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	NAPP2302448038
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: **Enterprise Field Services, LLC**	OGRID: **241602**
Contact Name: **Thomas Long**	Contact Telephone: **505-599-2286**
Contact email:**tjlong@eprod.com**	Incident # *(assigned by OCD)* **nAPP2302448038**
Contact mailing address: **614 Reilly Ave, Farmington, NM 87401**	

Location of Release Source

Latitude **36.679161** Longitude **-108.101733** *(NAD 83 in decimal degrees to 5 decimal places)*

Site Name **Trunk 3A**	Site Type **Natural Gas Gathering Pipeline**
Date Release Discovered: **01/25/2023**	Serial Number *(if applicable)*: **N/A**

Unit Letter	Section	Township	Range	County
J	**33**	**29N**	**12W**	**San Juan**

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☒ Condensate	Volume Released (bbls): **Estimated 10-15 BBLs**	Volume Recovered (bbls): **None**
☒ Natural Gas	Volume Released (Mcf): **193.34 MCF**	Volume Recovered (Mcf): **None**
☐ Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

Cause of Release: On January 18, 2022, Enterprise had a release of natural gas and natural gas liquids from the Trunk 3A pipeline. The pipeline was isolated, depressurized, locked and tagged out. No fire nor injuries occurred. No waterways were affected. Enterprise began repairs and remediation on January 25, 2023 and determine the release reportable per NMOCD regulation due to the volume of impacted subsurface soil. Remediation and repairs were completed on January 30, 2023. The final excavation dimensions measured approximately 20 feet long by 20 feet wide by 16 feet deep. A total of 504 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	NAPP2302448038
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Thomas Long Title: Senior Environmental Scientist

Signature: Thomas Long Date: 05-22-2023

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

OCD Only

Received by: Michael Buchanan Date: 05/23/2023

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

Closure Approved by: Nelson Velez Date: 05/23/2023

Printed Name: Nelson Velez Title: Environmental Specialist - Adv

ENSOLUM

CLOSURE REPORT

Property:

Trunk 3A (01/24/23)
Unit Letter J, S33 T29N R12W
San Juan County, New Mexico

New Mexico EMNRD OCD Incident ID No. NAPP2302448038

May 12, 2023

Ensolum Project No. 05A1226227

Prepared for:

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

Prepared by:

Ranee Deechilly
Project Manager

Kyle Summers
Senior Managing Geologist

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1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Trunk 3A (01/24/23) (Site)
NM EMNRD OCD Incident ID No.	NAPP2302448038
Location:	36.679161° North, 108.101733° West Unit Letter J, Section 33, Township 29 North, Range 12 West San Juan County, New Mexico
Property:	United States Bureau of Land Management (BLM)
Regulatory:	New Mexico (NM) Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On January 18, 2023, Enterprise discovered a release on the Trunk 3A pipeline. Enterprise personnel subsequently isolated and locked the pipeline out of service. On January 24, 2023, Enterprise initiated activities to repair the pipeline and remediate potential petroleum hydrocarbon impact. During initial remediation activities, 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 NM EMNRD OCD. Ensolum, LLC (Ensolum) referenced 19.15.29 New Mexico Administrative Code (NMAC), 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). Numerous PODs with recorded depths to water were identified in the same Public Land Survey System (PLSS) section as the Site, and in the adjacent PLSS sections (**Figure A**, **Appendix B**). The average depth to water for the PODs is 16 feet below grade surface (bgs). The closest POD (SJ-01677) is approximately 0.54 miles north of the Site and approximately 134 feet lower in elevation than the Site. The recorded depth to water for this POD is 35 feet bgs. Most, if not all, of the identified PODs are located in the river valley.

- Two cathodic protection wells (CPWs) were identified in the NM EMNRD OCD imaging database in the adjacent PLSS sections. No CPWs were identified in the same PLSS section as the Site. The CPWs are depicted in **Figure B** (**Appendix B**). Documentation for the cathodic protection well located near the Gallegos Canyon Unit 199E well location indicates a depth to water of approximately 140 feet. This cathodic protection well is located approximately 0.60 miles east of the Site and is 56 feet higher in elevation than the Site. Documentation for the cathodic protection well located near the Gallegos Canyon Unit 154E well location indicates a depth to water of approximately 60 feet bgs. This cathodic protection well is located approximately 1.5 miles northeast of the Site and is 96 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[1]	**Method**	**Limit**
Chloride	EPA 300.0 or SM4500 Cl B	600 mg/kg
TPH (GRO+DRO+MRO)[2]	EPA SW-846 Method 8015	100 mg/kg
BTEX[3]	EPA SW-846 Method 8021 or 8260	50 mg/kg
Benzene	EPA SW-846 Method 8021 or 8260	10 mg/kg

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

3.0 SOIL REMEDIATION ACTIVITIES

On January 24, 2023, Enterprise initiated activities to repair the pipeline and remediate petroleum hydrocarbon impact resulting from the release. During the remediation and corrective action activities, West States Energy Contractors, Inc., provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final excavation measured approximately 20 feet long and 20 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 16 feet bgs. The lithology encountered during the completion of remediation activities consisted primarily of silty sand underlain by sandstone.

Approximately 504 cubic yards (yd^3) of petroleum hydrocarbon-affected soils 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 depicts approximate soil sample locations and depicts the approximate dimensions of the excavation with respect to the pipeline (**Appendix A**). Photographic documentation of the field activities is included in **Appendix D**.

4.0 SOIL SAMPLING PROGRAM

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

Ensolum's soil sampling program included the collection of 11 composite soil samples (TS-1 and 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^2) sample area or less per guidelines outlined in Section D of 19.15.29.12 NMAC. The excavator bucket was utilized to obtain fresh aliquots from each area of the excavation. Regulatory correspondence is provided in **Appendix E**.

First Sampling Event
On January 25, 2023, sampling was performed at the Site. Composite soil sample TS-1 (14') was collected from the floor of the excavation to evaluate the extent of hydrocarbons at the site.

