

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: <b>Enterprise Field Services, LLC</b>	OGRID: <b>241602</b>
Contact Name: <b>Thomas Long</b>	Contact Telephone: <b>505-599-2286</b>
Contact email: <b>tjlong@eprod.com</b>	Incident # (assigned by OCD) <b>nAPP2311048689</b>
Contact mailing address: <b>614 Reilly Ave, Farmington, NM 87401</b>	

### Location of Release Source

Latitude **36.530211** Longitude **-107.656439** (NAD 83 in decimal degrees to 5 decimal places)

Site Name <b>Hammond #47R</b>	Site Type <b>Natural Gas Gathering Pipeline</b>
Date Release Discovered: <b>04/20/2023</b>	Serial Number (if applicable): <b>N/A</b>

Unit Letter	Section	Township	Range	County
<b>F</b>	<b>35</b>	<b>27N</b>	<b>8W</b>	<b>San Juan</b>

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): <b>Estimated 5-10 BBLs</b>	Volume Recovered (bbls): <b>None</b>
<input checked="" type="checkbox"/> Natural Gas	Volume Released (Mcf): <b>0.616 MCF</b>	Volume Recovered (Mcf): <b>None</b>
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

**Cause of Release:** On March 13, 2023, Enterprise had a release of natural gas and natural gas liquids from the Hammond #47R pipeline. The pipeline was isolated, depressurized, locked and tagged out. No fire nor injuries occurred. No liquids were observed on the ground surface. Repairs and remediation began on April 20, 2023, at which time Enterprise determined the release reportable per NMOCD regulation, due to the volume of impacted subsurface soil. Repairs and remediation were completed on May 10, 2023. The final excavation dimensions measured approximately 15 feet long by 15 feet wide by 17 feet deep. A total of 340 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: Thomas Long Title: Senior Environmental Scientist

Signature:  Date: 06-29-2023

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: 09/22/2023

Printed Name: Nelson Velez Title: Environmental Specialist - Adv



## CLOSURE REPORT

Property:

**Hammond #47R (04/20/23)**  
Unit Letter F, S35 T27N R08W  
San Juan County, New Mexico

**New Mexico EMNRD OCD Incident ID No. NAPP2311048689**

**June 27, 2023**

Ensolum Project No. 05A1226233

Prepared for:

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

Prepared by:

Chad D'Aponi  
Project Scientist

Kyle Summers  
Senior Managing Geologist

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## 1.0 INTRODUCTION

### 1.1 Site Description & Background

<b>Operator:</b>	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
<b>Site Name:</b>	Hammond #47R (04/20/23) (Site)
<b>NM EMNRD OCD Incident ID No.</b>	NAPP2311048689
<b>Location:</b>	36.530211° North, 107.656439° West Unit Letter F, Section 35, Township 27 North, Range 08 West San Juan County, New Mexico
<b>Property:</b>	United States Bureau of Land Management (BLM)
<b>Regulatory:</b>	New Mexico (NM) Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On March 13, 2023, a release of natural gas from the Hammond #47R pipeline was identified by a third party. Enterprise verified a release and subsequently isolated and locked the pipeline out of service. On April 19, 2022, Enterprise initiated activities to repair the pipeline and remediate petroleum hydrocarbon impact. On April 20, 2023, Enterprise determined the release was “reportable” due to the estimated volume of impacted soil. The NM EMNRD OCD was subsequently notified.

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). No PODs were identified in the same Public Land Survey System (PLSS) section as the Site. Nine PODs (SJ-02410, SJ-04124-POD1 through SJ-04124-POD3, SJ-04194-POD1, SJ-04194-POD8, SJ-02405, SJ-02407, and SJ-02411) were identified in the adjacent sections. The average depth to water for these PODs is 60 feet below grade surface (bgs). The closest POD (SJ-02410) is approximately 0.88 miles east of the Site, however no depths to water were

indicated. The second closest POD (SJ-04162-POD1), that is not indicated on the average depth to water report, was identified approximately 1.17 northeast of the Site using the OSE online mapping tool. Documentation for this POD indicated a depth to water of approximately 40 feet bgs. This POD is approximately 118 feet lower in elevation than the Site (**Figure A, Appendix B**).

- One cathodic protection well (CPWs) was identified in the NM EMNRD OCD imaging database in adjacent PLSS section. The CPW is depicted in **Figure B (Appendix B)**. Documentation for the cathodic protection well located near the Brookhaven Com #7 well location indicates a depth to water of approximately 30 feet. This cathodic protection well is located approximately 1.5 miles east of the Site and is 116 feet lower in elevation than the Site.
- 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**).
- No freshwater 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 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 <sup>1</sup>	Method	Limit
Chloride	EPA 300.0 or SM4500 Cl B	600 mg/kg
TPH (GRO+DRO+MRO) <sup>2</sup>	EPA SW-846 Method 8015	100 mg/kg
BTEX <sup>3</sup>	EPA SW-846 Method 8021 or 8260	50 mg/kg
Benzene	EPA SW-846 Method 8021 or 8260	10 mg/kg

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

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

<sup>3</sup> – Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX).

### 3.0 SOIL REMEDIATION ACTIVITIES

On April 19, 2023, Enterprise initiated activities to repair the pipeline and remediate petroleum hydrocarbon impact resulting from the release. During the remediation and corrective action activities, Sunland Construction Inc, provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final excavation measured approximately 15 feet long and 15 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 17 feet bgs. The lithology encountered during the completion of remediation activities consisted primarily of sand and gravel.

Approximately 340 cubic yards (yd<sup>3</sup>) of petroleum hydrocarbon-affected soil and 12 barrels (bbls) of hydro-excavation soil cuttings and water were transported to the Envirotech, Inc., (Envirotech) landfarm near Hilltop, NM for disposal/remediation. The executed C-138 solid waste acceptance form is provided in **Appendix C**. The excavation was backfilled with imported fill and 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 D**.

### 4.0 SOIL SAMPLING PROGRAM

Ensolum field screened the soil samples from the excavation utilizing a calibrated Dexsil PetroFLAG<sup>®</sup> 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 10 composite soil samples (S-1 through S-10) from the excavation for laboratory analysis. The composite samples were comprised of five aliquots each and represent an estimated 200 square foot (ft<sup>2</sup>) or less 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 E**.

#### First Sampling Event

On May 10, 2023, sampling was performed at the Site. The NM EMNRD OCD was notified of the sampling event although no representative was present during sampling activities. Composite soil samples S-1 (17') and S-2 (17') were collected from the floor of the excavation. Composite soil samples S-3 (0' to 17'), S-4 (0' to 17'), S-5 (0' to 17'), S-6 (0' to 17'), S-7 (0' to 17'), S-8 (0' to 17'), S-9 (0' to 17'), and S-10 (0' to 17'), were collected from the walls of the excavation.



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

## 5.0 SOIL LABORATORY ANALYTICAL METHODS

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

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

## 6.0 SOIL DATA EVALUATION

Ensolum compared the 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-10) to the applicable NM EMNRD OCD closure criteria. The laboratory analytical results are summarized in **Table 1 (Appendix F)**.

- 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 NM EMNRD OCD closure criteria of 10 mg/kg.
- The laboratory analytical results for composite soil samples S-3 and S-6 indicate total BTEX concentrations of 0.081 mg/kg and 0.10 mg/kg, respectively, which are less than the New Mexico EMNRD OCD closure criteria of 50 mg/kg. The laboratory analytical results for all other composite soil samples indicate total BTEX is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the NM EMNRD OCD closure criteria of 50 mg/kg.
- The laboratory analytical results for composite soil samples S-1 through S-6 indicate total combined TPH GRO/DRO/MRO concentrations ranging from 21 mg/kg (S-1) to 40 mg/kg (S-3 and S-4), which are less than the New Mexico EMNRD OCD closure criteria of 100 mg/kg. The laboratory analytical results for all other composite soil samples indicate total combined TPH GRO/DRO/MRO is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the New Mexico 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 New Mexico EMNRD OCD closure criteria of 600 mg/kg.

## 7.0 RECLAMATION AND REVEGETATION

The excavation was backfilled with imported fill and then contoured to the surrounding topography.



## 8.0 FINDINGS AND RECOMMENDATION

- Ten composite soil samples were collected from the Site. Based on laboratory analytical results, no benzene, BTEX, chloride, or total combined TPH GRO/DRO/MRO exceedances were identified in the soils remaining at the Site.
- Approximately 340 yd<sup>3</sup> of petroleum hydrocarbon-affected soil and 12 bbls of hydro-excavation soil cuttings and water were transported to the Envirotech landfarm for disposal/remediation. The excavation was backfilled with imported fill and 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.

