

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Enterprise Field Services, LLC	OGRID: 151618 241602 NV 05/02/2022
Contact Name: Thomas Long	Contact Telephone: 505-599-2286
Contact email: tjlong@eprod.com	Incident # (assigned by OCD): NRM2032958391
Contact mailing address: 614 Reilly Ave, Farmington, NM 87401	

Location of Release Source

Latitude **36.178041** Longitude **-107.122833** (NAD 83 in decimal degrees to 5 decimal places)

Site Name Jicarilla 55#3	Site Type Natural Gas Gathering Pipeline
Date Release Discovered: 11/6/2020	Serial Number (if applicable): N/A

Unit Letter	Section	Township	Range	County
L	35	23N	3W	Rio Arriba

Surface Owner: ☐ State ☐ Federal ☒ Tribal ☐ Private (Name: **Jicarilla Apache Tribe**)

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): 3-5 Barrels	Volume Recovered (bbls): None
<input checked="" type="checkbox"/> Natural Gas	Volume Released (Mcf): 1 MCF	Volume Recovered (Mcf): None
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

Cause of Release On November 6, 2020, Enterprise had a release of natural gas and natural gas liquids from a valve on the Jicarilla 55#3 pipeline. An area of approximately five feet in diameter was impacted by the released fluids. The pipeline was isolated, depressurize, locked and tagged out. No washes were affected. Repairs and remediation began on November 13, 2020, at which time Enterprise determined the release reportable due the volume of impacted subsurface soil. The final excavation dimensions measured approximately 13.5 feet long by 12.5 feet wide by 4 feet deep. Approximately 25 cubic yards of hydrocarbon impacted soil was excavated and transported to a New Mexico Oil Conservation Division (NMOCD) approved land farm. A third party closure report is included with this "Final." C-141.

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: Jon E. Fields

Title: Director, Environmental

Signature: 

Date: 3/4/2021

email: jefields@eprod.com

Telephone: (713) 381-6684

OCD Only

Received by: _____

Date: _____

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

Closure Approved by: 

Date: 05/02/2022

Printed Name: Nelson Velez

Title: Environmental Specialist – Adv



CLOSURE REPORT

Property:

**Jicarilla 55 #3
SE ¼, S35 T23N R3W
Sandoval County, New Mexico**

December 14, 2020
Ensolum Project No. 05A1226125

Prepared for:

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

Prepared by:

A handwritten signature in blue ink, reading "Rane Deechilly".

Rane Deechilly
Environmental Scientist

A handwritten signature in blue ink, reading "Kyle Summers".

Kyle Summers, CPG
Sr. Project Manager

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CLOSURE REPORT

Jicarilla 55 #3
SE ¼, S35 T23N R3W
Sandoval County, New Mexico

Ensolum Project No. 05A1226125

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Jicarilla 55 #3 (Site)
Incident ID	NRM2032958391
Location:	36.178041° North, 107.122833° West Southeast (SE) ¼ of Section 35, Township 23 North, Range 3 West Sandoval County, New Mexico
Property:	Jicarilla Apache Nation
Regulatory:	Jicarilla Apache Nation Environmental Protection Office (JAN-EPO)

On November 6, 2020, Enterprise personnel discovered a release of condensate near the Jicarilla 55 #3 downstream valve. Enterprise subsequently isolated and locked the pipeline out of service. Enterprise implemented initial response activities by removing free-standing liquid from the ground surface and repairing the valve. On November 13, 2020, 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 New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD) closure criteria.

2.0 CLOSURE CRITERIA

The Site is under the jurisdiction of the Jicarilla Apache Nation and is subject to regulatory oversight by the Jicarilla Apache Nation Environmental Protection Office (JAN-EPO). Ensolum, LLC (Ensolum) deferred to the New Mexico Administrative Code (NMAC) 19.15.29 *Releases*, as guidance, which establishes investigation and abatement action requirements for oil and gas release sites that are subject to reporting and/or corrective action. Ensolum utilized information provided by Enterprise, the general site characteristics, and information available from the New Mexico Office of the State Engineer (OSE) and the New Mexico EMNRD OCD imaging database to determine the appropriate closure criteria for the Site. Supporting figures and documentation associated with the following bullets are provided in **Appendix B**.

Enterprise Field Services, LLC
Closure Report
Jicarilla 55 #3
December 14, 2020



- The OSE tracks the usage and assignment of water rights and water well installations and records this information in the Water Rights Reporting System (WRRS) database. Water wells and other points of diversion (PODs) are each assigned POD numbers in the database (which is searchable and includes an interactive map). No PODs were identified within a one mile radius of the Site in the OSE WRRS database. In addition, no PODs were identified in adjacent Public Land Survey System (PLSS) sections (**Figure A, Appendix B**).
- No cathodic wells were identified within one mile of the Site in the New Mexico EMNRD imaging database. In addition, no cathodic wells were identified in adjacent PLSS sections (**Figure B, Appendix B**).
- Records for former test holes associated with a below grade tank registration and various pit permits were identified in the New Mexico EMNRD OCD imaging database. The test hole identified nearest to the Site was advanced at the Chacon Amigos #9E well location which is located approximately 0.7 miles southeast of the Site and at a lower elevation (7,138 feet, based on permit documentation) than the Site (approximately 7,247 feet). Records for this former test hole indicate that the test hole was drilled to 65 feet bgs and no water was detected. Records for the former test hole drilled at the Chacon Amigos #10 well location, located approximately 1.5 miles southeast of the Site and at a lower elevation (7,169 feet, based on permit documentation) than the Site, indicate a depth to water of 115 feet bgs. Records for the former test hole drilled at the Jicarilla O 3E well location, located approximately 2.4 miles southwest of the Site (near a large ephemeral wash) and at a lower elevation (7,072 feet, based on permit documentation) than the Site, indicate a depth to water of 70 feet bgs (**Figure B, Appendix B**).
- The Site is located within 300 feet of a New Mexico EMNRD OCD-defined continuously flowing watercourse or significant watercourse. The excavation is located approximately 150 feet northeast of a small unnamed ephemeral wash that may convey water during significant rain events (**Figure C, Appendix B**).
- The Site is not located within 200 feet of a lakebed, sinkhole, or playa lake.
- The Site is not located within 300 feet of a permanent residence, school, hospital, institution, or church (**Figure D, Appendix B**).
- No springs, or private domestic fresh water wells used by less than five (5) households for domestic or stock watering purposes were identified within 500 feet of the Site (**Figure E, Appendix B**).
- No fresh water wells or springs were identified within 1,000 feet of the Site (**Figure E, Appendix B**).
- The Site is not located within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to New Mexico Statutes Annotated (NMSA) 1978, Section 3-27-3.
- Based on information identified in the U.S. Fish & Wildlife Service National Wetlands Inventory Wetlands Mapper, the Site is not located within 300 feet of a wetland (**Figure F, Appendix B**).
- Based on information identified in the New Mexico Mining and Minerals Division's Geographic Information System (GIS) Maps and Mine Data database, the Site is not located within an area overlying a subsurface mine (**Figure G, Appendix B**).
- The Site is not located within an unstable area.

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 Closure Report
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 December 14, 2020



- The Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) geospatial database does not provide flood hazard information for this geographic area of the Jicarilla Apache reservation. Based on the location of the Site, it is unlikely that the Site is located within a 100-year floodplain (**Figure H, Appendix B**).

Based on the identified siting criteria, the applicable closure criteria for the upper four (4) feet of soils at the Site include:

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

3.0 SOIL REMEDIATION ACTIVITIES

On November 13, 2020, 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 13.5 feet long and 12.5 feet wide at the maximum extents. The maximum depth of the excavation measured approximately four (4) feet bgs.

The lithology encountered during the completion of remediation activities consisted primarily of semi-consolidated silty sand and silty clay.

Approximately 25 cubic yards of petroleum hydrocarbon affected soils were transported to the Envirotech, Inc. (Envirotech) landfarm near Hilltop, New Mexico for disposal/remediation. The executed C-138 solid waste acceptance form is provided in **Appendix C**. The excavation was backfilled with JAN-EPO approved native fill and then contoured to 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 Dextsil 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 five (5) composite soil samples (S-1 through S-5) from the excavation for laboratory analysis. The composite samples were comprised of five (5) aliquots each, and each sample represents an estimated 200 square-foot (ft²) sample area per guidelines outlined in 19.15.29.12 Section D NMAC. A clean shovel was utilized to obtain fresh aliquots from each area of the excavation.

Enterprise Field Services, LLC
Closure Report
Jicarilla 55 #3
December 14, 2020



On November 16, 2020, sampling was performed at the Site. The JAN-EPO and New Mexico EMNRD OCD were notified of the sampling event although no representatives were present during sampling activities. Regulatory correspondence is provided in **Appendix E**.

Composite soil sample S-1 (3'-4') was collected from the floor of excavation. Composite soil samples S-2 (0'-4'), S-3 (0'-4'), S-4 (0'-4'), and S-5 (0'-4') were collected from the sidewalls of the excavation.

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

5.0 SOIL LABORATORY ANALYTICAL METHODS

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

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

6.0 DATA EVALUATION

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

- The laboratory analytical results for the composite soil samples indicate benzene is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 10 milligrams per kilogram (mg/kg).
- The laboratory analytical results for the composite soil samples indicate total BTEX is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 50 mg/kg.
- The laboratory analytical results for the composite soil samples indicate combined TPH GRO/DRO/MRO is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 100 mg/kg.
- The laboratory analytical results for the composite soil samples indicate chloride is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 600 mg/kg for chlorides.