Second Sampling Event
On January 30, 2023, a second sampling event was performed at the Site. The NM EMNRD OCD was notified of the sampling event although no representative was present during sampling activities. Composite soil samples S-1 (16') and S-2 (16') were collected from the floor of the excavation. Composite soil samples S-3 (0' to 16'), S-4 (0' to 16'), S-5 (0' to 16'), S-6 (0' to 16'), S-7 (0' to 16'), S-8 (0' to 16'), S-9 (0' to 16'), and S-10 (0' to 16') 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 soil associated with composite soil sample TS-1 was removed from the Site because the clamp leaked liquids prior to repairs being completed, and therefore, is not included in the following discussion. The laboratory analytical results are summarized in **Table 1** (**Appendix F**).

- The laboratory analytical results for composite soil samples S-1, S-2, S-5, and S-6 indicate benzene concentrations ranging from 0.028 mg/kg (S-1) to 0.065 mg/kg (S-5), which are less than the New Mexico EMNRD OCD closure criteria of 10 mg/kg. The laboratory analytical results for all other composite soil samples collected from soils remaining at the Site 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-1, S-2, and S-5 through S-10 indicate total BTEX concentrations ranging from 0.085 mg/kg (S-9) to 1.4 mg/kg (S-2), 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 collected from soils remaining at the Site 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, S-2, and S-10 indicate total combined TPH GRO/DRO/MRO concentrations of 7.9 mg/kg, 17 mg/kg, and 4.9 mg/kg, respectively, 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 collected from soils remaining at the Site 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 collected from soils remaining at the Site 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

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

- Approximately 504 yd^3 of petroleum hydrocarbon-affected soil cuttings 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.

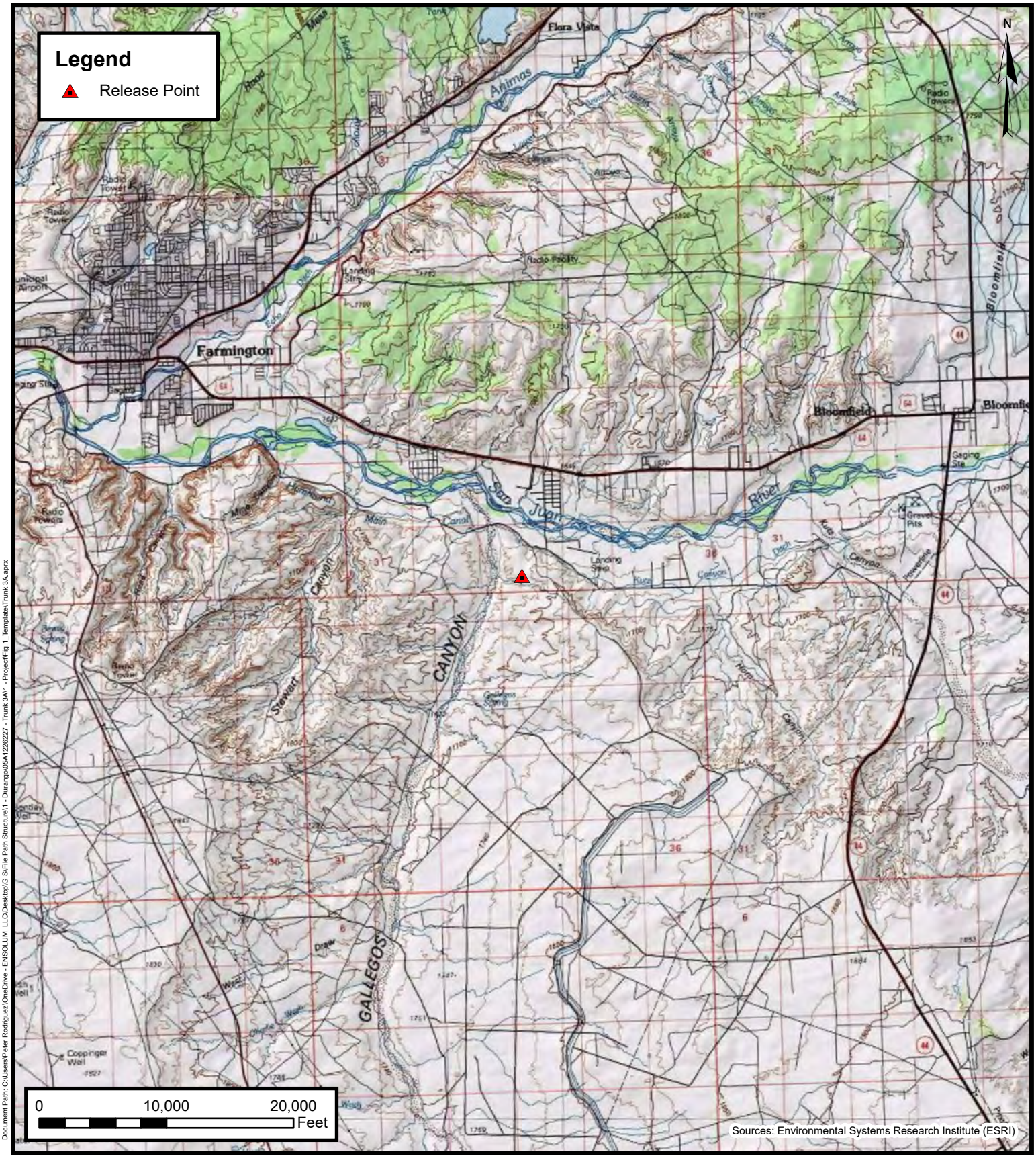
9.3 Reliance

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.