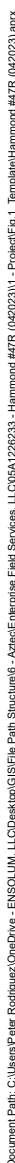


# APPENDIX A

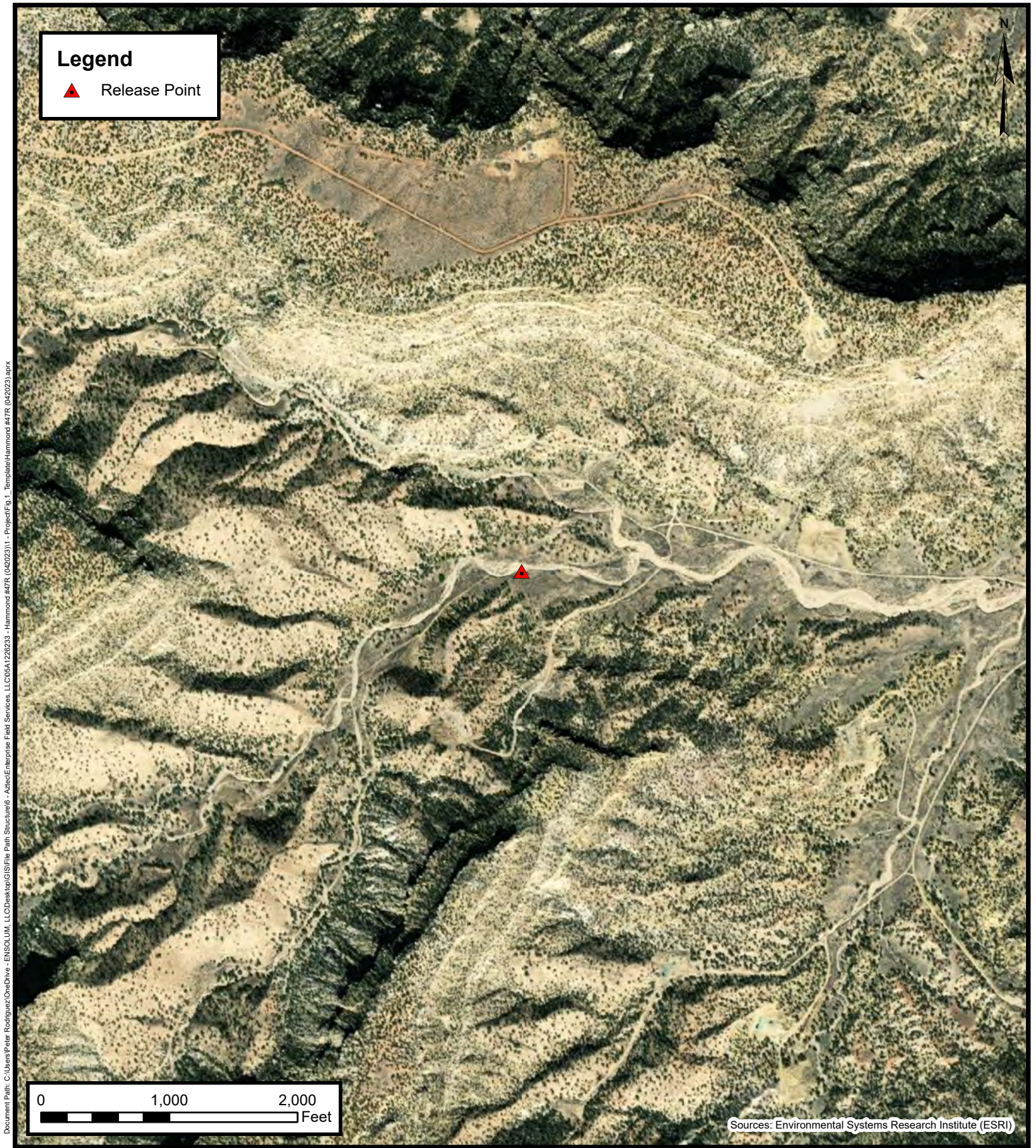
## Figures

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## Site Vicinity Map

Enterprise Field Services, LLC  
Hammond #47R (04/20/23)

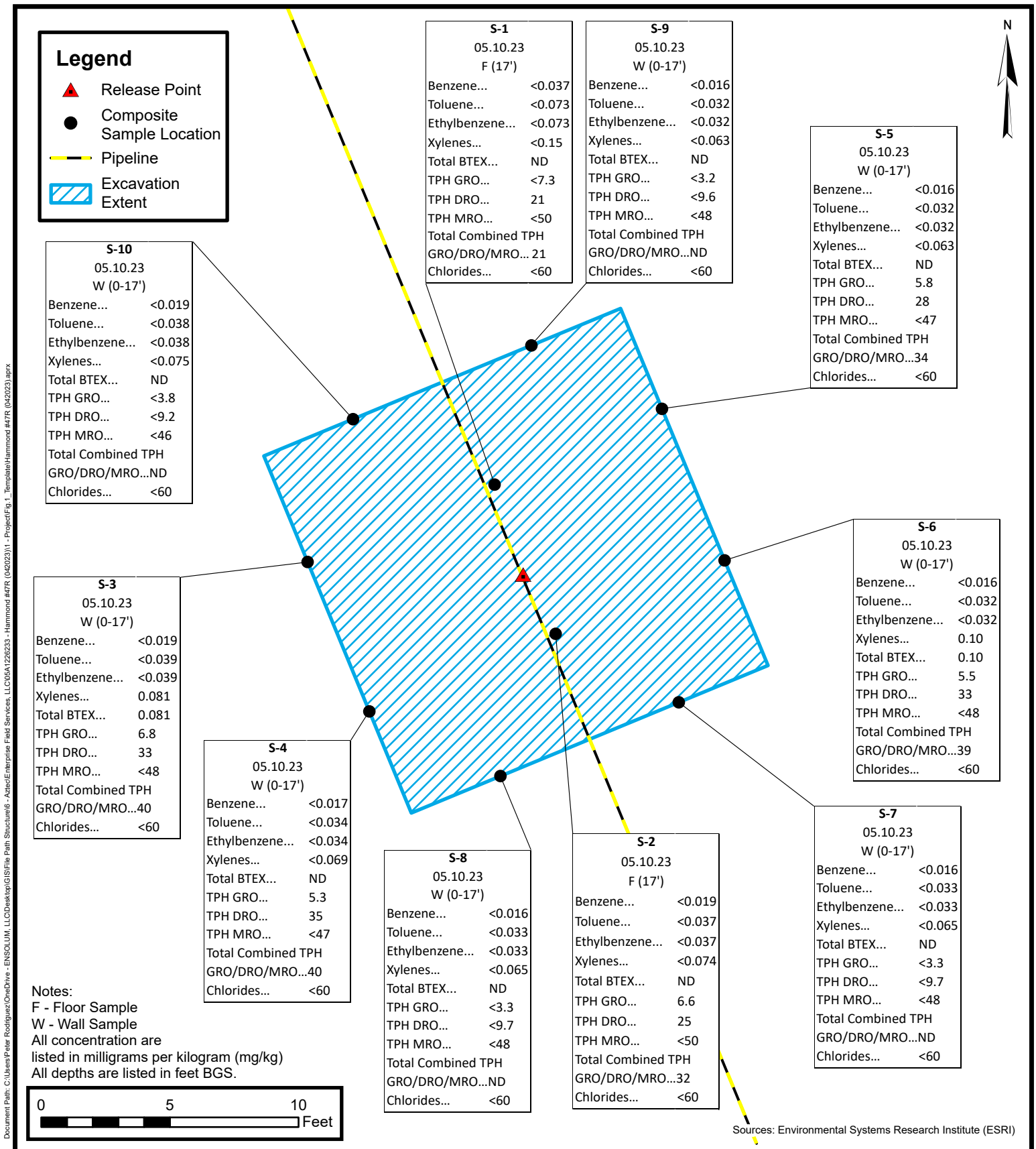
Project Number: 05A1226233

Unit Letter F, S35 T27N R8W, San Juan County, New Mexico  
36.530211, -107.656439

FIGURE

2





## Site Map with Soil Analytical Results

Enterprise Field Services, LLC

Hammond #47R (04/20/23)

Project Number: 05A1226233

Unit Letter F, S35 T27N R8W, San Juan County, New Mexico  
36.530211, -107.656439