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

7.0 RECLAMATION AND REVEGETATION

The excavation was backfilled with JAN-EPO approved native imported fill and was then contoured to surrounding grade.

Enterprise Field Services, LLC
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Jicarilla 55 #3
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8.0 FINDINGS AND RECOMMENDATION

- Five (5) composite soil samples were collected from the excavation. Based on laboratory analytical results, no benzene, BTEX, chloride, or combined TPH GRO/DRO/MRO exceedances were identified in the Site soils.
- Approximately 25 cubic yards of petroleum hydrocarbon affected soils were transported to the Envirotech landfarm for disposal/remediation. The excavation was backfilled and was then contoured to surrounding grade.

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

9.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

9.1 Standard of Care

Ensolum's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Ensolum makes no warranties, express or implied, as to the services performed hereunder. Additionally, Ensolum does not warrant the work of third parties supplying information used in the report (e.g., laboratories, regulatory agencies, or other third parties).

9.2 Limitations

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

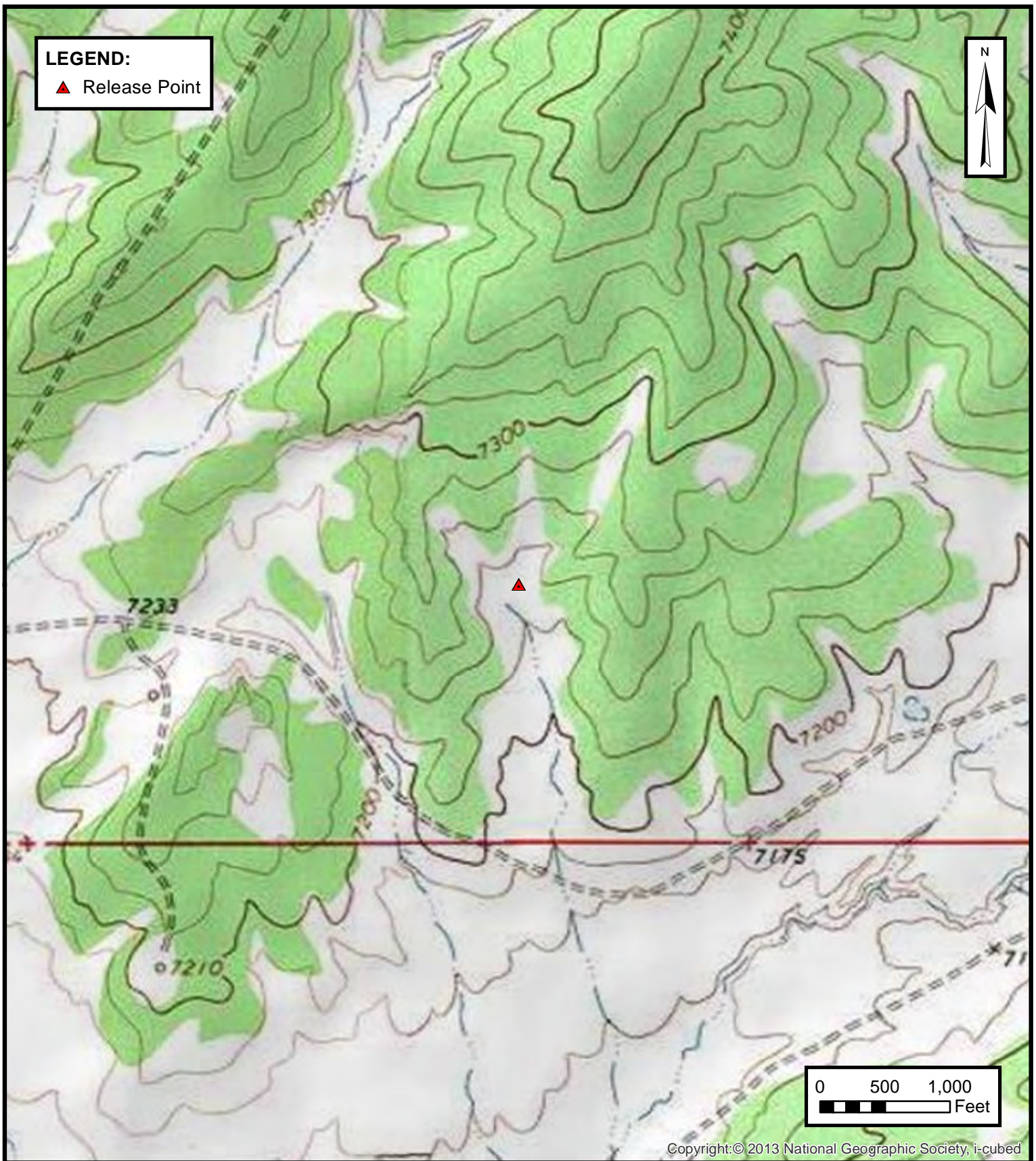
9.3 Reliance

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



ENSOLUM
Environmental & Hydrogeologic Consultants

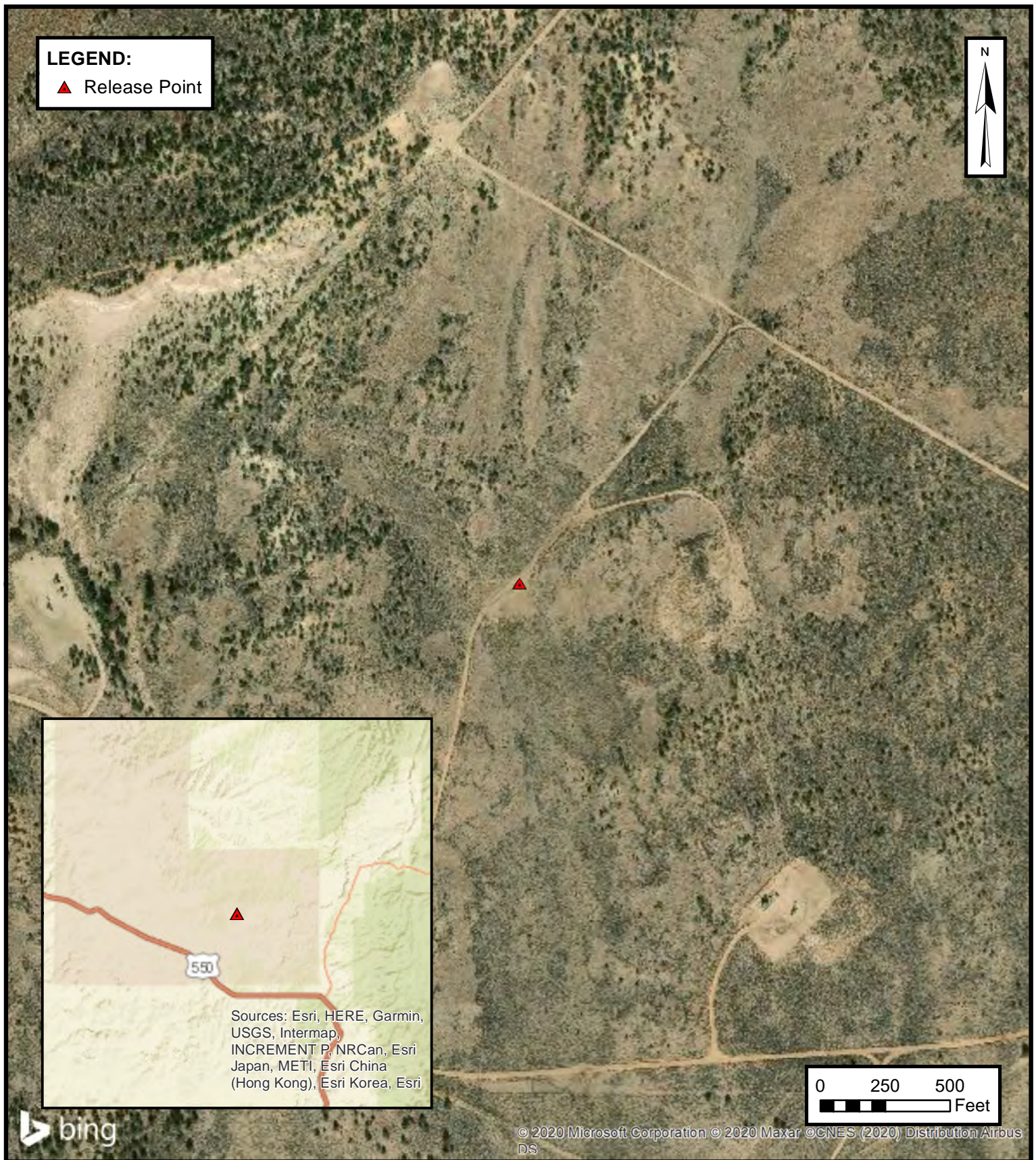
TOPOGRAPHIC MAP

ENTERPRISE FIELD SERVICES, LLC
JICARILLA 55 #3
SE ¼, S35 T23N R3W, Sandoval County, New Mexico
36.178041° N, 107.122833° W