ENSOLUM

APPENDIX A

Figures



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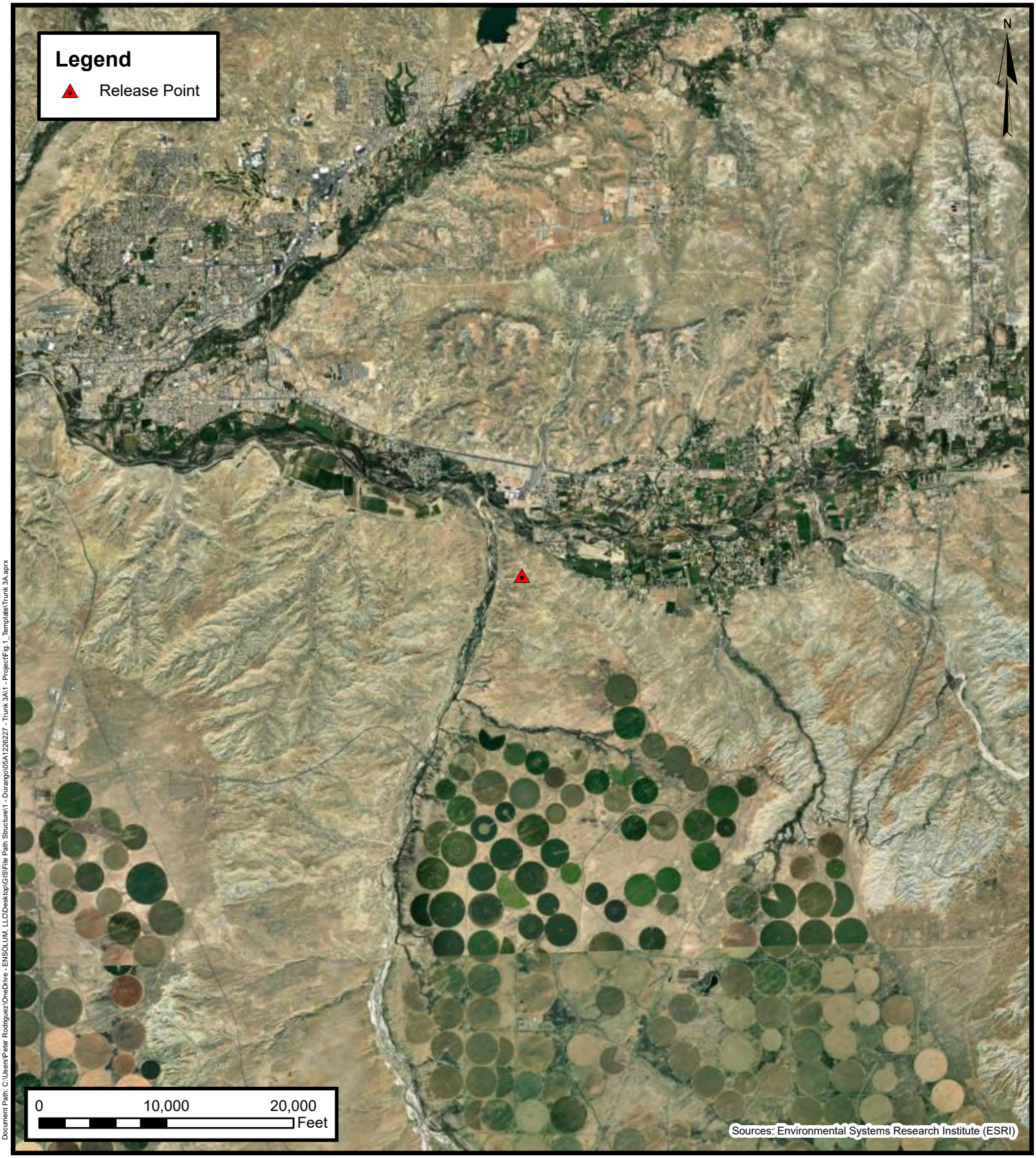
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Topographic Map

Enterprise Field Services, LLC
Trunk 3A (01/24/23)
Project Number: 05A1226227
Unit Letter J, S33 T29N R12W, San Juan County, New Mexico
36.679161, -108.101733

FIGURE
1



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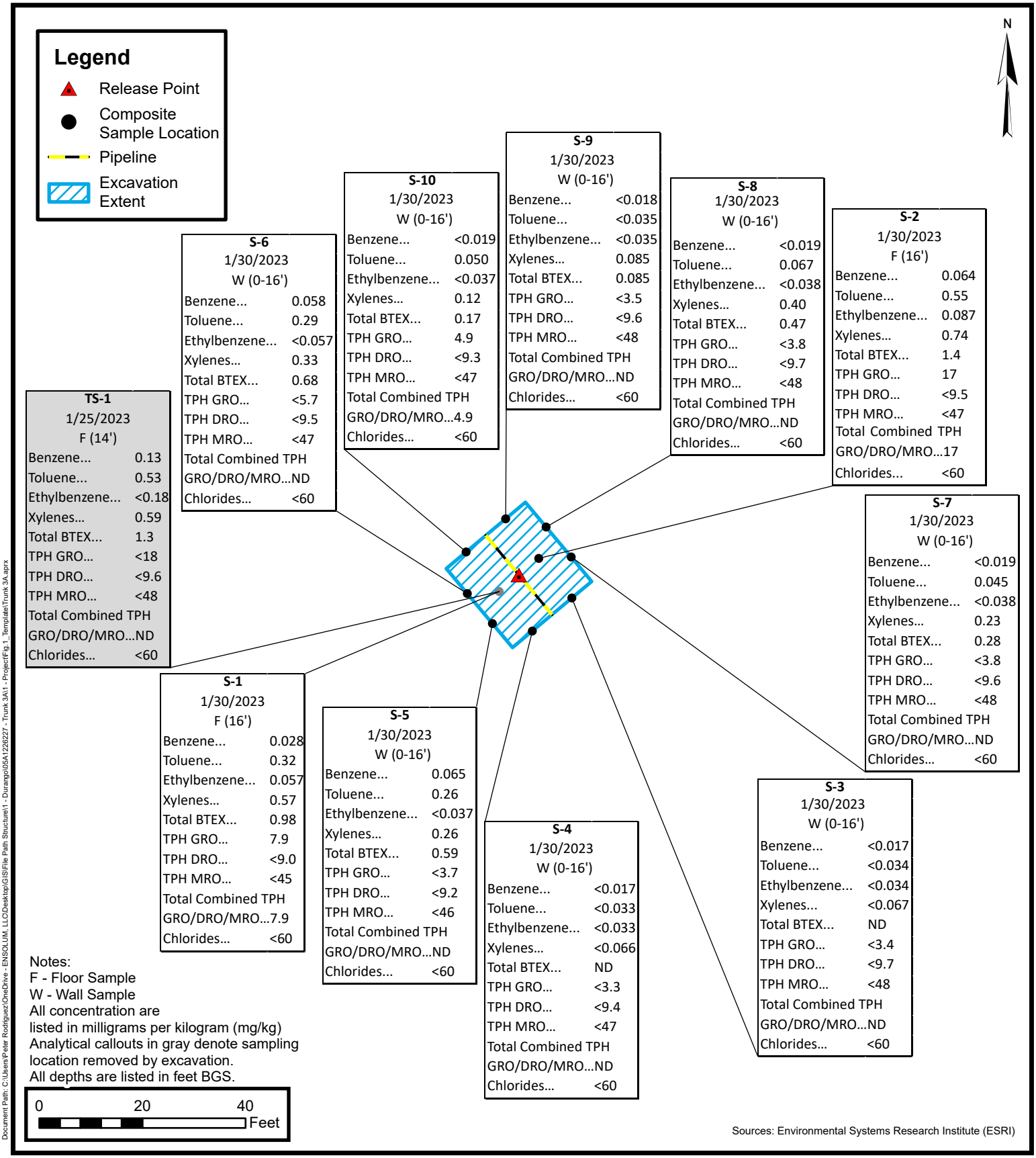
Environmental, Engineering and Hydrogeologic Consultants

