6:30:00 AM

Juan Rojas

Completed By: Juan Rojas

8/17/2022 6:43:45 AM

*Juan Rojas*Reviewed By: *JO**8/17/22*

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: *JA 8/17/22*

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good				

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 154584

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 154584
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

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