PROJECT NUMBER: 05A1226125

FIGURE

1



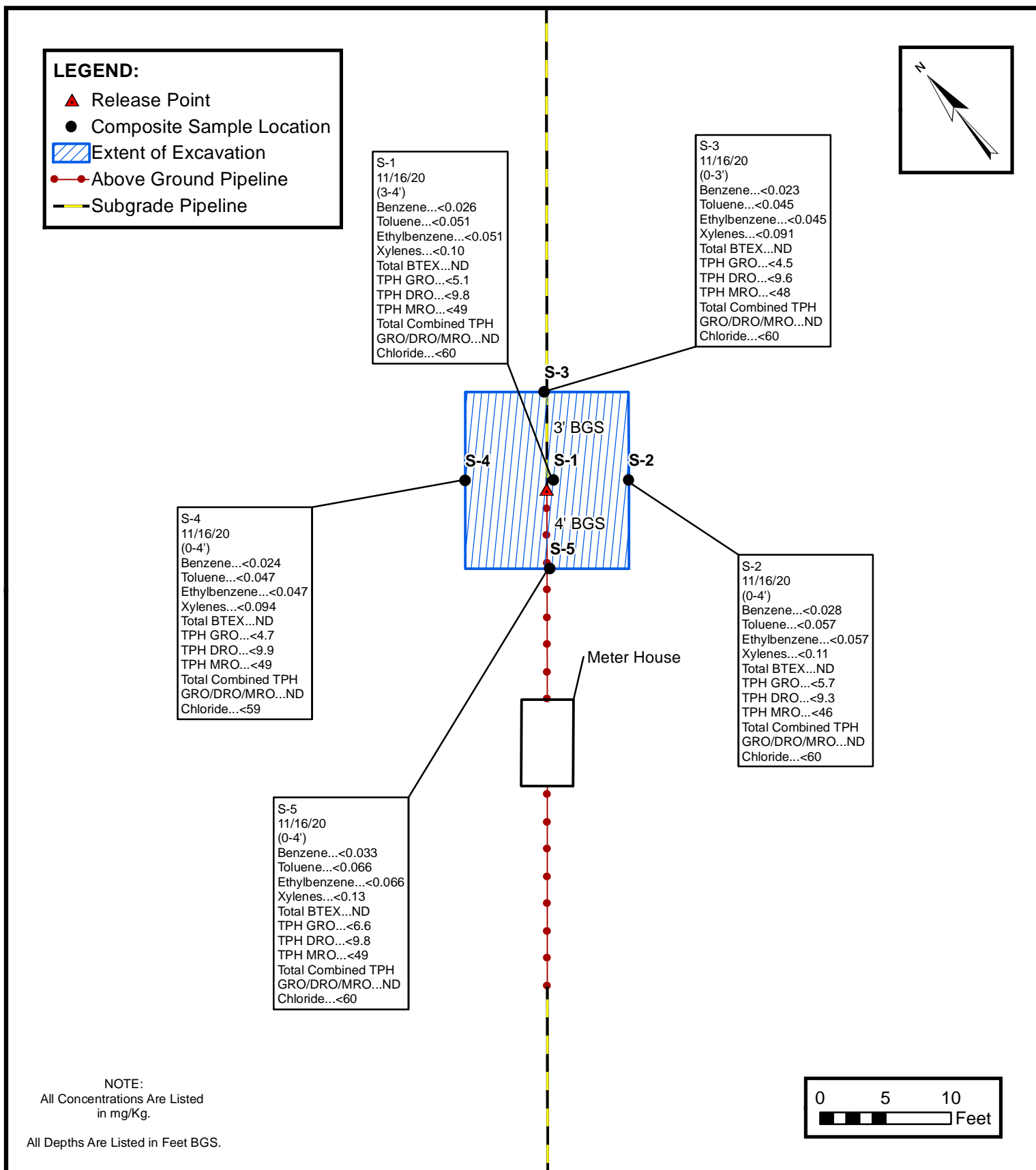
SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC
JICARILLA 55 #3
SE ¼, S35 T23N R3W, Sandoval County, New Mexico
36.178041° N, 107.122833° W

PROJECT NUMBER: 05A1226125

FIGURE

2



SITE MAP

ENTERPRISE FIELD SERVICES, LLC
JICARILLA 55 #3
SE ¼, S35 T23N R3W, Sandoval County, New Mexico
36.178041° N, 107.122833° W