Site Vicinity Map

Enterprise Field Services, LLC
Trunk 3A (01/24/23)
Project Number: 05A1226227
Unit Letter J, S33 T29N R12W, San Juan County, New Mexico
36.679161, -108.101733

FIGURE

2



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Site Map with Soil Analytical Results

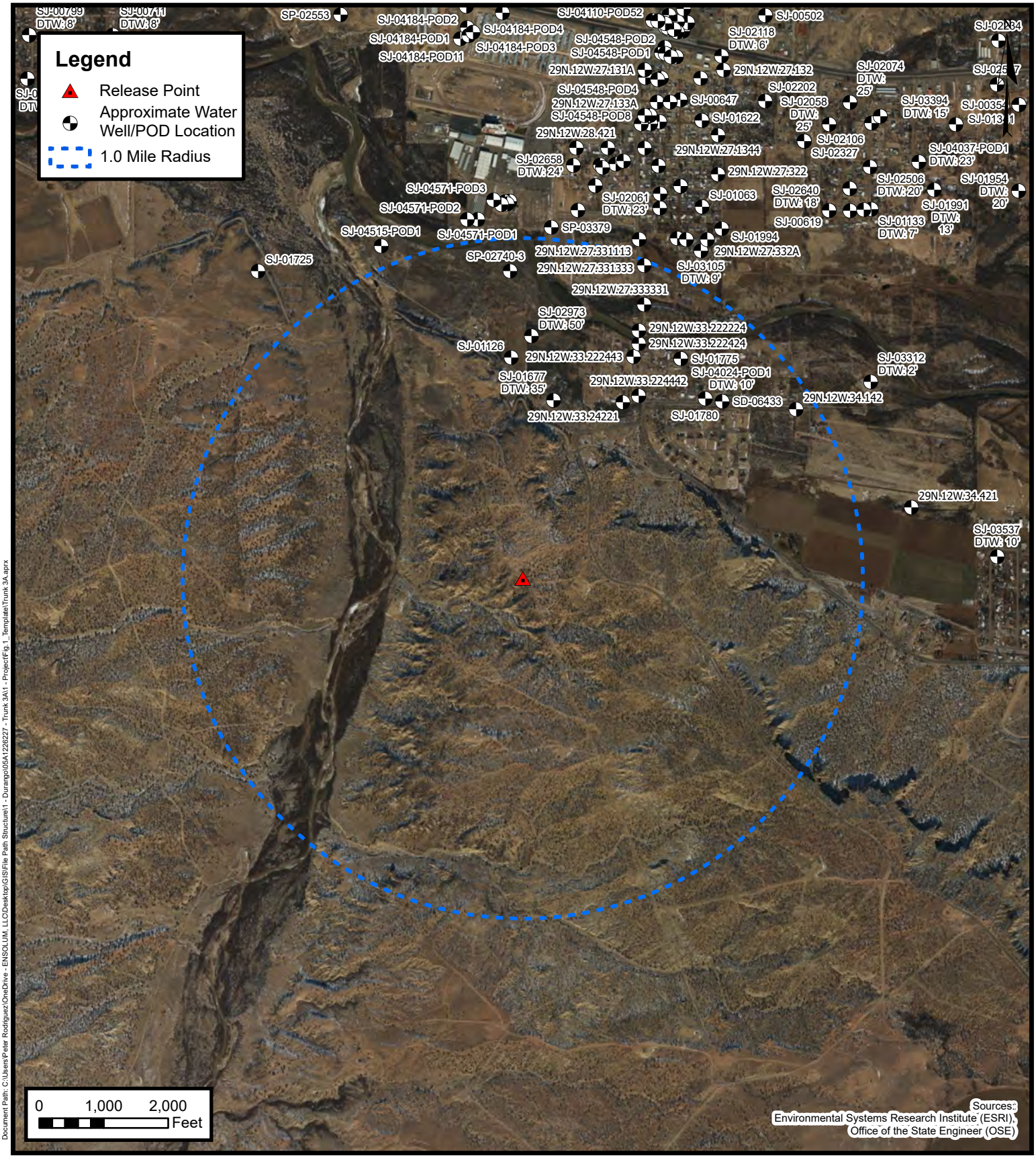
Enterprise Field Services, LLC
Trunk 3A (01/24/23)
Project Number: 05A1226227
Unit Letter J, S33 T29N R12W, San Juan County, New Mexico
36.679161, -108.101733

FIGURE
3

ENSOLUM

APPENDIX B

Siting Figures and Documentation



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1.0 Mile Radius Water Well/ Pod Location Map