FIGURE

3

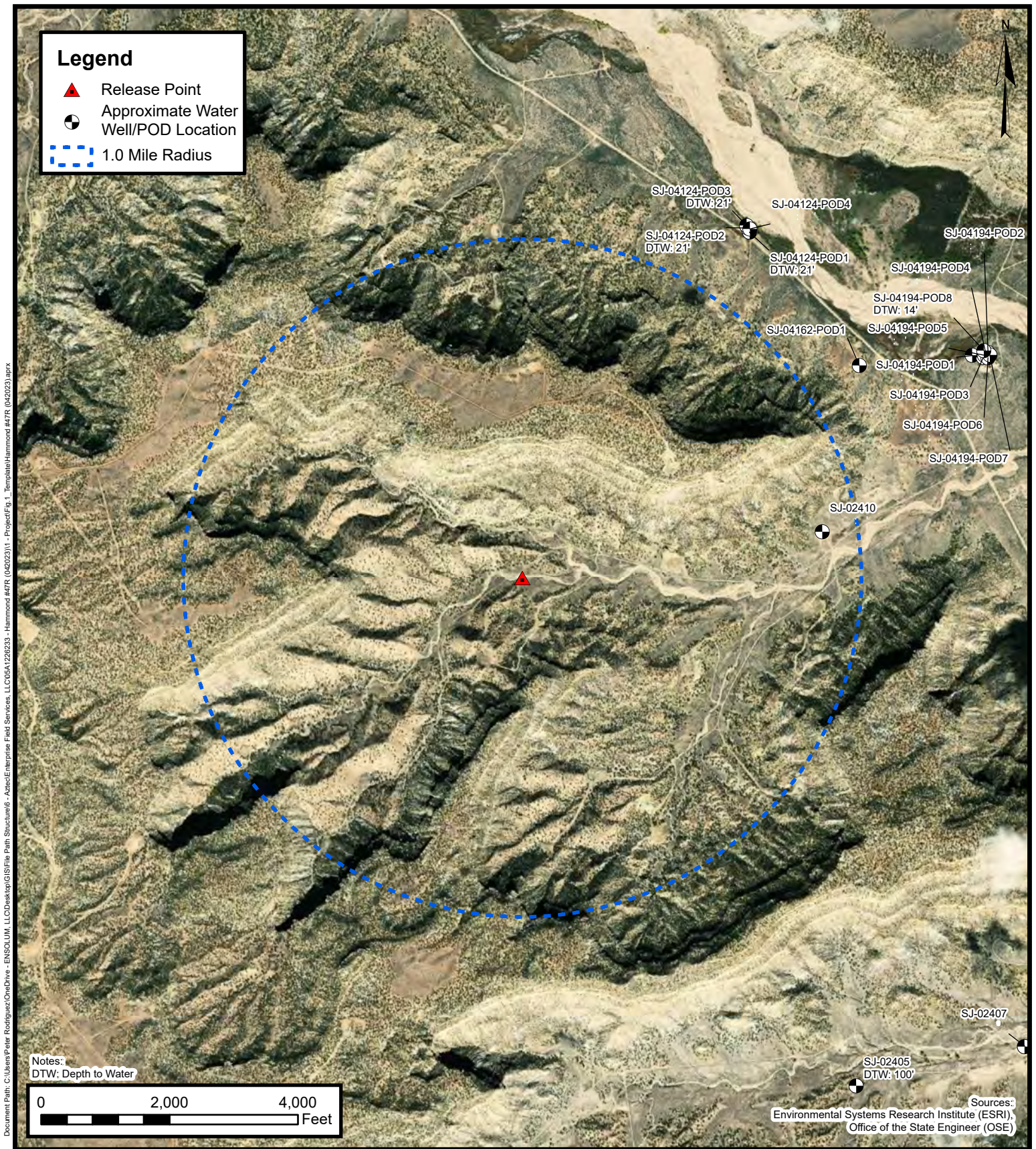


## APPENDIX B

### Siting Figures and Documentation

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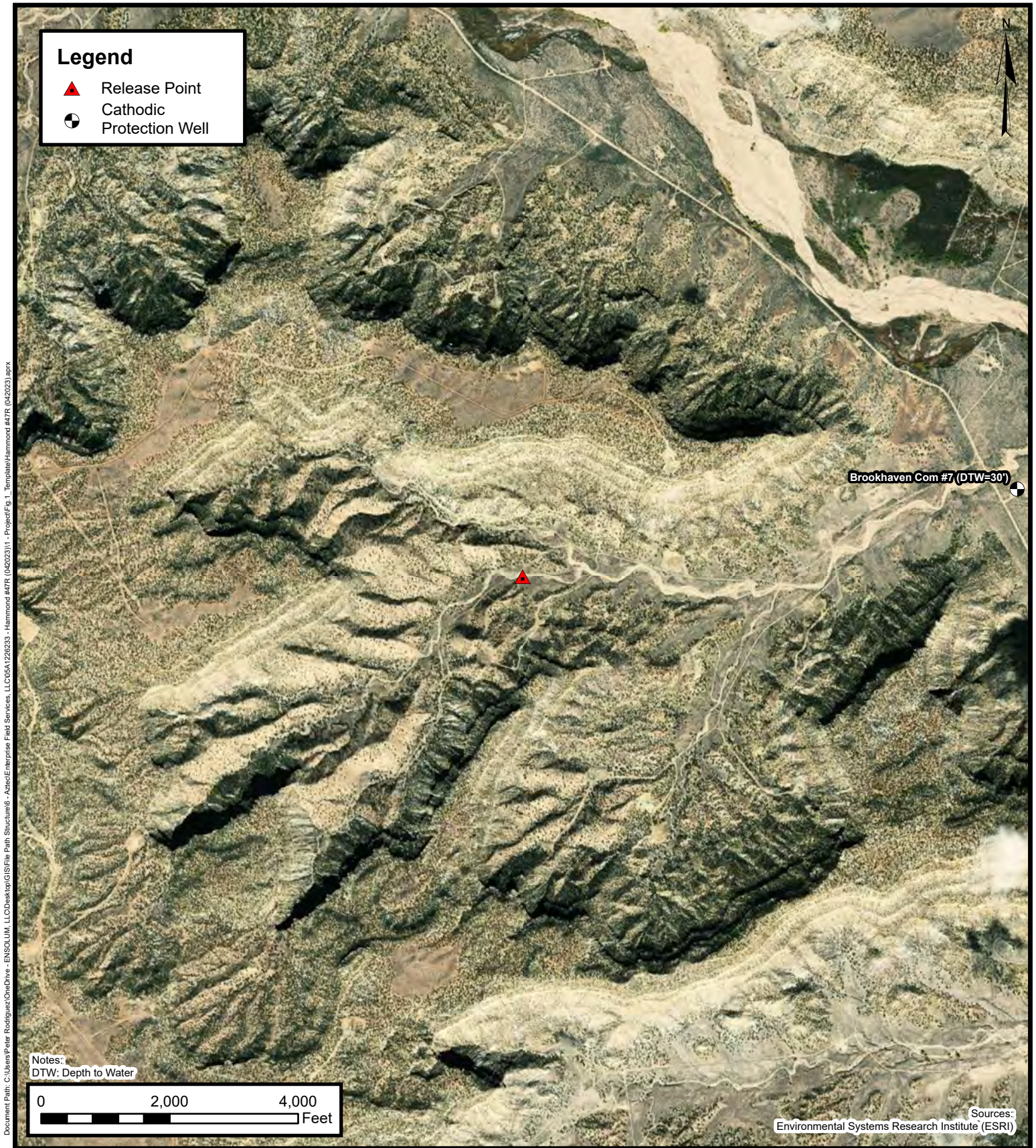


## 1.0 Mile Radius Water Well/ Pod Location Map

Enterprise Field Services, LLC  
Hammond #47R (04/20/23)  
Project Number: 05A1226233  
Unit Letter F, S35 T27N R8W, San Juan County, New Mexico  
36.530211, -107.656439

FIGURE  
**A**





## Cathodic Protection Well Recorded Depth to Water

Enterprise Field Services, LLC

Hammond #47R (04/20/23)

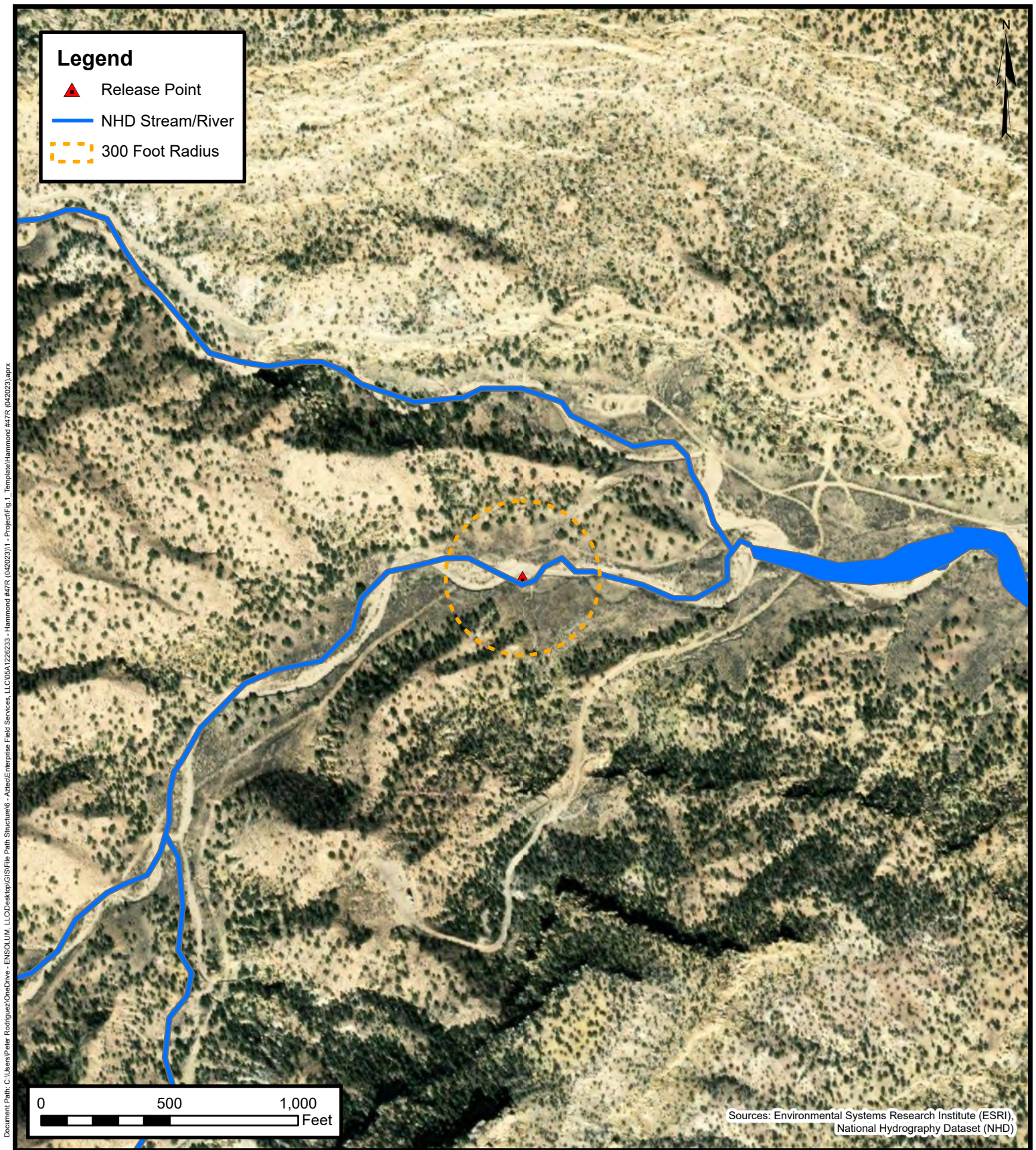
Project Number: 05A1226233

Unit Letter F, S35 T27N R8W, San Juan County, New Mexico  
36.530211, -107.656439

FIGURE

**B**





### 300 Foot Radius Watercourse and Drainage Identification

Enterprise Field Services, LLC  
Hammond #47R (04/20/23)