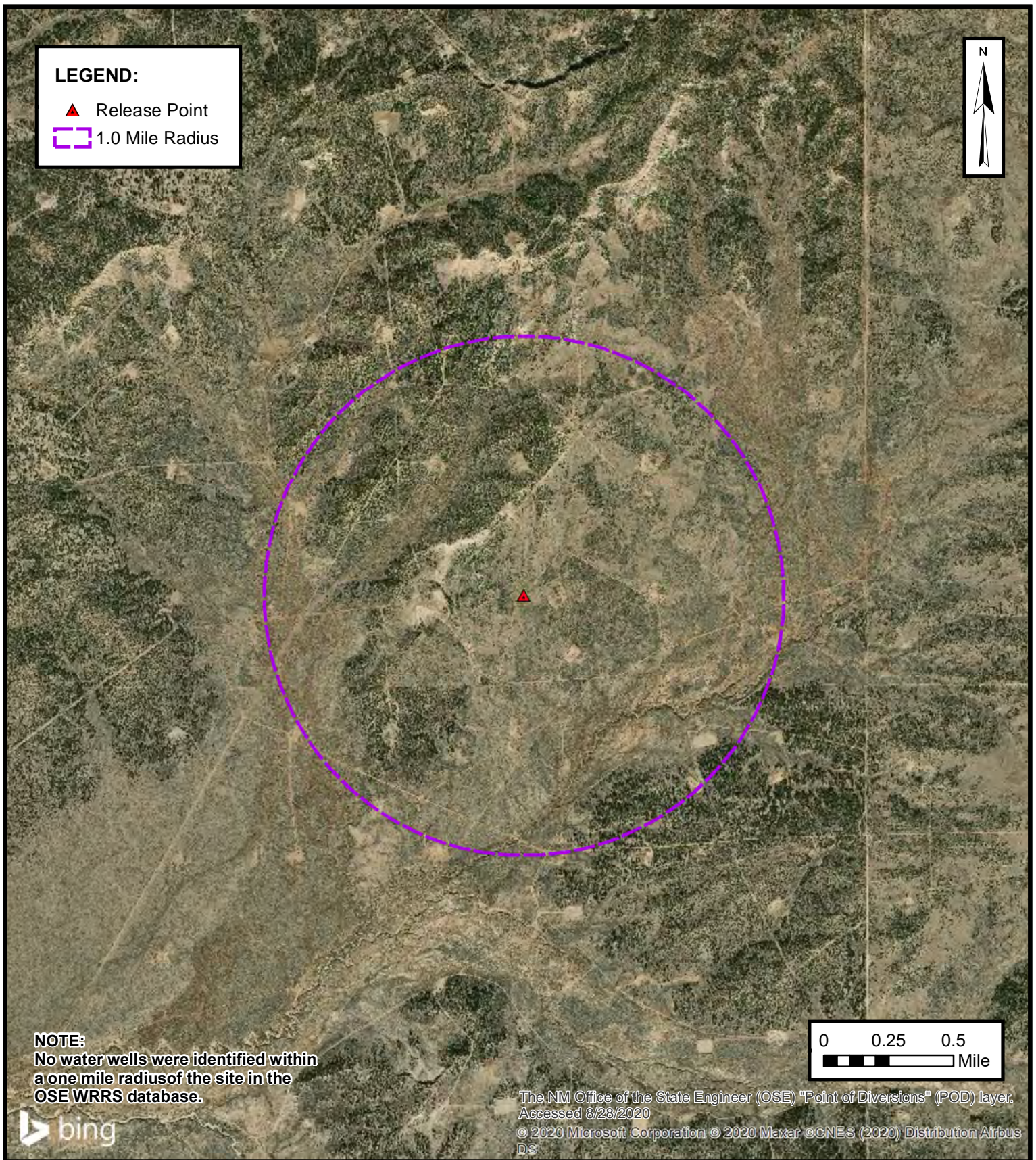
PROJECT NUMBER: 05A1226125

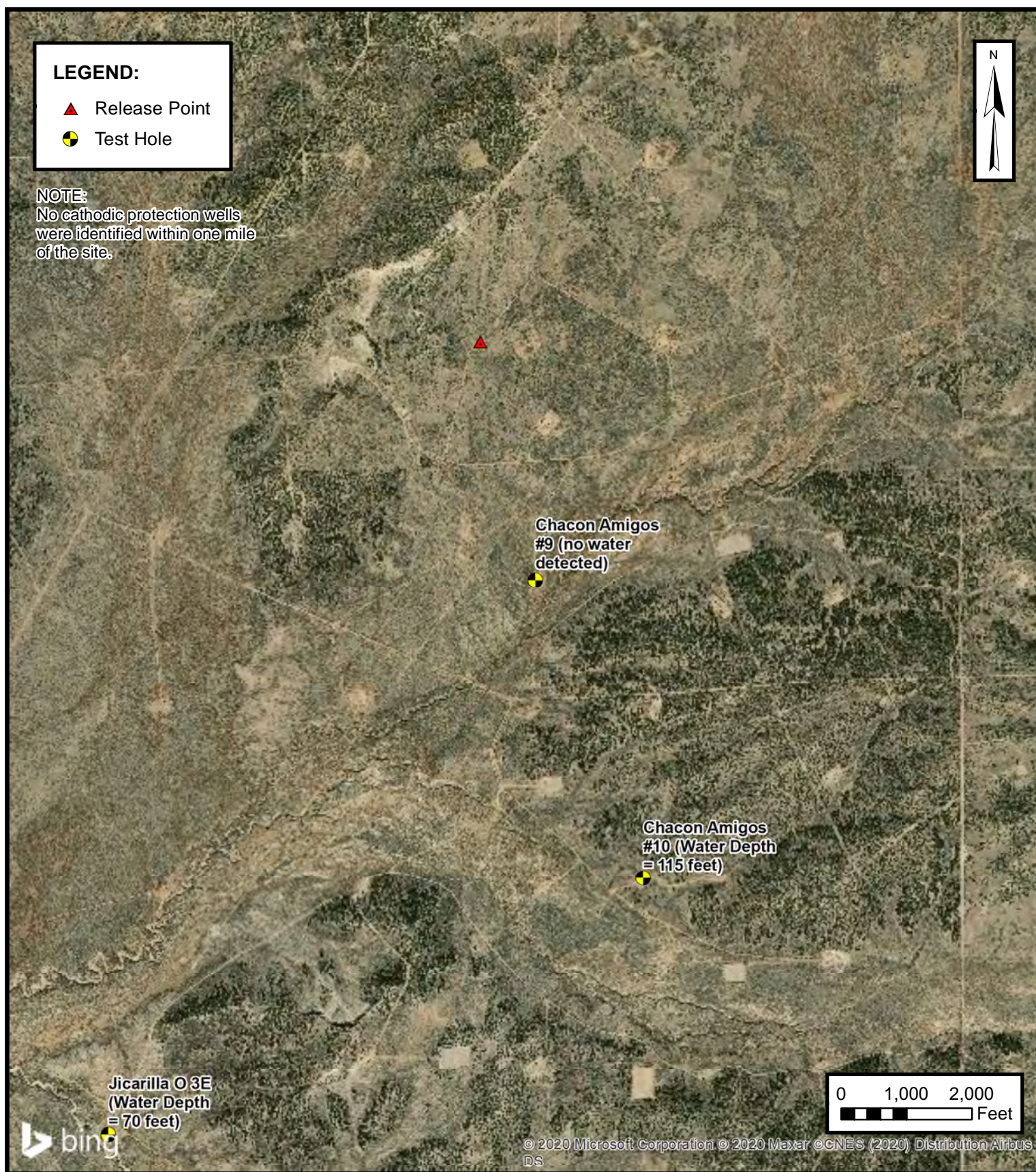
FIGURE
3

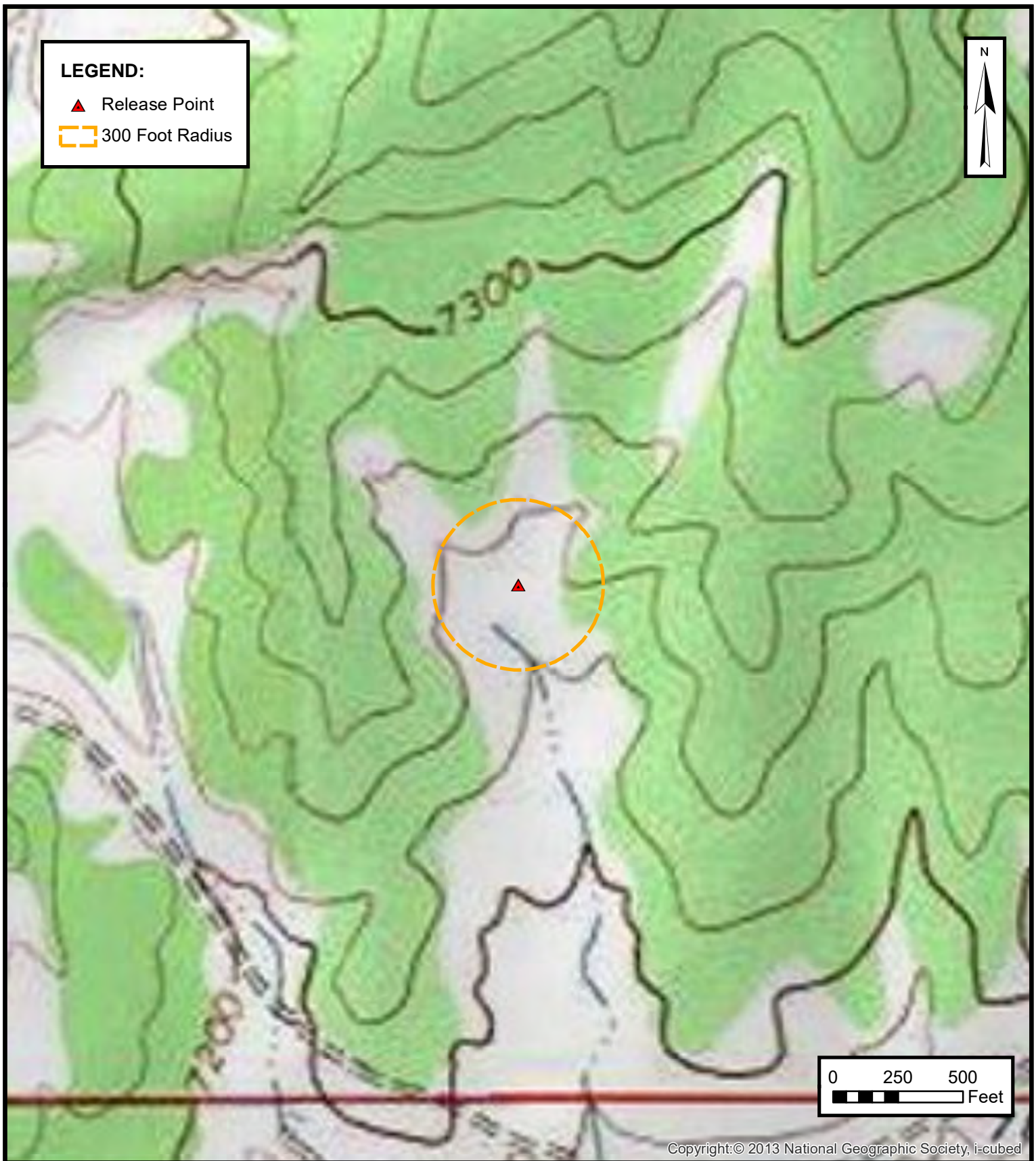


APPENDIX B

Siting Figures and Documentation







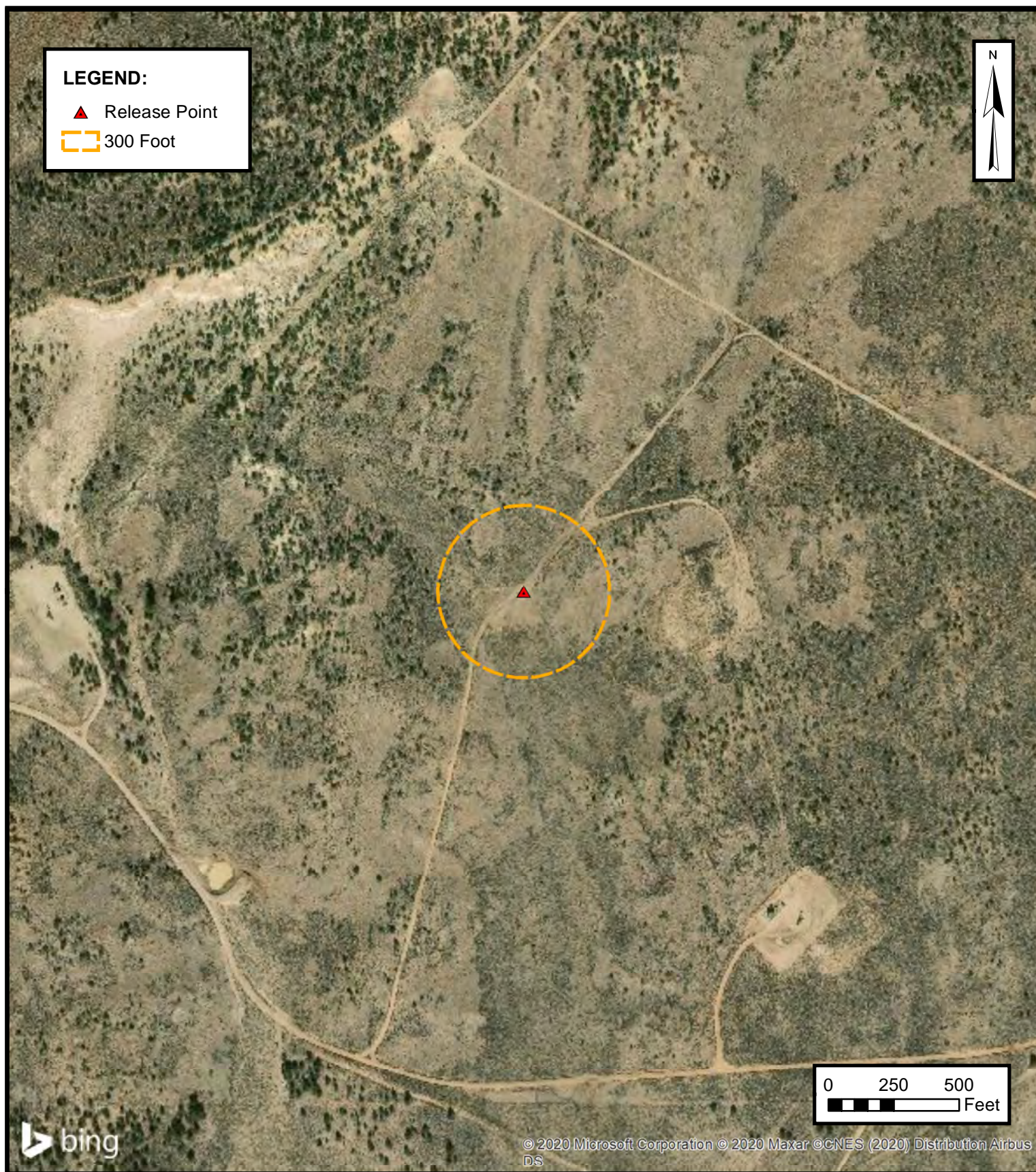
ENSOLUM
Environmental & Hydrogeologic Consultants