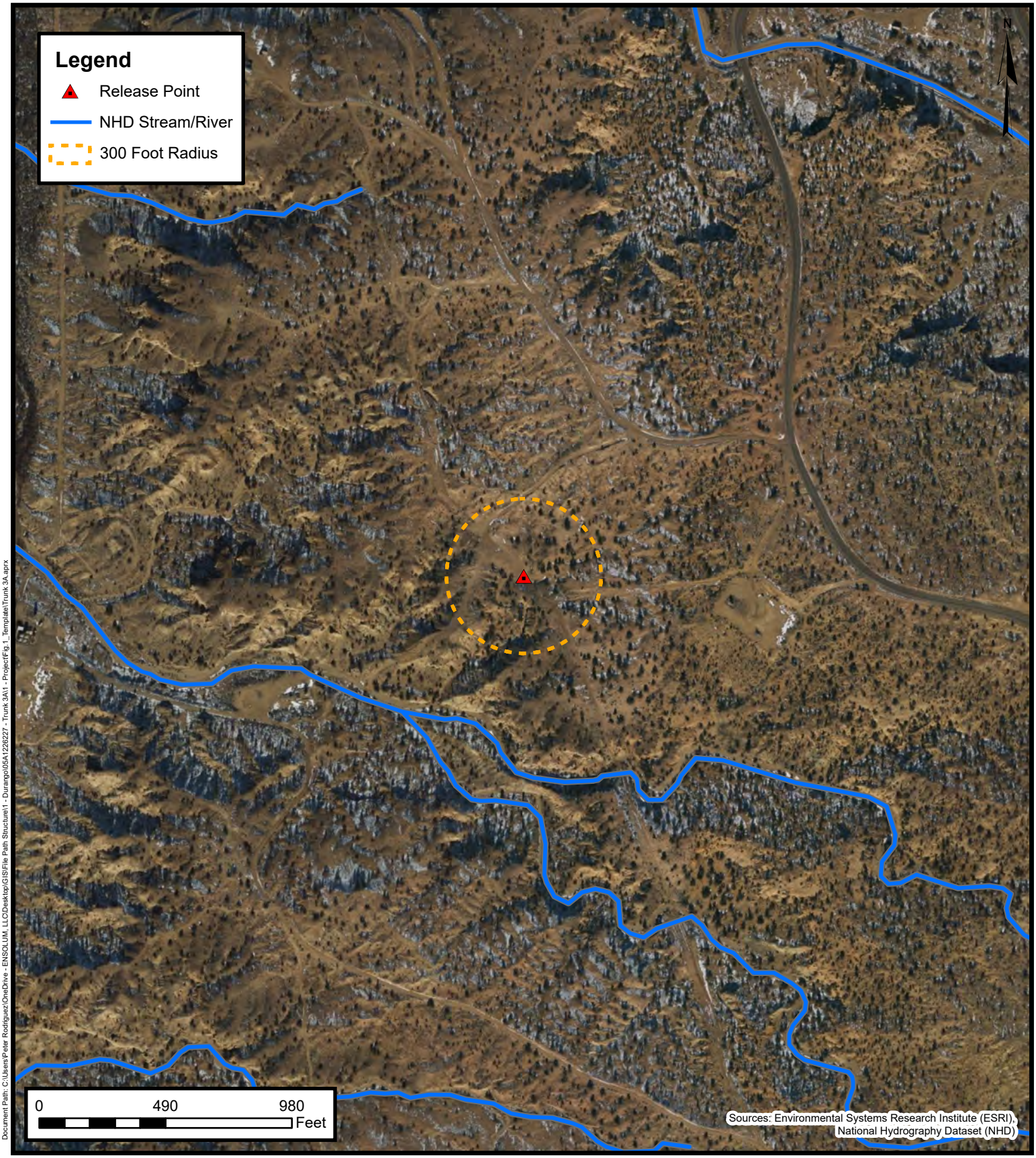
Enterprise Field Services, LLC
Trunk 3A (01/24/23)
Project Number: 05A1226227
Unit Letter J, S33 T29N R12W, San Juan County, New Mexico
36.679161, -108.101733

FIGURE
A

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Cathodic Protection Well
Recorded Depth to Water
Enterprise Field Services, LLC
Trunk 3A (01/24/23)
Project Number: 05A1226227
Unit Letter J, S33 T29N R12W, San Juan County, New Mexico
36.679161, -108.101733

FIGURE
B



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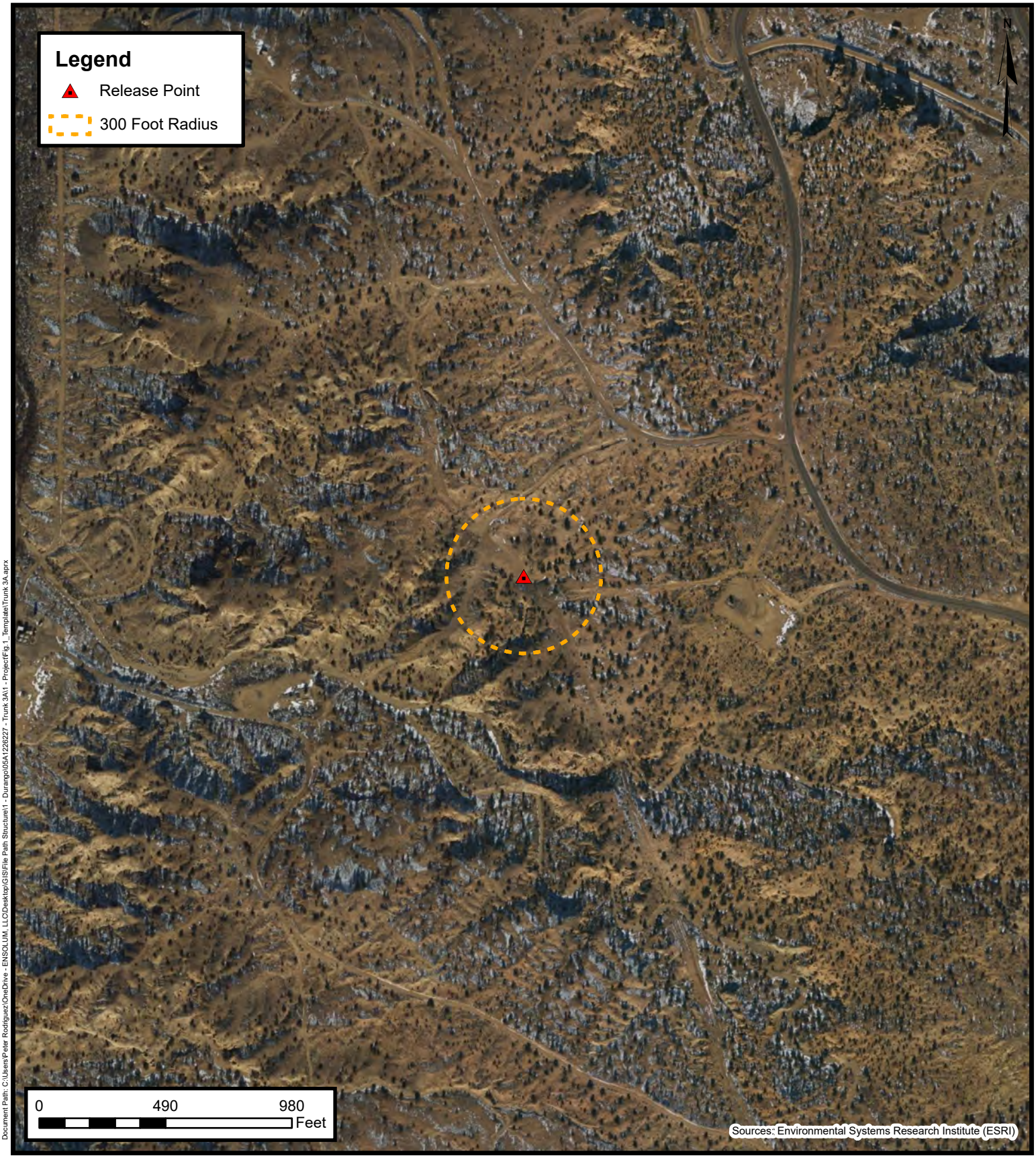
Environmental, Engineering and Hydrogeologic Consultants