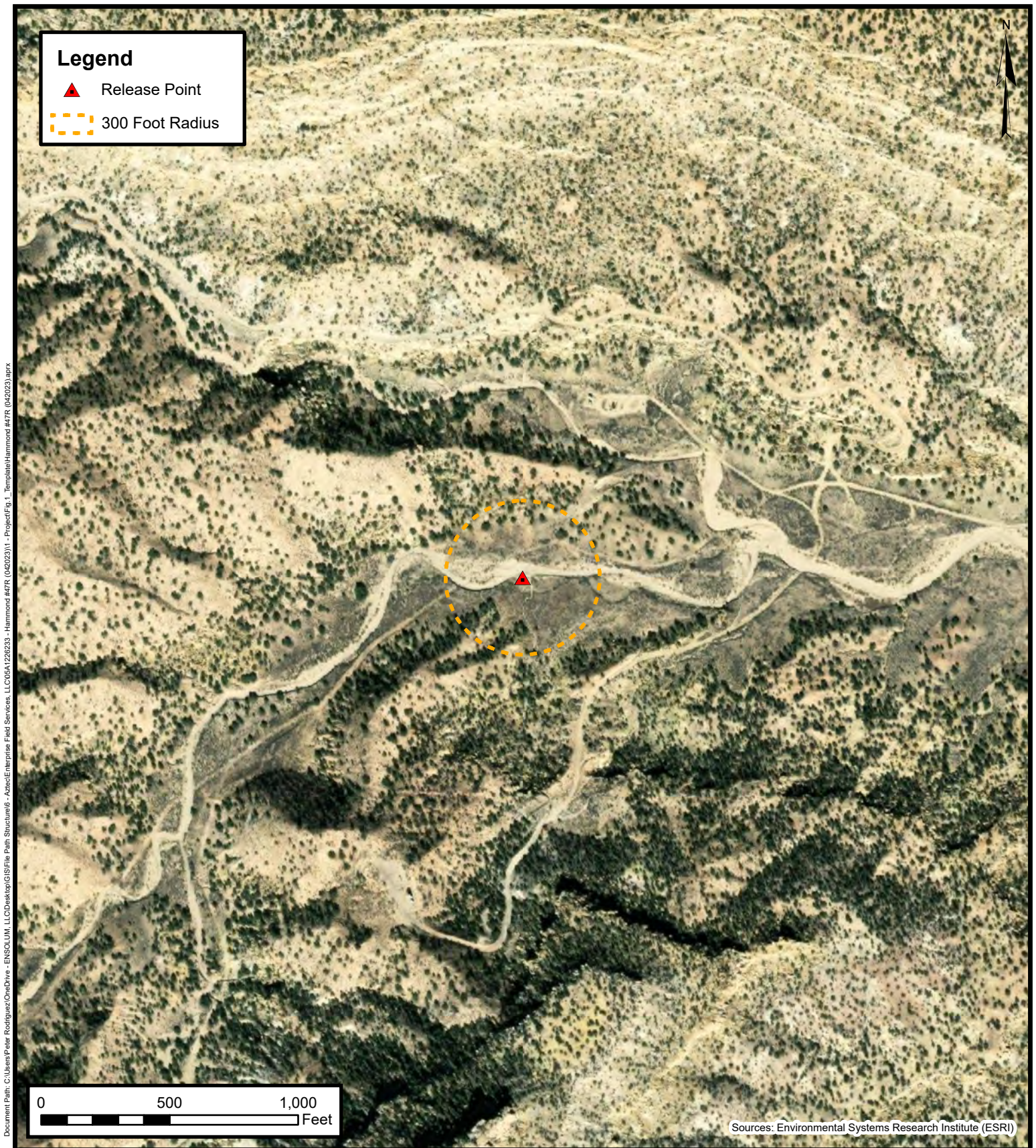
Project Number: 05A1226233

Unit Letter F, S35 T27N R8W, San Juan County, New Mexico  
36.530211, -107.656439

FIGURE

C





### 300 Foot Radius Occupied Structure Identification

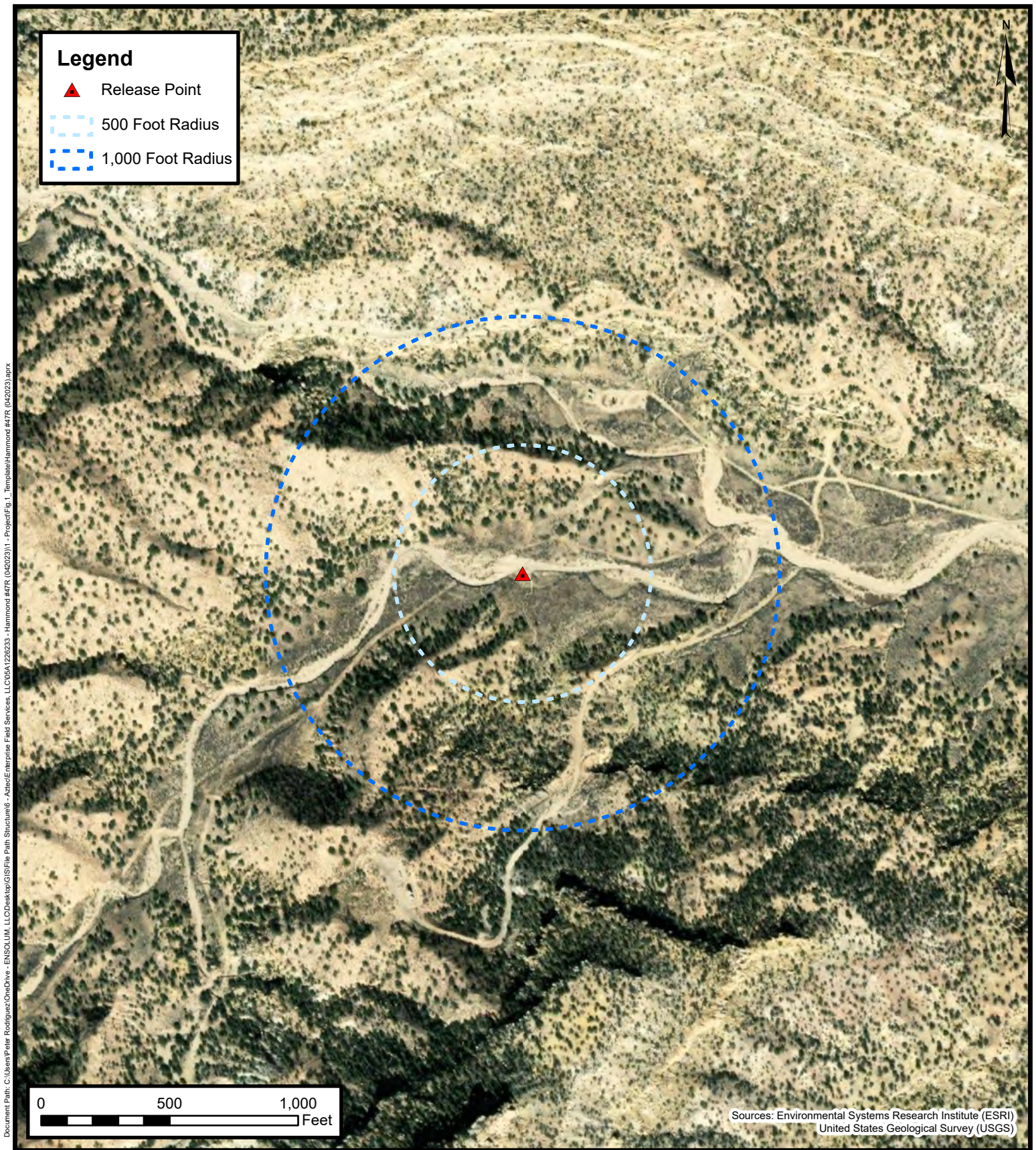
Enterprise Field Services, LLC  
Hammond #47R (04/20/23)

Project Number: 05A1226233

Unit Letter F, S35 T27N R8W, San Juan County, New Mexico  
36.530211, -107.656439

FIGURE  
D





## Water Well and Natural Spring Location

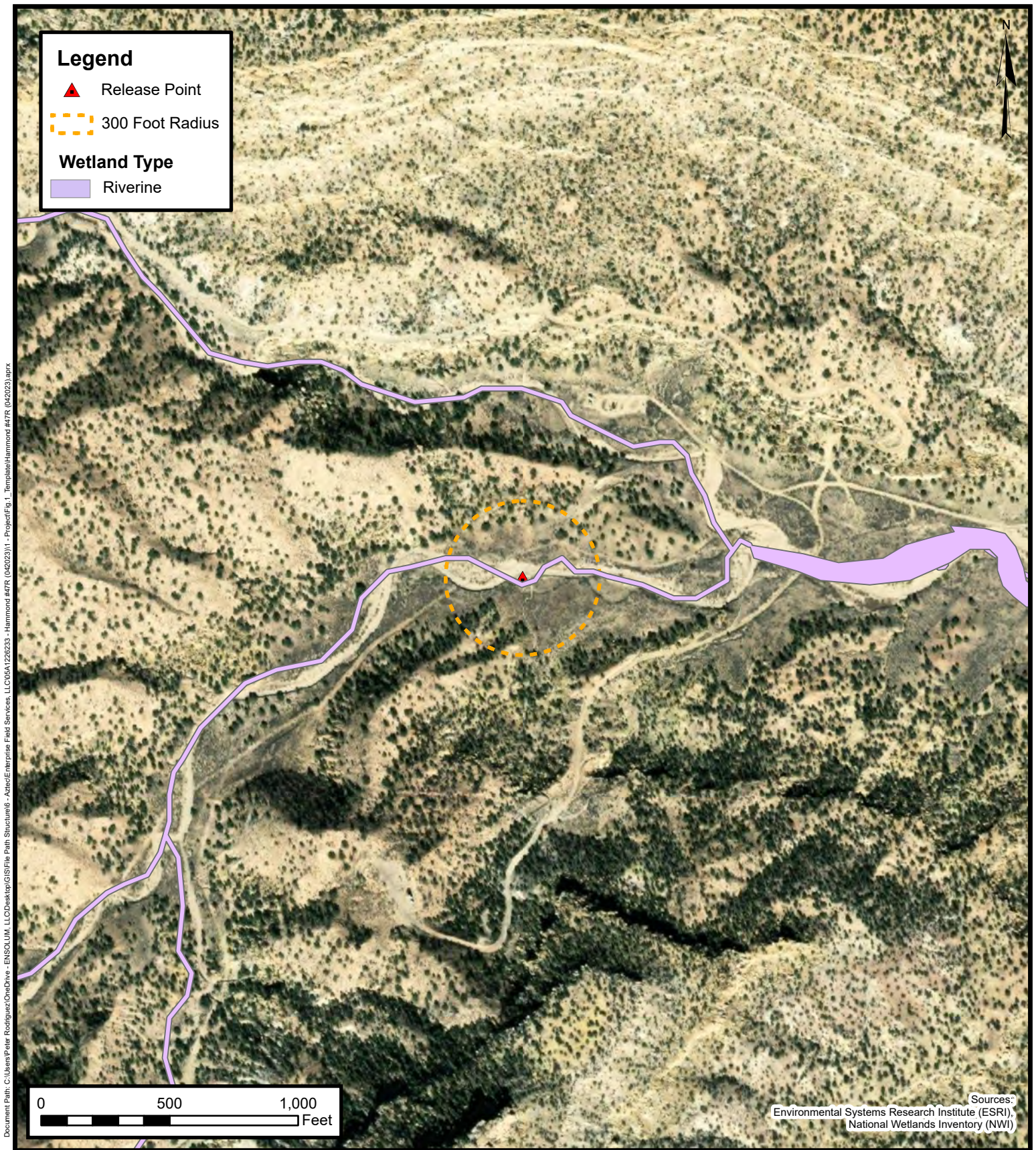
Enterprise Field Services, LLC  
Hammond #47R (04/20/23)