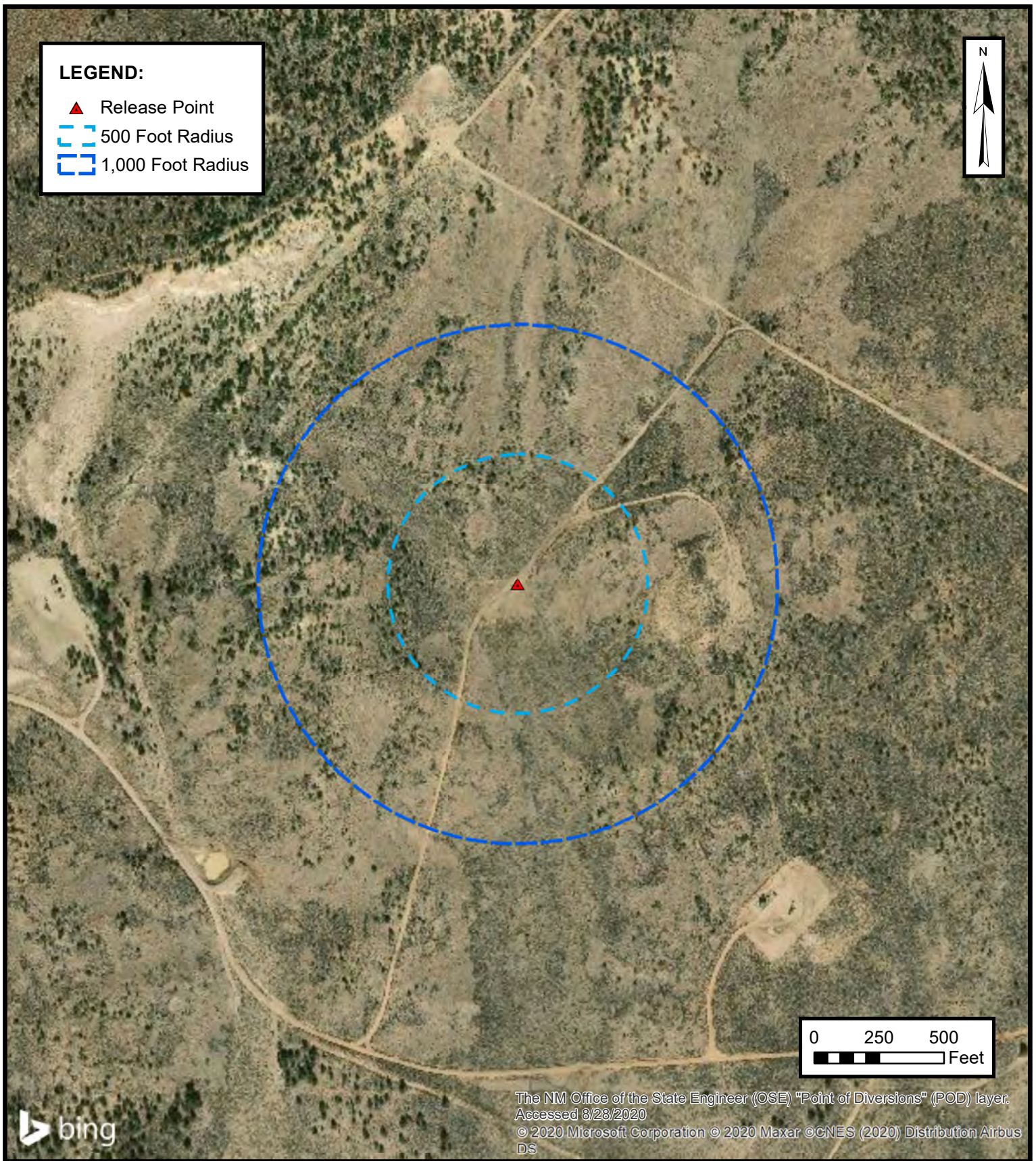
**300 FOOT RADIUS
WATERCOURSE AND DRAINAGE IDENTIFICATION**

ENTERPRISE FIELD SERVICES, LLC
JICARILLA 55 #3
SE ¼, S35 T23N R3W, Sandoval County, New Mexico
36.178041° N, 107.122833° W

PROJECT NUMBER: 05A1226125

**FIGURE
C**





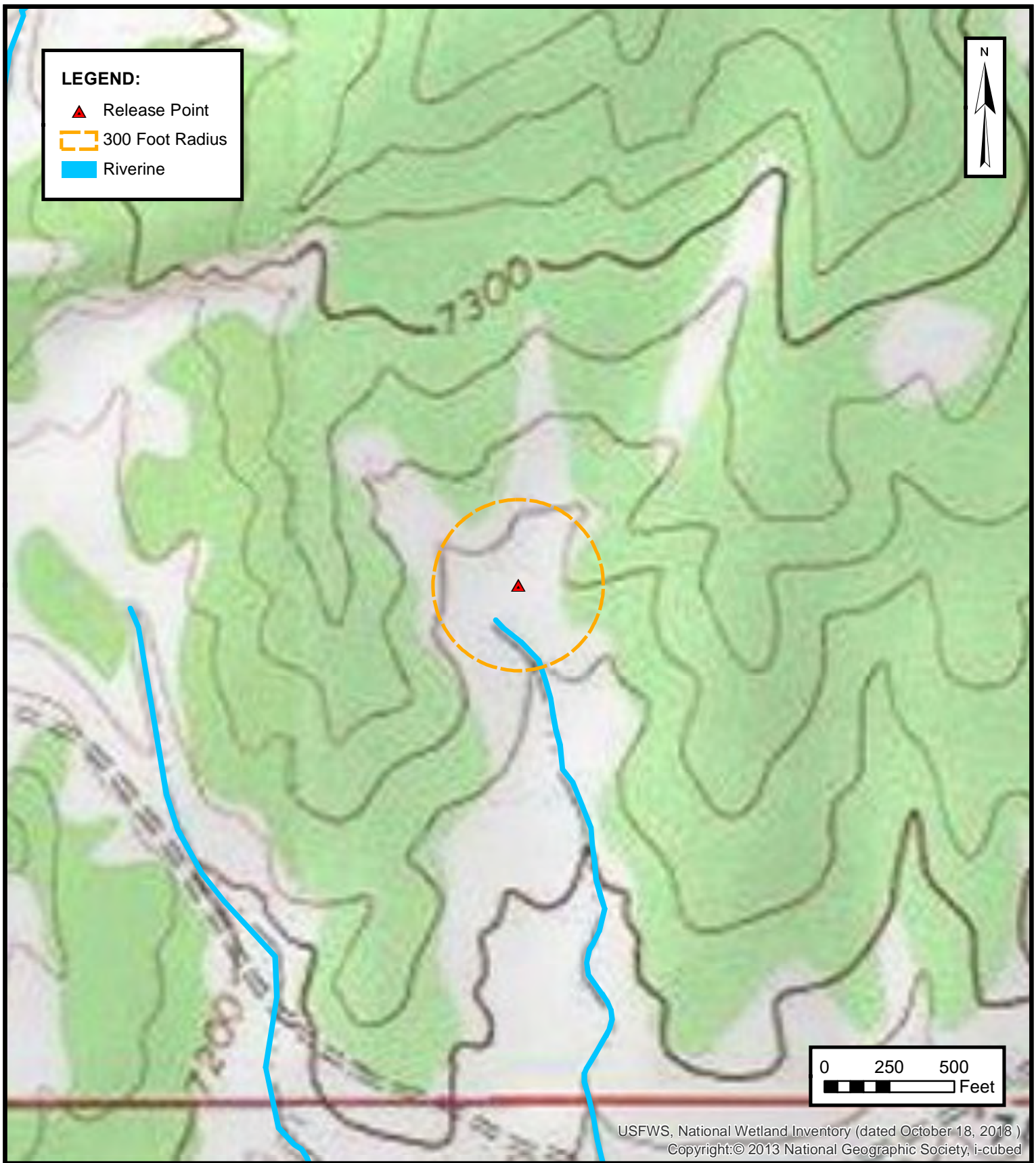
ENSOLUM
Environmental & Hydrogeologic Consultants

WATER WELL AND NATURAL SPRING LOCATION

ENTERPRISE FIELD SERVICES, LLC
JICARILLA 55 #3
SE ¼, S35 T23N R3W, Sandoval County, New Mexico
36.178041° N, 107.122833° W