300 Foot Radius Watercourse and Drainage Identification

Enterprise Field Services, LLC
Trunk 3A (01/24/23)
Project Number: 05A1226227
Unit Letter J, S33 T29N R12W, San Juan County, New Mexico
36.679161, -108.101733

FIGURE

C



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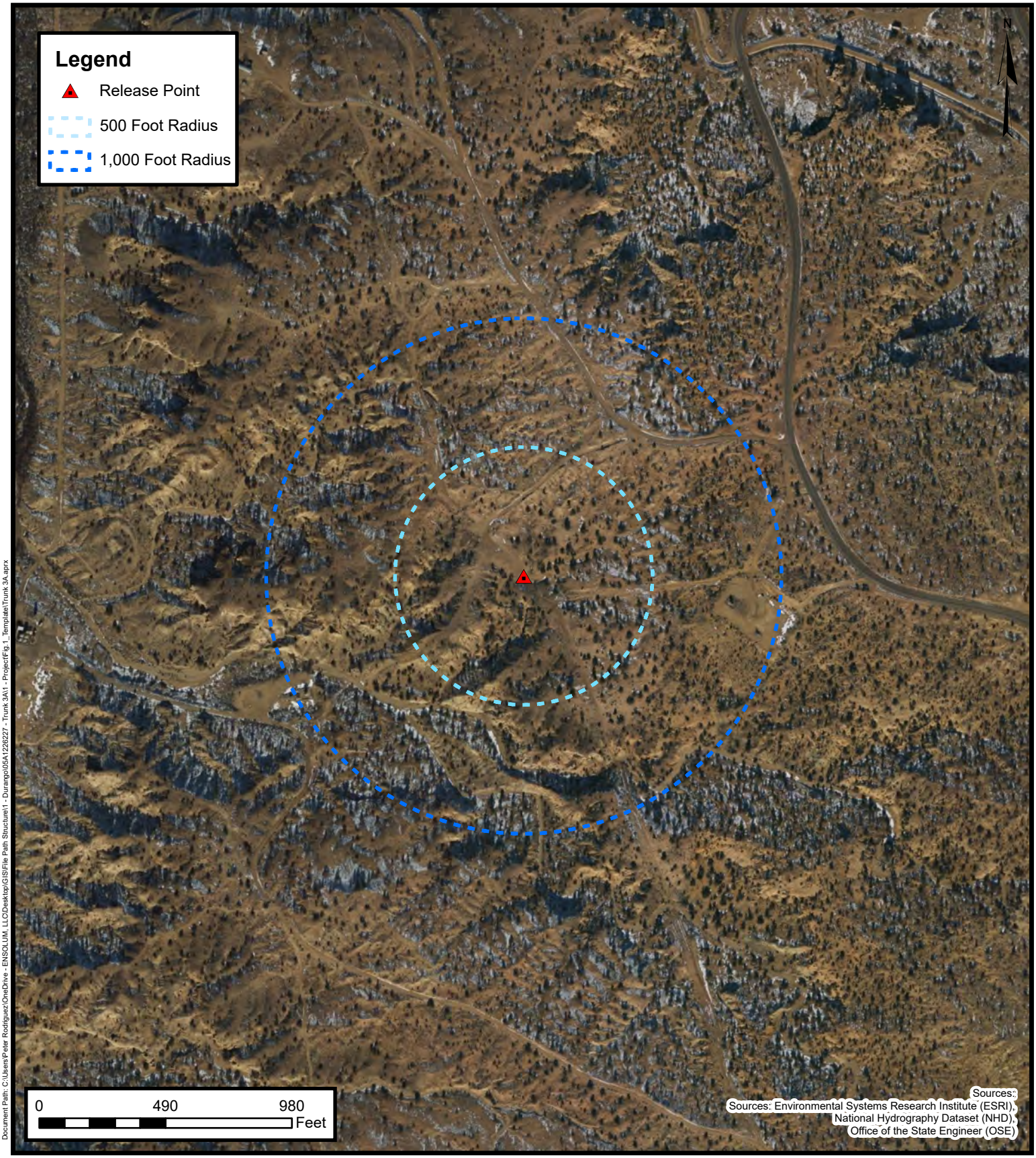
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

300 Foot Radius Occupied Structure Identification

Enterprise Field Services, LLC
Trunk 3A (01/24/23)
Project Number: 05A1226227
Unit Letter J, S33 T29N R12W, San Juan County, New Mexico
36.679161, -108.101733