Project Number: 05A1226233

Unit Letter F, S35 T27N R8W, San Juan County, New Mexico  
36.530211, -107.656439

**FIGURE  
E**





## Wetlands

Enterprise Field Services, LLC  
Hammond #47R (04/20/23)

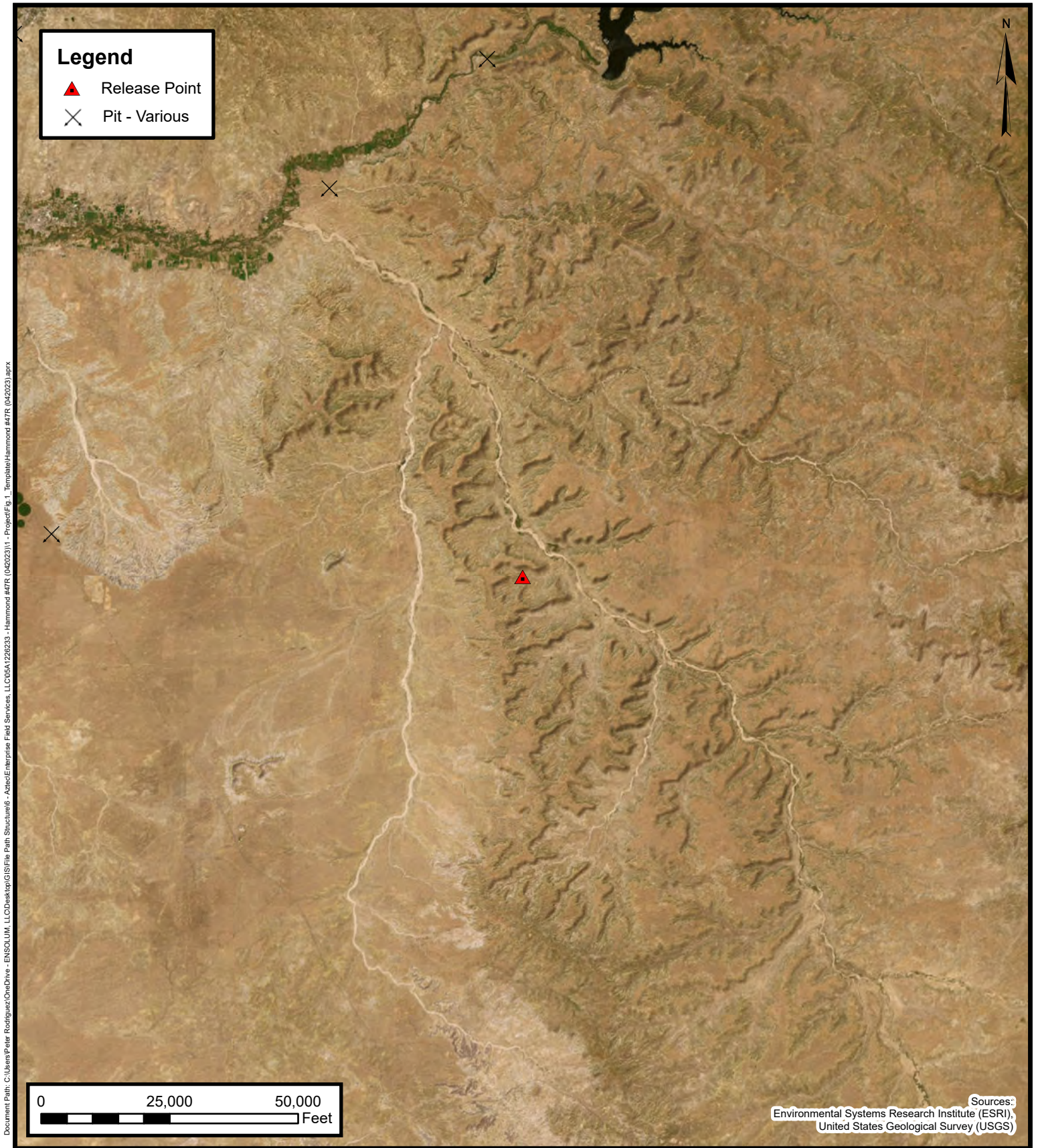
Project Number: 05A1226233

Unit Letter F, S35 T27N R8W, San Juan County, New Mexico  
36.530211, -107.656439

FIGURE

F





Document Path: C:\Users\Peter.Rodriguez\OneDrive - ENSOLUM, LLC\Desktop\GIS\Map Path Structure\6 - Article\Enterprise Field Services, LLC\05A1226233 - Hammond #47R (04/20/23) - Project\Fig. 1 Template\Hammond #47R (04/20/23).aprx



## Mines, Mills, and Quarries

Enterprise Field Services, LLC  
Hammond #47R (04/20/23)

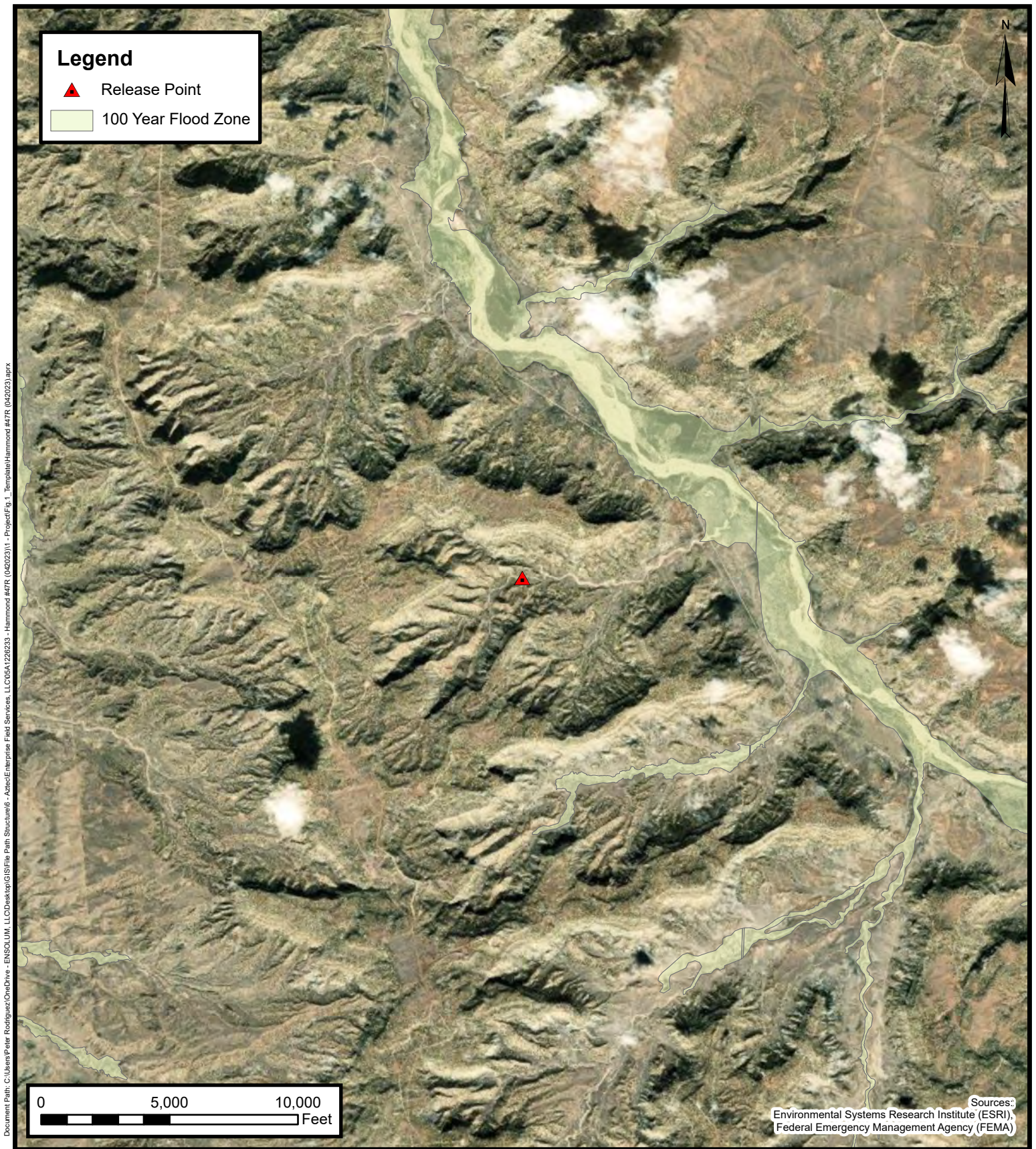
Project Number: 05A1226233

Unit Letter F, S35 T27N R8W, San Juan County, New Mexico  
36.530211, -107.656439

FIGURE

G





## 100-Year Flood Plain Map

Enterprise Field Services, LLC  
Hammond #47R (04/20/23)

Project Number: 05A1226233

Unit Letter F, S35 T27N R8W, San Juan County, New Mexico  
36.530211, -107.656439

FIGURE

H





# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

---

No records found.