PROJECT NUMBER: 05A1226125

FIGURE
E

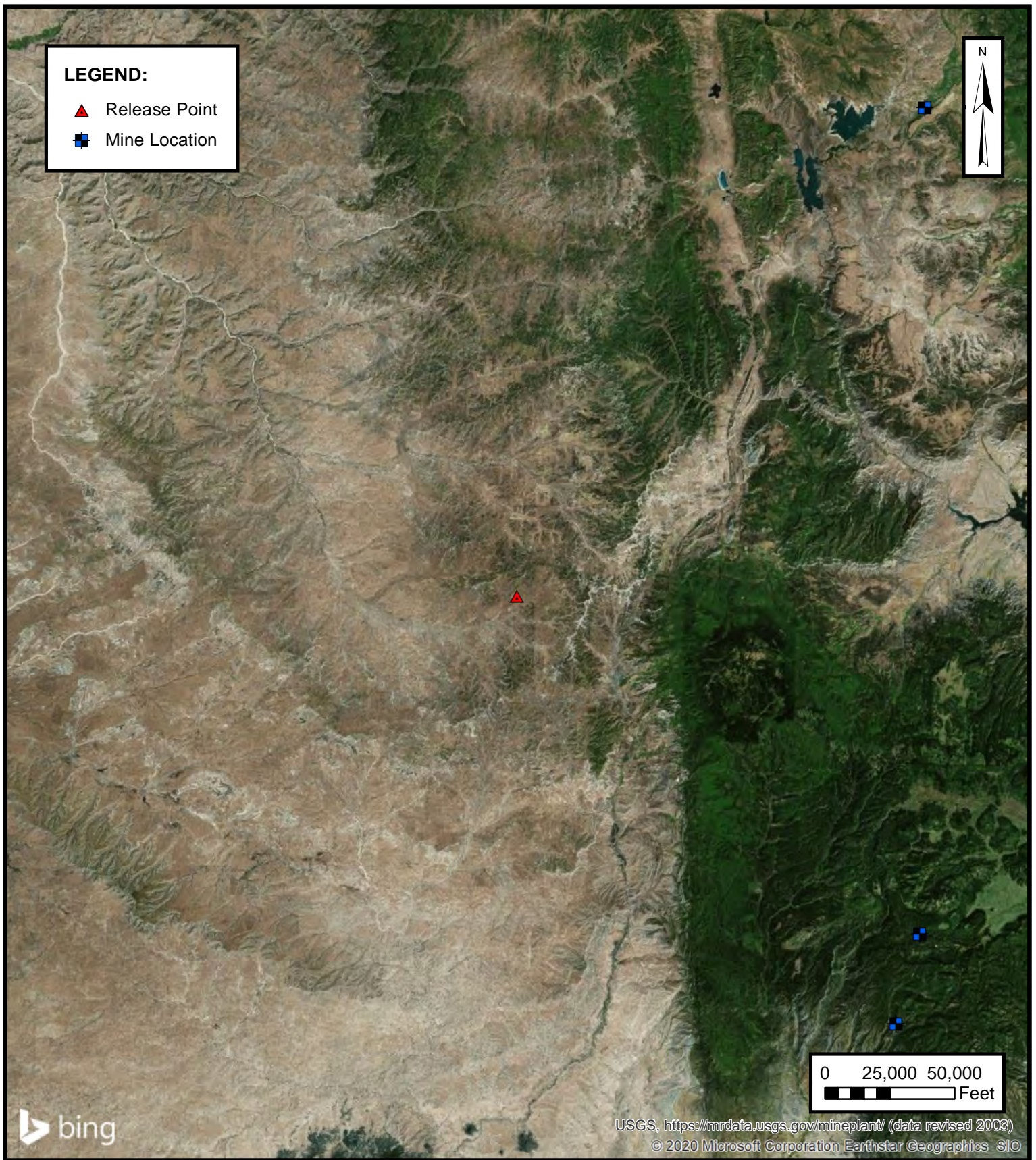


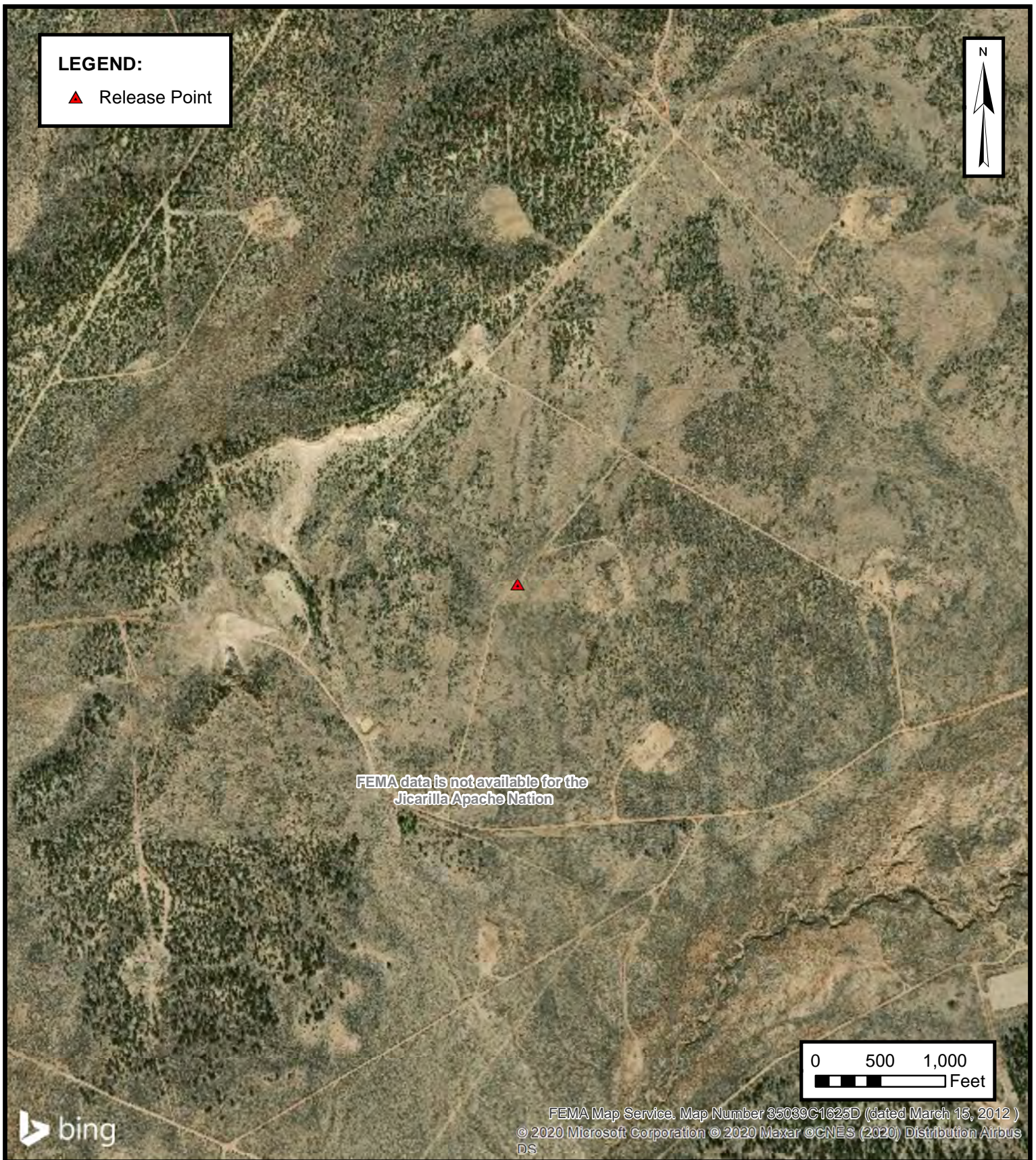
WETLANDS

ENTERPRISE FIELD SERVICES, LLC
JICARILLA 55 #3
SE ¼, S35 T23N R3W, Sandoval County, New Mexico
36.178041° N, 107.122833° W

PROJECT NUMBER: 05A1226125

FIGURE
F







New Mexico Office of the State Engineer

Water Column/Average Depth to Water

No records found.

PLSS Search:

Section(s): 35, 34, 27, 26, 25, 36 **Township:** 23N **Range:** 03W

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.

11/17/20 8:33 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): 1, 2, 3

Township: 22N

Range: 03W

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.

11/17/20 8:34 AM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER



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		AFE: N49793 PayKey: RB21200 PM: Dwayne Dixon
2. Originating Site: Jicarilla 55#3		
3. Location of Material (Street Address, City, State or ULSTR): Section 35 T23N R3W; 36.178041, -107.122833		
4. Source and Description of Waste: Source: Remediation activities associated with a natural gas pipeline leak. Description: Hydrocarbon/Condensate impacted soil associated natural gas pipeline release. Estimated Volume <u>50</u> yd ³ bbls Known Volume (to be entered by the operator at the end of the haul) <u>25</u> yd ³ bbls		
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS		
<p>I, Thomas Long <i>Thomas Long</i>, 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)</p> <p><input checked="" type="checkbox"/> RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. <u>Operator Use Only: Waste Acceptance Frequency</u> <input type="checkbox"/> Monthly <input type="checkbox"/> Weekly <input type="checkbox"/> Per Load</p> <p><input type="checkbox"/> 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)</p> <p><input type="checkbox"/> MSDS Information <input type="checkbox"/> RCRA Hazardous Waste Analysis <input type="checkbox"/> Process Knowledge <input type="checkbox"/> Other (Provide description in Box 4)</p>		
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS		
<p>I, Thomas Long <i>Thomas Long</i> 11-13-2020, representative for Enterprise Products Operating authorizes Envirotech, Inc. to complete Generator Signature the required testing/sign the Generator Waste Testing Certification.</p> <p>I, <i>Greg Crabtree</i>, representative for <u>Envirotech, Inc.</u> 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.</p>		
5. Transporter: TBD		

OCD Permitted Surface Waste Management Facility

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

Address of Facility: Hilltop, NM

Method of Treatment and/or Disposal:

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

Waste Acceptance Status:

☒ APPROVED

☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: *Greg Crabtree*

SIGNATURE: *Greg Crabtree*

Surface Waste Management Facility Authorized Agent

TITLE: *Enviro Manager*

TELEPHONE NO.:

505-632-0615

DATE: *11/13/20*



APPENDIX D

Photographic Documentation

SITE PHOTOGRAPHS

Enterprise Field Services, LLC
Closure Report
Jicarilla 55 #3
Ensolum Project No. 05A1226125

**Photograph 1**

Photograph Description: View of release area.