FIGURE

D



ENSOLUM
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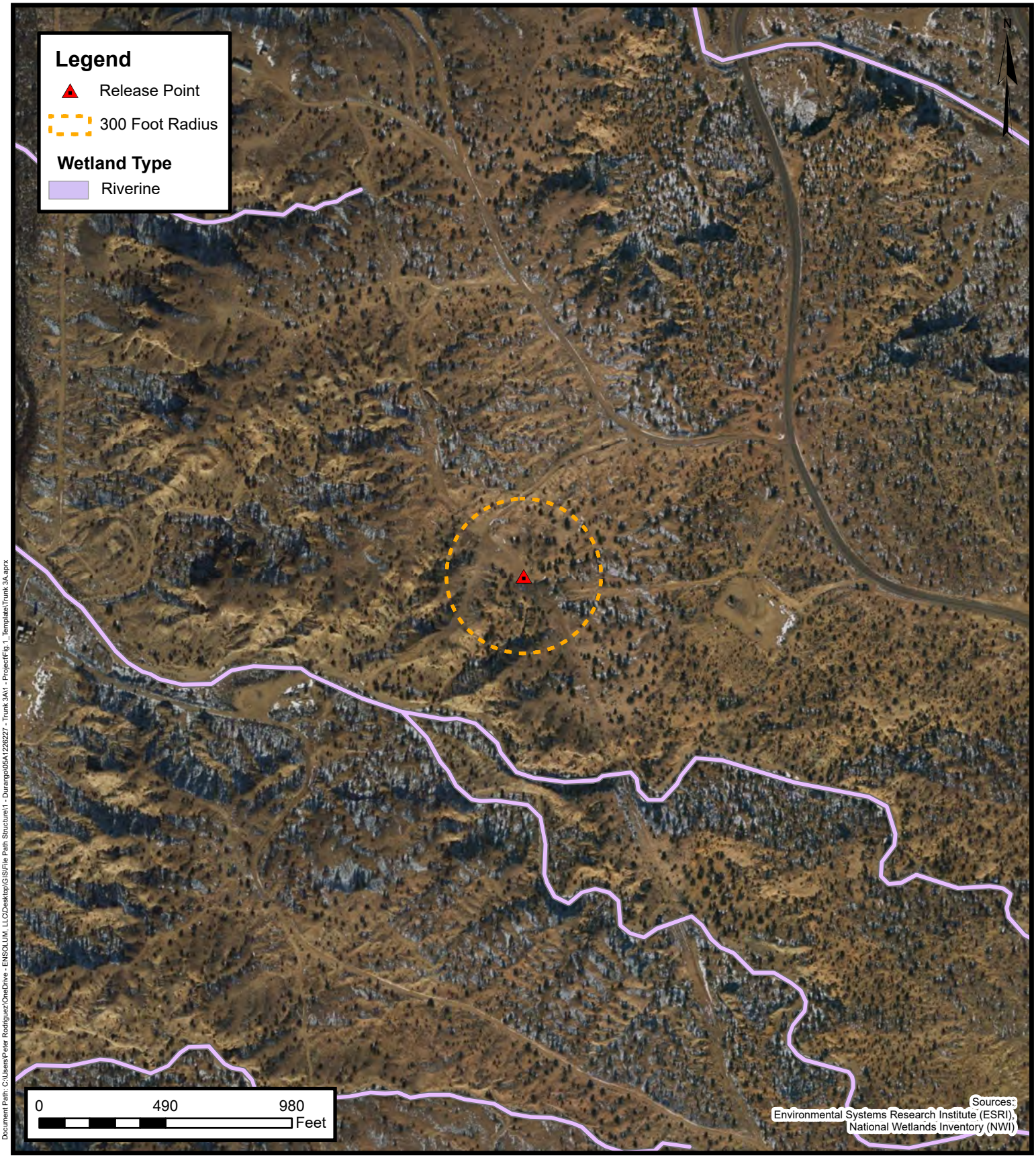
Water Well and Natural Spring Location

Enterprise Field Services, LLC
Trunk 3A (01/24/23)
Project Number: 05A1226227
Unit Letter J, S33 T29N R12W, San Juan County, New Mexico
36.679161, -108.101733