**PLSS Search:**

**Section(s):** 6, 5

**Township:** 27N

**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.

---

3/27/23 2:23 PM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER



# 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
<a href="#">SJ 02405</a>	SJ	SJ		3	4	3	01	26N	08W	263754	4043631*	180	100	80
<a href="#">SJ 02407</a>	SJ	SJ		1	4	4	01	26N	08W	264553	4043817*	2200		
<a href="#">SJ 02411</a>	SJ	SJ		1	4	4	01	26N	08W	264553	4043817*	6000		

Average Depth to Water: **100 feet**

Minimum Depth: **100 feet**

Maximum Depth: **100 feet**

**Record Count: 3**

**PLSS Search:**

**Section(s):** 1, 2, 3

**Township:** 26N

**Range:** 08W

\*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.

3/23/23 2:33 PM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER



# 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
<a href="#">SJ 02410</a>	SJ	SJ		2	3	1	36	27N	08W	263593	4046261*	2200		
<a href="#">SJ 04124 POD1</a>	SJ	SJ					26	27N	08W	263248	4047683	32	21	11
<a href="#">SJ 04124 POD2</a>	SJ	SJ					26	27N	08W	263240	4047703	31	21	10
<a href="#">SJ 04124 POD3</a>	SJ	SJ					26	27N	08W	263234	4047715	31	21	10
<a href="#">SJ 04194 POD1</a>	SJ	SJ		3	4	25	27N	08W	264305	4047099		32		
<a href="#">SJ 04194 POD8</a>	SJ	SJ		3	4	25	27N	08W	264360	4047121		31	14	17

Average Depth to Water: **19 feet**

Minimum Depth: **14 feet**

Maximum Depth: **21 feet**

**Record Count:** 6

### PLSS Search:

**Section(s):** 35, 25, 26, 27, 34, 36 **Township:** 27N **Range:** 08W

\*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.

3/23/23 2:32 PM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS  
NORTHWESTERN NEW MEXICOOperator Meridian Oil Co. Location: Unit B Sec. 36 Twp 27 Rng 8Name of Well/Wells or Pipeline Serviced Brookhaven Com #7Elevation \_\_\_\_\_ Completion Date 7-22-95 Total Depth 385' Land Type SCasing Strings, Sizes, Types & Depths 175' of 8" PVC casingIf Casing Strings are cemented, show amounts & types used yes 28 sacks

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

NoneDepths & thickness of water zones with description of water: Fresh, Clear,  
Salty, Sulphur, Etc. 30'-FreshRECEIVED  
JAN 11 1996Depths gas encountered: None

OIL CON. DIV.

DIST. 3

Ground bed depth with type & amount of coke breeze used: 385'3750' AsburyDepths anodes placed: 368, 360, 353, 346, 338, 320, 323, 316, 308, 300, 293, 286, 250, 243, 236Depths vent pipes placed: Surface to 385'Vent pipe perforations: From 185' to 385'Remarks: No gas or boulders encountered during drilling

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

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



## 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.

97057-1165

## REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

<b>1. Generator Name and Address:</b> Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401	
<b>2. Originating Site:</b> Hammond #47	AFE: N65560 PM: Dwayne Dixon Pay Key: AM14058
<b>2. Location of Material (Street Address, City, State or ULSTR):</b> UL F Section 35 T27 R8W; 36.530211, -107.656439	
<b>4. Source and Description of Waste:</b> Source: Hydrocarbon contaminated soil associated with remediation activities from a natural gas pipeline release. Description: Hydrocarbon contaminated soil associated with remediation activities from a natural gas pipeline release. Estimated Volume <u>20</u> yd <sup>3</sup> / bbls Known Volume (to be entered by the operator at the end of the haul) <u>340/12</u> yd <sup>3</sup> / bbls	
<b>5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS</b>  I, Thomas Long <i>Thomas Long</i> , representative or authorized agent for Enterprise Products Operating do hereby <b>Generator Signature</b> 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)  <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  <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)  <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)	
<b>GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS</b>  I, Thomas Long <i>Thomas Long</i> 4-19-2023, representative for Enterprise Products Operating authorize to complete <b>Generator Signature</b> the required testing/sign the Generator Waste Testing Certification.  I, <u>Greg Crabtree</u> , 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.	
<b>5. Transporter: TBD</b>	

### OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Envirotech, Inc. Soil Remediation Facility \* Permit #: NM01-0011

Address of Facility: Hill Top, NM

Method of Treatment and/or Disposal:

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

Waste Acceptance Status:

☒ APPROVED

☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Greg Crabtree

TITLE: Enviro Manager

DATE: 4/19/23

SIGNATURE: *Greg Crabtree*  
 Surface Waste Management Facility Authorized Agent

TELEPHONE NO.: 505-632-0615



## APPENDIX D

# Photographic Documentation



## SITE PHOTOGRAPHS

Closure Report  
Enterprise Field Services, LLC  
Hammond #47R (04/20/23)  
Ensolum Project No. 05A1226233

**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  
Hammond #47R (04/20/23)  
Ensolum Project No. 05A1226233

**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 site after initial restoration.





## APPENDIX E

# Regulatory Correspondence

**From:** [Kyle Summers](#)  
**To:** [Chad D"Aponti](#); [Ranee Deechilly](#)  
**Subject:** FW: [EXTERNAL] Hammond #47 - UL F Section 35 T27 R8W; 36.530211, -107.656439; NMOCD Incident #nAPP2311048689  
**Date:** Tuesday, May 9, 2023 10:06:56 AM  
**Attachments:** [image003.png](#)  
[image004.png](#)  
[image005.png](#)

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**Kyle Summers**

Principal

903-821-5603

**Ensolum, LLC**

in f

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**From:** Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>  
**Sent:** Tuesday, May 9, 2023 9:30 AM  
**To:** Long, Thomas <tjlong@eprod.com>; Landon, Sherrie C <slandon@blm.gov>  
**Cc:** Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>  
**Subject:** Re: [EXTERNAL] Hammond #47 - UL F Section 35 T27 R8W; 36.530211, -107.656439; NMOCD Incident #nAPP2311048689

[ \*\*EXTERNAL EMAIL\*\* ]

Tom,

Thank you for the notice. Your variance request specifically addressing 19.15.29.12D (1a) NMAC 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.

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

Regards,

**Nelson Velez** • Environmental Specialist - Adv

Environmental Bureau | EMNRD - Oil Conservation Division

1000 Rio Brazos Road | Aztec, NM 87410

(505) 469-6146 | [nelson.velez@emnrd.nm.gov](mailto:nelson.velez@emnrd.nm.gov)

<http://www.emnrd.state.nm.us/OCD/>



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**From:** Long, Thomas <[tjlong@eprod.com](mailto:tjlong@eprod.com)>

**Sent:** Tuesday, May 9, 2023 9:20 AM

**To:** Velez, Nelson, EMNRD <[Nelson.Velez@emnrd.nm.gov](mailto:Nelson.Velez@emnrd.nm.gov)>; Landon, Sherrie C <[slandon@blm.gov](mailto:slandon@blm.gov)>

**Cc:** Stone, Brian <[bmstone@eprod.com](mailto:bmstone@eprod.com)>; Kyle Summers <[ksummers@ensolum.com](mailto:ksummers@ensolum.com)>

**Subject:** [EXTERNAL] Hammond #47 - UL F Section 35 T27 R8W; 36.530211, -107.656439; NMOCD Incident #nAPP2311048689

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

Nelson/Sherrie,

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 soil samples for laboratory analysis tomorrow May 10, 2023 at 10:00 a.m. at Hammond #47R excavation. Please acknowledge acceptance of this variance request. If you have any questions, please call or email.

Thank you,

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](mailto: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

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**TABLE 1**  
Hammond #47R (04/20/23)  
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 <sup>1</sup> (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO/MRO) <sup>1</sup> (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
Excavation Composite Soil Samples													
S-1	5.10.23	C	17	<0.037	<0.073	<0.073	<0.15	ND	<7.3	21	<50	21	<60
S-2	5.10.23	C	17	<0.019	<0.037	<0.037	<0.074	ND	6.6	25	<50	32	<60
S-3	5.10.23	C	0 to 17	<0.019	<0.039	<0.039	0.081	0.081	6.8	33	<48	40	<60
S-4	5.10.23	C	0 to 17	<0.017	<0.034	<0.034	<0.069	ND	5.3	35	<47	40	<60
S-5	5.10.23	C	0 to 17	<0.016	<0.032	<0.032	<0.063	ND	5.8	28	<47	34	<60
S-6	5.10.23	C	0 to 17	<0.016	<0.032	<0.032	0.10	0.10	5.5	33	<48	39	<60
S-7	5.10.23	C	0 to 17	<0.016	<0.033	<0.033	<0.065	ND	<3.3	<9.7	<48	ND	<60
S-8	5.10.23	C	0 to 17	<0.016	<0.033	<0.033	<0.065	ND	<3.3	<9.7	<48	ND	<60
S-9	5.10.23	C	0 to 17	<0.016	<0.032	<0.032	<0.063	ND	<3.2	<9.6	<48	ND	<60
S-10	5.10.23	C	0 to 17	<0.019	<0.038	<0.038	<0.075	ND	<3.8	<9.2	<46	ND	<60

<sup>1</sup> = 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)

NE = Not established

mg/kg = milligrams 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

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

May 18, 2023

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (214) 350-5469

FAX: (214) 350-2914

RE: Hammond 47A

OrderNo.: 2305585

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 10 sample(s) on 5/11/2023 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](http://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 2305585

Date Reported: 5/18/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-1

Project: Hammond 47A

Collection Date: 5/10/2023 10:00:00 AM

Lab ID: 2305585-001

Matrix: MEOH (SOIL)