**Photograph 2**

Photograph Description: View of the initial excavation.

**Photograph 3**

Photograph Description: View of the initial excavation.



SITE PHOTOGRAPHS

Enterprise Field Services, LLC
Closure Report
Jicarilla 55 #3
Ensolum Project No. 05A1226125

**Photograph 4**

Photograph Description: View of the final excavation.

**Photograph 5**

Photograph Description: View of the final excavation.

**Photograph 6**

Photograph Description: View of the excavation after initial restoration.





APPENDIX E

Regulatory Correspondence

From: [Long, Thomas](#)
To: [Yahoo Warning](#)
Subject: RE: [EXTERNAL] Re: Jicarilla 55 #3 - Section 35 T23N R3W; 36.178041, -107.122833
Date: Wednesday, November 18, 2020 7:06:00 AM

Keith,

They will be backfilling today, beginning this morning.

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: Yahoo Warning <kcmanwell@yahoo.com>
Sent: Tuesday, November 17, 2020 8:21 PM
To: Long, Thomas <tjlong@eprod.com>
Subject: Re: [EXTERNAL] Re: Jicarilla 55 #3 - Section 35 T23N R3W; 36.178041, -107.122833

[Use caution with links/attachments]

Thomas,

Great results, when is proposed backfill date & time?

Thank You,
K.C. Manwell, Environmental Specialist
Jicarilla Apache Nation, Environmental Protection Office
505-330-8031

On Tuesday, November 17, 2020, 02:08:38 PM MST, Long, Thomas <tjlong@eprod.com> wrote:

Keith,

Please find the attached lab report and site sketch for the Jicarilla 55#3 excavation. All results are below laboratory detection limits. Enterprise will backfill the excavation with material from the location you identified yesterday. 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: Yahoo Warning <kcmannwell@yahoo.com>
Sent: Friday, November 6, 2020 11:15 AM
To: Long, Thomas <tjlong@eprod.com>
Subject: [EXTERNAL] Re: Jicarilla 55 #3 - Section 35 T23N R3W; 36.178041, -107.122833

[Use caution with links/attachments]

Thomas Long,

After review of photo for Jicarilla 55 # 3, it appears to be discharging fluids for awhile. Seems that no fluids are migrating laterally and contained. The proposed plan of operations is APPROVED, with options for amendments to the plan as progress proceeds from JANEPO. I plan to be on location on Tuesday November 10, 2020. JANEPO will determine a designated backfill site. Any question/comments call me.

Thank You,

Keith Manwell, Environmental Specialist

505-330-8031

On Friday, November 6, 2020, 10:33:28 AM MST, Long, Thomas <tjlong@eprod.com> wrote:

Keith,

This email is a notification that Enterprise had a release of condensate from a valve the Jicarilla 55 #3 will tie. The release is located at Section 35 T23N R3W; 36.178041, -107.122833. Minimal fluids was release to the ground surface. Enterprise is currently isolating, depressurizing, locking and tagging the pipeline out. Enterprise will recover the standing liquids as much as practicable. I will keep you informed as to when the remediation is scheduled. I have attached a picture for reference and a preliminary remediation plan. 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.

From: [Smith, Cory, EMNRD](#)
To: [Long, Thomas](#); [Yahoo Warning](#)
Cc: [Stone, Brian](#)
Subject: [EXTERNAL] RE: Jicarilla 55 #3 - Section 35 T23N R3W; 36.178041, -107.122833
Date: Monday, November 16, 2020 12:14:24 PM

[Use caution with links/attachments]

Tom,

OCD approves the sampling timeframe and sampling plan so long as the Surface owner agrees to them or has more stringent requirements.

Please include this approval in your Final C-141 as no hard copy will be sent to you.

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

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

From: Long, Thomas <tjlong@eprod.com>
Sent: Monday, November 16, 2020 12:07 PM
To: Yahoo Warning <kcmawell@yahoo.com>
Cc: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Stone, Brian <bmstone@eprod.com>
Subject: [EXT] RE: Jicarilla 55 #3 - Section 35 T23N R3W; 36.178041, -107.122833

Keith,

This email is to notify you that Enterprise will be collecting soil samples for laboratory analysis today. This should complete the remediation activities for this release site. 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: Friday, November 6, 2020 10:33 AM
To: 'Yahoo Warning' <kcmanwell@yahoo.com>
Cc: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>; Stone, Brian <bmstone@eprod.com>
Subject: Jicarilla 55 #3 - Section 35 T23N R3W; 36.178041, -107.122833

Keith,

This email is a notification that Enterprise had a release of condensate from a valve the Jicarilla 55 #3 will tie. The release is located at Section 35 T23N R3W; 36.178041, -107.122833. Minimal fluids was release to the ground surface. Entperise is currently isolating, depressurizing, locking and tagging the pipeline out. Entperise will recover the standing liquids as much as practicable. I will keep you informed as to when the remediation is scheduled. I have attached a picture for reference and a preliminary remediation plan. If you have any questions, please call or email.

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



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



APPENDIX F

Table 1 – Soil Analytical Summary



TABLE 1
Jicarilla 55 #3
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample Depth (Feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO/MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria (Tier I)				10	NE	NE	NE	50				100	600
Excavation Composite Soil Samples													
S-1	11.16.20	C	3 to 4	<0.026	<0.051	<0.051	<0.10	ND	<5.1	<9.8	<49	ND	<60
S-2	11.16.20	C	0 to 4	<0.028	<0.057	<0.057	<0.11	ND	<5.7	<9.3	<46	ND	<60
S-3	11.16.20	C	0 to 3	<0.023	<0.045	<0.045	<0.091	ND	<4.5	<9.6	<48	ND	<60
S-4	11.16.20	C	0 to 4	<0.024	<0.047	<0.047	<0.094	ND	<4.7	<9.9	<49	ND	<59
S-5	11.16.20	C	0 to 4	<0.033	<0.066	<0.066	<0.13	ND	<6.6	<9.8	<49	ND	<60

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

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

NA = Not Analyzed

NE = Not established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPH = Total Petroleum Hydrocarbon

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics



APPENDIX G

Laboratory Data Sheets & Chain of Custody Documentation



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

November 19, 2020

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: Jicarilla 55 3

OrderNo.: 2011810

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 11/17/2020 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2011810

Date Reported: 11/19/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-1

Project: Jicarilla 55 3

Collection Date: 11/16/2020 1:30:00 PM

Lab ID: 2011810-001

Matrix: MEOH (SOIL)

Received Date: 11/17/2020 8:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	11/17/2020 12:13:15 PM	56490
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/17/2020 10:52:39 AM	56488
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/17/2020 10:52:39 AM	56488
Surr: DNOP	81.6	30.4-154		%Rec	1	11/17/2020 10:52:39 AM	56488
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.1		mg/Kg	1	11/17/2020 9:57:44 AM	A73411
Surr: BFB	89.9	75.3-105		%Rec	1	11/17/2020 9:57:44 AM	A73411
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.026		mg/Kg	1	11/17/2020 9:57:44 AM	C73411
Toluene	ND	0.051		mg/Kg	1	11/17/2020 9:57:44 AM	C73411
Ethylbenzene	ND	0.051		mg/Kg	1	11/17/2020 9:57:44 AM	C73411
Xylenes, Total	ND	0.10		mg/Kg	1	11/17/2020 9:57:44 AM	C73411
Surr: 4-Bromofluorobenzene	95.7	80-120		%Rec	1	11/17/2020 9:57:44 AM	C73411

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 1 of 11

Analytical Report

Lab Order 2011810

Date Reported: 11/19/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-2

Project: Jicarilla 55 3

Collection Date: 11/16/2020 1:35:00 PM

Lab ID: 2011810-002

Matrix: MEOH (SOIL)

Received Date: 11/17/2020 8:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	11/17/2020 12:25:39 PM	56490
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	11/17/2020 11:16:42 AM	56488
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/17/2020 11:16:42 AM	56488
Surr: DNOP	91.0	30.4-154		%Rec	1	11/17/2020 11:16:42 AM	56488
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.7		mg/Kg	1	11/17/2020 10:21:22 AM	A73411
Surr: BFB	91.5	75.3-105		%Rec	1	11/17/2020 10:21:22 AM	A73411
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.028		mg/Kg	1	11/17/2020 10:21:22 AM	C73411
Toluene	ND	0.057		mg/Kg	1	11/17/2020 10:21:22 AM	C73411
Ethylbenzene	ND	0.057		mg/Kg	1	11/17/2020 10:21:22 AM	C73411
Xylenes, Total	ND	0.11		mg/Kg	1	11/17/2020 10:21:22 AM	C73411
Surr: 4-Bromofluorobenzene	98.3	80-120		%Rec	1	11/17/2020 10:21:22 AM	C73411

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011810

Date Reported: 11/19/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-3

Project: Jicarilla 55 3

Collection Date: 11/16/2020 1:40:00 PM

Lab ID: 2011810-003

Matrix: MEOH (SOIL)

Received Date: 11/17/2020 8:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	11/17/2020 12:38:04 PM	56490
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	11/17/2020 11:40:41 AM	56488
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/17/2020 11:40:41 AM	56488
Surr: DNOP	91.8	30.4-154		%Rec	1	11/17/2020 11:40:41 AM	56488
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.5		mg/Kg	1	11/17/2020 10:45:06 AM	A73411
Surr: BFB	93.8	75.3-105		%Rec	1	11/17/2020 10:45:06 AM	A73411
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	11/17/2020 10:45:06 AM	C73411
Toluene	ND	0.045		mg/Kg	1	11/17/2020 10:45:06 AM	C73411
Ethylbenzene	ND	0.045		mg/Kg	1	11/17/2020 10:45:06 AM	C73411
Xylenes, Total	ND	0.091		mg/Kg	1	11/17/2020 10:45:06 AM	C73411
Surr: 4-Bromofluorobenzene	99.2	80-120		%Rec	1	11/17/2020 10:45:06 AM	C73411

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 3 of 11

Analytical Report

Lab Order 2011810

Date Reported: 11/19/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-4

Project: Jicarilla 55 3

Collection Date: 11/16/2020 1:45:00 PM

Lab ID: 2011810-004

Matrix: MEOH (SOIL)

Received Date: 11/17/2020 8:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	59		mg/Kg	20	11/17/2020 12:50:29 PM	56490
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/17/2020 12:04:42 PM	56488
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/17/2020 12:04:42 PM	56488
Surr: DNOP	92.7	30.4-154		%Rec	1	11/17/2020 12:04:42 PM	56488
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/17/2020 11:08:59 AM	A73411
Surr: BFB	96.7	75.3-105		%Rec	1	11/17/2020 11:08:59 AM	A73411
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	11/17/2020 11:08:59 AM	C73411
Toluene	ND	0.047		mg/Kg	1	11/17/2020 11:08:59 AM	C73411
Ethylbenzene	ND	0.047		mg/Kg	1	11/17/2020 11:08:59 AM	C73411
Xylenes, Total	ND	0.094		mg/Kg	1	11/17/2020 11:08:59 AM	C73411
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	11/17/2020 11:08:59 AM	C73411

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 4 of 11

Analytical Report

Lab Order 2011810

Date Reported: 11/19/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-5

Project: Jicarilla 55 3

Collection Date: 11/16/2020 1:50:00 PM

Lab ID: 2011810-005

Matrix: MEOH (SOIL)

Received Date: 11/17/2020 8:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	11/17/2020 1:02:53 PM	56490
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/17/2020 12:28:48 PM	56488
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/17/2020 12:28:48 PM	56488
Surr: DNOP	91.1	30.4-154		%Rec	1	11/17/2020 12:28:48 PM	56488
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	6.6		mg/Kg	1	11/17/2020 11:32:51 AM	A73411
Surr: BFB	94.0	75.3-105		%Rec	1	11/17/2020 11:32:51 AM	A73411
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.033		mg/Kg	1	11/17/2020 11:32:51 AM	C73411
Toluene	ND	0.066		mg/Kg	1	11/17/2020 11:32:51 AM	C73411
Ethylbenzene	ND	0.066		mg/Kg	1	11/17/2020 11:32:51 AM	C73411
Xylenes, Total	ND	0.13		mg/Kg	1	11/17/2020 11:32:51 AM	C73411
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	11/17/2020 11:32:51 AM	C73411

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 5 of 11

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

WO#: 2011810

19-Nov-20

Client: ENSOLUM**Project:** Jicarilla 55 3

Sample ID: MB-56490	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 56490	RunNo: 73441								
Prep Date: 11/17/2020	Analysis Date: 11/17/2020	SeqNo: 2586403	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-56490	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 56490	RunNo: 73441								
Prep Date: 11/17/2020	Analysis Date: 11/17/2020	SeqNo: 2586404	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.0	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

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

Page 6 of 11

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

WO#: 2011810

19-Nov-20

Client: ENSOLUM**Project:** Jicarilla 55 3

Sample ID: LCS-56488	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 56488			RunNo: 73413						
Prep Date: 11/17/2020	Analysis Date: 11/17/2020			SeqNo: 2585187		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	87.5	70	130			
Surr: DNOP	4.0		5.000		79.2	30.4	154			

Sample ID: MB-56488	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 56488			RunNo: 73413						
Prep Date: 11/17/2020	Analysis Date: 11/17/2020			SeqNo: 2585188		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	8.8		10.00		88.0	30.4	154			

Sample ID: 2011810-001AMS	SampType: MS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: S-1	Batch ID: 56488			RunNo: 73413						
Prep Date: 11/17/2020	Analysis Date: 11/17/2020			SeqNo: 2586224		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	9.4	46.95	0	84.5	15	184			
Surr: DNOP	4.1		4.695		86.8	30.4	154			

Sample ID: 2011810-001AMSD	SampType: MSD			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: S-1	Batch ID: 56488			RunNo: 73413						
Prep Date: 11/17/2020	Analysis Date: 11/17/2020			SeqNo: 2586225		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	9.7	48.69	0	79.1	15	184	3.06	23.9	
Surr: DNOP	3.9		4.869		79.4	30.4	154	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 Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

Page 7 of 11

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

WO#: 2011810

19-Nov-20

Client: ENSOLUM**Project:** Jicarilla 55 3

Sample ID: mb1	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: A73411			RunNo: 73411						
Prep Date:	Analysis Date: 11/17/2020			SeqNo: 2585419		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	900		1000		90.1	75.3	105			

Sample ID: 2.5ug gro lcs	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: A73411			RunNo: 73411						
Prep Date:	Analysis Date: 11/17/2020			SeqNo: 2585420		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.2	72.5	106			
Surr: BFB	1000		1000		100	75.3	105			

Sample ID: mb1	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: G73447			RunNo: 73447						
Prep Date:	Analysis Date: 11/18/2020			SeqNo: 2586922		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	900		1000		90.1	75.3	105			

Sample ID: 2.5ug gro lcsb	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: G73447			RunNo: 73447						
Prep Date:	Analysis Date: 11/18/2020			SeqNo: 2586923		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		102	75.3	105			

Sample ID: MB-56503	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 56503			RunNo: 73447						
Prep Date: 11/17/2020	Analysis Date: 11/19/2020			SeqNo: 2586929		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	930		1000		92.7	75.3	105			

Sample ID: lcs-56503	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 56503			RunNo: 73447						
Prep Date: 11/17/2020	Analysis Date: 11/19/2020			SeqNo: 2586930		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		104	75.3	105			

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

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#: 2011810

19-Nov-20

Client: ENSOLUM**Project:** Jicarilla 55 3

Sample ID: 2011810-001ams	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: S-1	Batch ID: A73411		RunNo: 73447							
Prep Date:	Analysis Date: 11/18/2020		SeqNo: 2586991		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.1	25.67	0	102	61.3	114			
Surr: BFB	1100		1027		104	75.3	105			

Sample ID: 2011810-001amsd	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: S-1	Batch ID: A73411		RunNo: 73447							
Prep Date:	Analysis Date: 11/18/2020		SeqNo: 2586992		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.1	25.67	0	96.1	61.3	114	5.58	20	
Surr: BFB	1100		1027		104	75.3	105	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 Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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

WO#: 2011810

19-Nov-20

Client: ENSOLUM**Project:** Jicarilla 55 3

Sample ID: mb1	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: C73411	RunNo: 73411								
Prep Date:	Analysis Date: 11/17/2020	SeqNo: 2585449	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.97		1.000		97.3	80	120			

Sample ID: 100ng btex lcs	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: C73411	RunNo: 73411								
Prep Date:	Analysis Date: 11/17/2020	SeqNo: 2585450	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	96.6	80	120			
Toluene	1.0	0.050	1.000	0	100	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.0	0.10	3.000	0	100	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Sample ID: 2011810-002ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: S-2	Batch ID: C73411	RunNo: 73411								
Prep Date:	Analysis Date: 11/17/2020	SeqNo: 2585451	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.028	1.135	0	98.4	76.3	120			
Toluene	1.2	0.057	1.135	0	102	78.5	120			
Ethylbenzene	1.1	0.057	1.135	0	101	78.1	124			
Xylenes, Total	3.5	0.11	3.405	0	102	79.3	125			
Surr: 4-Bromofluorobenzene	1.2		1.135		103	80	120			

Sample ID: 2011810-002amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: S-2	Batch ID: C73411	RunNo: 73411								
Prep Date:	Analysis Date: 11/17/2020	SeqNo: 2585452	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.028	1.135	0	97.6	76.3	120	0.867	20	
Toluene	1.1	0.057	1.135	0	101	78.5	120	0.700	20	
Ethylbenzene	1.1	0.057	1.135	0	100	78.1	124	0.834	20	
Xylenes, Total	3.4	0.11	3.405	0	100	79.3	125	1.63	20	
Surr: 4-Bromofluorobenzene	1.2		1.135		106	80	120	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 Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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

WO#: 2011810

19-Nov-20

Client: ENSOLUM**Project:** Jicarilla 55 3

Sample ID: mb1	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: B73447			RunNo: 73447						
Prep Date:	Analysis Date: 11/18/2020			SeqNo: 2586967		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.97		1.000		96.9	80	120			

Sample ID: 100ng btex lcs	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: B73447			RunNo: 73447						
Prep Date:	Analysis Date: 11/18/2020			SeqNo: 2586968		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.98		1.000		98.4	80	120			

Sample ID: LCS-56503	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 56503			RunNo: 73447						
Prep Date: 11/17/2020	Analysis Date: 11/19/2020			SeqNo: 2586977		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID: MB-56503	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 56503			RunNo: 73447						
Prep Date: 11/17/2020	Analysis Date: 11/19/2020			SeqNo: 2586993		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
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P Sample pH Not In Range
RL Reporting Limit



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: 2011810

RcptNo: 1

Received By: Sean Livingston 11/17/2020 8:48:00 AM

Completed By: Desiree Dominguez 11/17/2020 8:57:18 AM

Reviewed By: SGL 11/17/20

Sean Livingston
DD

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: JR 11/17/20

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.9	Good	Yes			

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 19650

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 19650
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	5/2/2022