Received Date: 5/11/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>SNS</b>
Chloride	ND	60		mg/Kg	20	5/11/2023 10:54:12 AM	74885
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>PRD</b>
Diesel Range Organics (DRO)	21	9.9		mg/Kg	1	5/11/2023 11:41:41 AM	74880
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/11/2023 11:41:41 AM	74880
Surr: DNOP	98.1	69-147		%Rec	1	5/11/2023 11:41:41 AM	74880
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>KMN</b>
Gasoline Range Organics (GRO)	ND	7.3		mg/Kg	2	5/11/2023 11:08:00 AM	GS96678
Surr: BFB	101	15-244		%Rec	2	5/11/2023 11:08:00 AM	GS96678
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>KMN</b>
Benzene	ND	0.037		mg/Kg	2	5/11/2023 11:08:00 AM	BS96678
Toluene	ND	0.073		mg/Kg	2	5/11/2023 11:08:00 AM	BS96678
Ethylbenzene	ND	0.073		mg/Kg	2	5/11/2023 11:08:00 AM	BS96678
Xylenes, Total	ND	0.15		mg/Kg	2	5/11/2023 11:08:00 AM	BS96678
Surr: 4-Bromofluorobenzene	89.9	39.1-146		%Rec	2	5/11/2023 11:08:00 AM	BS96678

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

Page 1 of 14

## Analytical Report

Lab Order 2305585

Date Reported: 5/18/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-2

Project: Hammond 47A

Collection Date: 5/10/2023 10:05:00 AM

Lab ID: 2305585-002

Matrix: MEOH (SOIL)

Received Date: 5/11/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>SNS</b>
Chloride	ND	60		mg/Kg	20	5/11/2023 11:06:37 AM	74885
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>PRD</b>
Diesel Range Organics (DRO)	25	10		mg/Kg	1	5/11/2023 11:55:09 AM	74880
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/11/2023 11:55:09 AM	74880
Surr: DNOP	103	69-147		%Rec	1	5/11/2023 11:55:09 AM	74880
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>KMN</b>
Gasoline Range Organics (GRO)	6.6	3.7		mg/Kg	1	5/11/2023 11:29:00 AM	GS96678
Surr: BFB	119	15-244		%Rec	1	5/11/2023 11:29:00 AM	GS96678
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>KMN</b>
Benzene	ND	0.019		mg/Kg	1	5/11/2023 11:29:00 AM	BS96678
Toluene	ND	0.037		mg/Kg	1	5/11/2023 11:29:00 AM	BS96678
Ethylbenzene	ND	0.037		mg/Kg	1	5/11/2023 11:29:00 AM	BS96678
Xylenes, Total	ND	0.074		mg/Kg	1	5/11/2023 11:29:00 AM	BS96678
Surr: 4-Bromofluorobenzene	89.5	39.1-146		%Rec	1	5/11/2023 11:29:00 AM	BS96678

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

Page 2 of 14

## Analytical Report

Lab Order 2305585

Date Reported: 5/18/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-3

Project: Hammond 47A

Collection Date: 5/10/2023 10:10:00 AM

Lab ID: 2305585-003

Matrix: MEOH (SOIL)

Received Date: 5/11/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>SNS</b>
Chloride	ND	60		mg/Kg	20	5/11/2023 11:19:01 AM	74885
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>PRD</b>
Diesel Range Organics (DRO)	33	9.7		mg/Kg	1	5/11/2023 12:08:23 PM	74880
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/11/2023 12:08:23 PM	74880
Surr: DNOP	101	69-147		%Rec	1	5/11/2023 12:08:23 PM	74880
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>KMN</b>
Gasoline Range Organics (GRO)	6.8	3.9		mg/Kg	1	5/11/2023 11:51:00 AM	GS96678
Surr: BFB	121	15-244		%Rec	1	5/11/2023 11:51:00 AM	GS96678
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>KMN</b>
Benzene	ND	0.019		mg/Kg	1	5/11/2023 11:51:00 AM	BS96678
Toluene	ND	0.039		mg/Kg	1	5/11/2023 11:51:00 AM	BS96678
Ethylbenzene	ND	0.039		mg/Kg	1	5/11/2023 11:51:00 AM	BS96678
Xylenes, Total	0.081	0.078		mg/Kg	1	5/11/2023 11:51:00 AM	BS96678
Surr: 4-Bromofluorobenzene	89.9	39.1-146		%Rec	1	5/11/2023 11:51:00 AM	BS96678

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

Page 3 of 14

## Analytical Report

Lab Order 2305585

Date Reported: 5/18/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-4

Project: Hammond 47A

Collection Date: 5/10/2023 10:15:00 AM

Lab ID: 2305585-004

Matrix: MEOH (SOIL)

Received Date: 5/11/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>SNS</b>
Chloride	ND	60		mg/Kg	20	5/11/2023 11:31:25 AM	74885
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>PRD</b>
Diesel Range Organics (DRO)	35	9.4		mg/Kg	1	5/11/2023 12:21:40 PM	74880
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/11/2023 12:21:40 PM	74880
Surr: DNOP	103	69-147		%Rec	1	5/11/2023 12:21:40 PM	74880
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>KMN</b>
Gasoline Range Organics (GRO)	5.3	3.4		mg/Kg	1	5/11/2023 12:12:00 PM	GS96678
Surr: BFB	103	15-244		%Rec	1	5/11/2023 12:12:00 PM	GS96678
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>KMN</b>
Benzene	ND	0.017		mg/Kg	1	5/11/2023 12:12:00 PM	BS96678
Toluene	ND	0.034		mg/Kg	1	5/11/2023 12:12:00 PM	BS96678
Ethylbenzene	ND	0.034		mg/Kg	1	5/11/2023 12:12:00 PM	BS96678
Xylenes, Total	ND	0.069		mg/Kg	1	5/11/2023 12:12:00 PM	BS96678
Surr: 4-Bromofluorobenzene	89.5	39.1-146		%Rec	1	5/11/2023 12:12:00 PM	BS96678

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2305585

Date Reported: 5/18/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-5

Project: Hammond 47A

Collection Date: 5/10/2023 10:20:00 AM

Lab ID: 2305585-005

Matrix: MEOH (SOIL)

Received Date: 5/11/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>SNS</b>
Chloride	ND	60		mg/Kg	20	5/11/2023 11:43:49 AM	74885
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>PRD</b>
Diesel Range Organics (DRO)	28	9.4		mg/Kg	1	5/11/2023 12:34:55 PM	74880
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/11/2023 12:34:55 PM	74880
Surr: DNOP	103	69-147		%Rec	1	5/11/2023 12:34:55 PM	74880
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>KMN</b>
Gasoline Range Organics (GRO)	5.8	3.2		mg/Kg	1	5/11/2023 12:34:00 PM	GS96678
Surr: BFB	117	15-244		%Rec	1	5/11/2023 12:34:00 PM	GS96678
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>KMN</b>
Benzene	ND	0.016		mg/Kg	1	5/11/2023 12:34:00 PM	BS96678
Toluene	ND	0.032		mg/Kg	1	5/11/2023 12:34:00 PM	BS96678
Ethylbenzene	ND	0.032		mg/Kg	1	5/11/2023 12:34:00 PM	BS96678
Xylenes, Total	ND	0.063		mg/Kg	1	5/11/2023 12:34:00 PM	BS96678
Surr: 4-Bromofluorobenzene	87.6	39.1-146		%Rec	1	5/11/2023 12:34:00 PM	BS96678

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2305585

Date Reported: 5/18/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-6

Project: Hammond 47A

Collection Date: 5/10/2023 10:25:00 AM

Lab ID: 2305585-006

Matrix: MEOH (SOIL)

Received Date: 5/11/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>SNS</b>
Chloride	ND	60		mg/Kg	20	5/11/2023 11:56:14 AM	74885
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>PRD</b>
Diesel Range Organics (DRO)	33	9.5		mg/Kg	1	5/11/2023 12:48:16 PM	74880
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/11/2023 12:48:16 PM	74880
Surr: DNOP	102	69-147		%Rec	1	5/11/2023 12:48:16 PM	74880
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>KMN</b>
Gasoline Range Organics (GRO)	5.5	3.2		mg/Kg	1	5/11/2023 12:55:00 PM	GS96678
Surr: BFB	120	15-244		%Rec	1	5/11/2023 12:55:00 PM	GS96678
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>KMN</b>
Benzene	ND	0.016		mg/Kg	1	5/11/2023 12:55:00 PM	BS96678
Toluene	ND	0.032		mg/Kg	1	5/11/2023 12:55:00 PM	BS96678
Ethylbenzene	ND	0.032		mg/Kg	1	5/11/2023 12:55:00 PM	BS96678
Xylenes, Total	0.10	0.063		mg/Kg	1	5/11/2023 12:55:00 PM	BS96678
Surr: 4-Bromofluorobenzene	88.3	39.1-146		%Rec	1	5/11/2023 12:55:00 PM	BS96678

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2305585

Date Reported: 5/18/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-7

Project: Hammond 47A

Collection Date: 5/10/2023 10:30:00 AM

Lab ID: 2305585-007

Matrix: MEOH (SOIL)

Received Date: 5/11/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>SNS</b>
Chloride	ND	60		mg/Kg	20	5/11/2023 12:08:39 PM	74885
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>PRD</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/11/2023 1:01:25 PM	74880
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/11/2023 1:01:25 PM	74880
Surr: DNOP	99.7	69-147		%Rec	1	5/11/2023 1:01:25 PM	74880
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>KMN</b>
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	5/11/2023 1:17:00 PM	GS96678
Surr: BFB	101	15-244		%Rec	1	5/11/2023 1:17:00 PM	GS96678
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>KMN</b>
Benzene	ND	0.016		mg/Kg	1	5/11/2023 1:17:00 PM	BS96678
Toluene	ND	0.033		mg/Kg	1	5/11/2023 1:17:00 PM	BS96678
Ethylbenzene	ND	0.033		mg/Kg	1	5/11/2023 1:17:00 PM	BS96678
Xylenes, Total	ND	0.065		mg/Kg	1	5/11/2023 1:17:00 PM	BS96678
Surr: 4-Bromofluorobenzene	87.0	39.1-146		%Rec	1	5/11/2023 1:17:00 PM	BS96678

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2305585

Date Reported: 5/18/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-8

Project: Hammond 47A

Collection Date: 5/10/2023 10:35:00 AM

Lab ID: 2305585-008

Matrix: MEOH (SOIL)

Received Date: 5/11/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>SNS</b>
Chloride	ND	60		mg/Kg	20	5/11/2023 12:21:03 PM	74885
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>PRD</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/11/2023 1:14:34 PM	74880
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/11/2023 1:14:34 PM	74880
Surr: DNOP	96.1	69-147		%Rec	1	5/11/2023 1:14:34 PM	74880
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>KMN</b>
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	5/11/2023 1:39:00 PM	GS96678
Surr: BFB	98.8	15-244		%Rec	1	5/11/2023 1:39:00 PM	GS96678
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>KMN</b>
Benzene	ND	0.016		mg/Kg	1	5/11/2023 1:39:00 PM	BS96678
Toluene	ND	0.033		mg/Kg	1	5/11/2023 1:39:00 PM	BS96678
Ethylbenzene	ND	0.033		mg/Kg	1	5/11/2023 1:39:00 PM	BS96678
Xylenes, Total	ND	0.065		mg/Kg	1	5/11/2023 1:39:00 PM	BS96678
Surr: 4-Bromofluorobenzene	85.2	39.1-146		%Rec	1	5/11/2023 1:39:00 PM	BS96678

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2305585

Date Reported: 5/18/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-9

Project: Hammond 47A

Collection Date: 5/10/2023 10:40:00 AM

Lab ID: 2305585-009

Matrix: MEOH (SOIL)

Received Date: 5/11/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>SNS</b>
Chloride	ND	60		mg/Kg	20	5/11/2023 12:58:16 PM	74885
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>PRD</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/11/2023 1:28:06 PM	74880
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/11/2023 1:28:06 PM	74880
Surr: DNOP	97.0	69-147		%Rec	1	5/11/2023 1:28:06 PM	74880
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>KMN</b>
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	5/11/2023 2:22:00 PM	GS96678
Surr: BFB	87.7	15-244		%Rec	1	5/11/2023 2:22:00 PM	GS96678
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>KMN</b>
Benzene	ND	0.016		mg/Kg	1	5/11/2023 2:22:00 PM	BS96678
Toluene	ND	0.032		mg/Kg	1	5/11/2023 2:22:00 PM	BS96678
Ethylbenzene	ND	0.032		mg/Kg	1	5/11/2023 2:22:00 PM	BS96678
Xylenes, Total	ND	0.063		mg/Kg	1	5/11/2023 2:22:00 PM	BS96678
Surr: 4-Bromofluorobenzene	84.3	39.1-146		%Rec	1	5/11/2023 2:22:00 PM	BS96678

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2305585

Date Reported: 5/18/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-10

Project: Hammond 47A

Collection Date: 5/10/2023 10:45:00 AM

Lab ID: 2305585-010

Matrix: MEOH (SOIL)

Received Date: 5/11/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>SNS</b>
Chloride	ND	60		mg/Kg	20	5/11/2023 1:10:41 PM	74885
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>PRD</b>
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	5/11/2023 1:41:18 PM	74880
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/11/2023 1:41:18 PM	74880
Surr: DNOP	97.6	69-147		%Rec	1	5/11/2023 1:41:18 PM	74880
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>KMN</b>
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	5/11/2023 2:44:00 PM	GS96678
Surr: BFB	93.4	15-244		%Rec	1	5/11/2023 2:44:00 PM	GS96678
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>KMN</b>
Benzene	ND	0.019		mg/Kg	1	5/11/2023 2:44:00 PM	BS96678
Toluene	ND	0.038		mg/Kg	1	5/11/2023 2:44:00 PM	BS96678
Ethylbenzene	ND	0.038		mg/Kg	1	5/11/2023 2:44:00 PM	BS96678
Xylenes, Total	ND	0.075		mg/Kg	1	5/11/2023 2:44:00 PM	BS96678
Surr: 4-Bromofluorobenzene	84.3	39.1-146		%Rec	1	5/11/2023 2:44:00 PM	BS96678

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305585  
18-May-23

Client: ENSOLUM  
Project: Hammond 47A

Sample ID: MB-74885	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 74885	RunNo: 96688								
Prep Date: 5/11/2023	Analysis Date: 5/11/2023	SeqNo: 3507070	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-74885	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 74885	RunNo: 96688								
Prep Date: 5/11/2023	Analysis Date: 5/11/2023	SeqNo: 3507071	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.5	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 standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305585  
18-May-23

Client: ENSOLUM  
Project: Hammond 47A

Sample ID: MB-74880	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 74880	RunNo: 96684								
Prep Date: 5/11/2023	Analysis Date: 5/11/2023	SeqNo: 3505883	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	8.5		10.00		84.8	69	147			

Sample ID: LCS-74880	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 74880	RunNo: 96684								
Prep Date: 5/11/2023	Analysis Date: 5/11/2023	SeqNo: 3505884	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	82.3	61.9	130			
Surr: DNOP	3.8		5.000		76.5	69	147			

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 standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305585

18-May-23

Client: ENSOLUM

Project: Hammond 47A

Sample ID: 2.5ug gro lcs	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: GS96678		RunNo: 96678							
Prep Date:	Analysis Date: 5/11/2023		SeqNo: 3505562		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	85.2	70	130			
Surr: BFB	2100		1000		206	15	244			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: GS96678		RunNo: 96678							
Prep Date:	Analysis Date: 5/11/2023		SeqNo: 3505563		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	920		1000		92.4	15	244			

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 standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/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#: 2305585

18-May-23

**Client:** ENSOLUM  
**Project:** Hammond 47A

Sample ID: <b>100ng btex lcs</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>BS96678</b>			RunNo: <b>96678</b>						
Prep Date:	Analysis Date: <b>5/11/2023</b>			SeqNo: <b>3505568</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.025	1.000	0	87.2	70	130			
Toluene	0.88	0.050	1.000	0	87.8	70	130			
Ethylbenzene	0.88	0.050	1.000	0	88.2	70	130			
Xylenes, Total	2.7	0.10	3.000	0	88.4	70	130			
Surr: 4-Bromofluorobenzene	0.97		1.000		96.7	39.1	146			

Sample ID: <b>mb</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>PBS</b>	Batch ID: <b>BS96678</b>			RunNo: <b>96678</b>						
Prep Date:	Analysis Date: <b>5/11/2023</b>			SeqNo: <b>3505569</b>		Units: <b>mg/Kg</b>				
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	0.93		1.000		92.6	39.1	146			

**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 standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank  
E Above Quantitation Range/Estimated Value  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

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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: 2305585

RcptNo: 1

Received By: Cheyenne Cason

5/11/2023 8:00:00 AM

Completed By: Cheyenne Cason

5/11/2023 8:17:35 AM

Reviewed By:

*[Signature]* 5-11-23

*[Signature]*

*[Signature]*

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐

2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐

4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐

5. Sample(s) in proper container(s)? Yes ☒ No ☐

6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐

7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐

8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐

9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☒

10. Were any sample containers received broken? Yes ☐ No ☒

11. Does paperwork match bottle labels? Yes ☒ No ☐

(Note discrepancies on chain of custody)

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? Yes ☒ No ☐

(If no, notify customer for authorization.)

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted? \_\_\_\_\_

Checked by: Justin/23

### 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: Phone number is missing on COC- TMC 5/5/23

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.6	Good	Yes	Yogi		
2	0.6	Good	Yes	Yogi		
3	4.8	Good	Yes	Yogi		



## Chain-of-Custody Record

Client: Ensolium, LLC Turn-Around Time: 10000

☐ Standard ☒ Rush 5-11-23

Project Name: Hammond #47 A

Project #: \_\_\_\_\_

Mailing Address: 606 S Rio Grande

Suit A 87410

Phone #: \_\_\_\_\_

email or Fax#: \_\_\_\_\_

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

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other \_\_\_\_\_

☐ EDD (Type) \_\_\_\_\_

Project Manager: K. Summers

Sampler: C. D. Apantzi

On Ice: ☒ Yes ☐ No Yogi

# of Coolers: 3 0.6-0-0.6

Cooler Temp (including CF): 3.6-0-3.6 (°C)

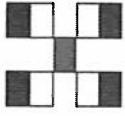
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
5/10	1000	S	S-1	1 <u>400</u> <u>1 Jar</u>	<u>Cool</u>	<u>001</u>
5/10	1005	S	S-2	<u>Cool</u>	<u>Cool</u>	<u>002</u>
5/10	1010	S	S-3	<u>Cool</u>	<u>Cool</u>	<u>003</u>
5/10	1015	S	S-4	<u>Cool</u>	<u>Cool</u>	<u>004</u>
5/10	1020	S	S-5	<u>Cool</u>	<u>Cool</u>	<u>005</u>
5/10	1025	S	S-6	<u>Cool</u>	<u>Cool</u>	<u>006</u>
5/10	1030	S	S-7	<u>Cool</u>	<u>Cool</u>	<u>007</u>
5/10	1035	S	S-8	<u>Cool</u>	<u>Cool</u>	<u>008</u>
5/10	1040	S	S-9	<u>Cool</u>	<u>Cool</u>	<u>009</u>
5/10	1045	S	S-10	<u>Cool</u>	<u>Cool</u>	<u>010</u>

Date: 5/10/23 Time: 1215 Relinquished by: [Signature]

Date: 5/10/23 Time: 1817 Relinquished by: [Signature]

Received by: Chris Wast Date: 5/10/23 Time: 1215

Received by: Chris Wast Date: 5/11/23 Time: 0800



# HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO <sub>2</sub> , NO <sub>3</sub> , PO <sub>4</sub> , SO <sub>4</sub>	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
✓	✓					✓			
✓	✓					✓			
✓	✓					✓			
✓	✓					✓			
✓	✓					✓			
✓	✓					✓			
✓	✓					✓			
✓	✓					✓			
✓	✓					✓			
✓	✓					✓			

Remarks: Per long

[Signature]

**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 234518

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 234518
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	9/22/2023