FIGURE

E



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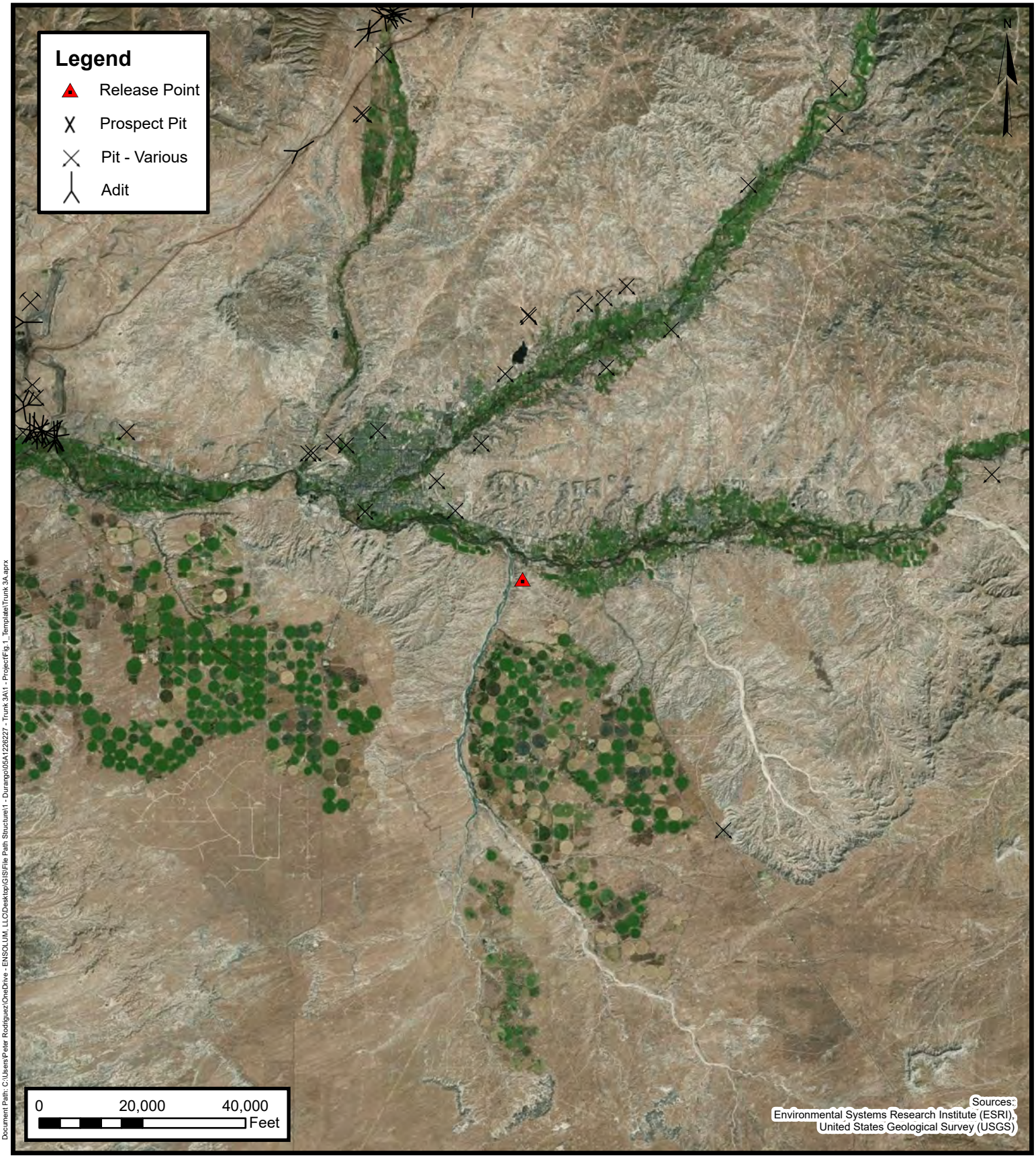
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Wetlands

Enterprise Field Services, LLC
Trunk 3A (01/24/23)
Project Number: 05A1226227
Unit Letter J, S33 T29N R12W, San Juan County, New Mexico
36.679161, -108.101733

FIGURE
F



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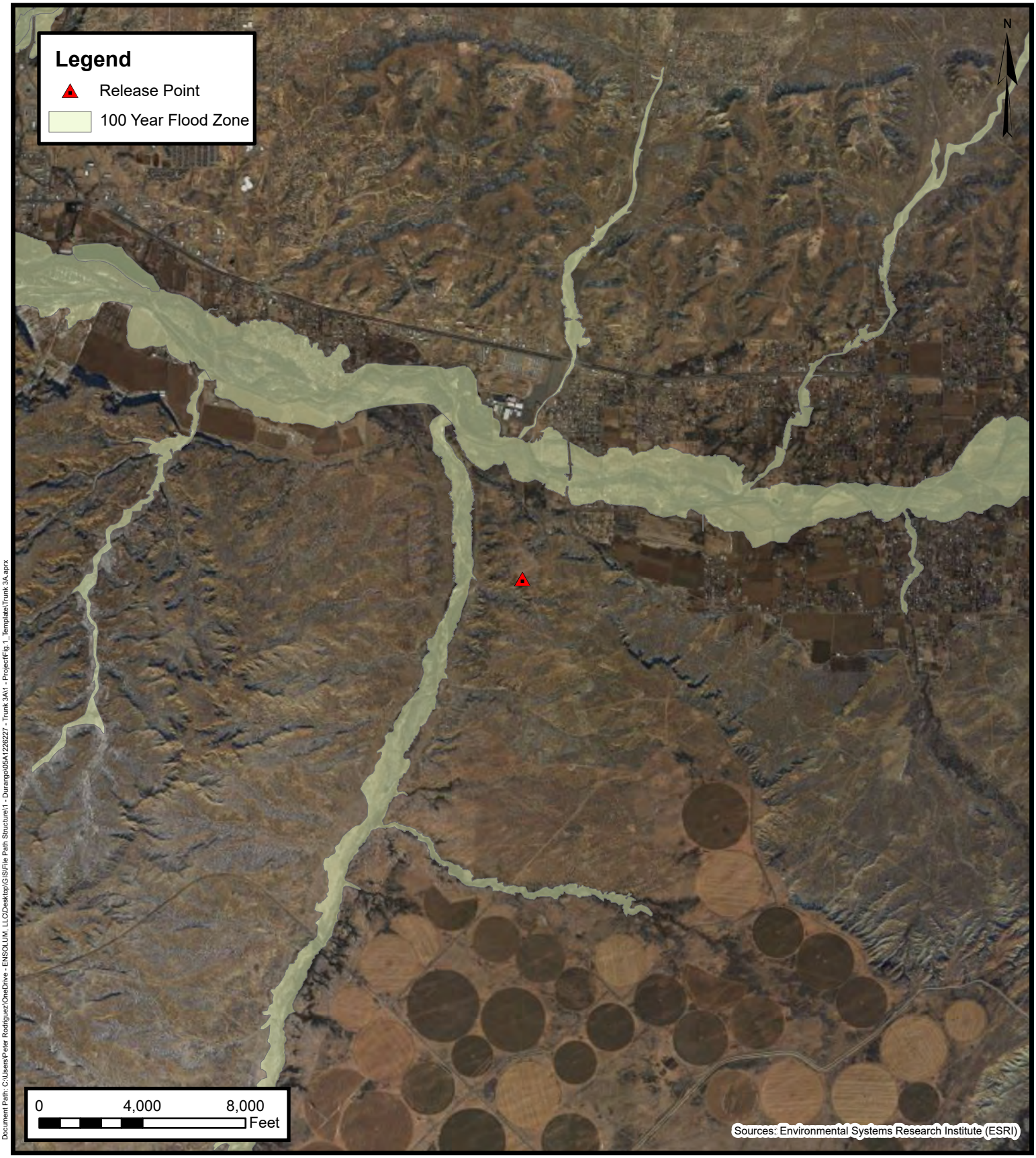
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Mines, Mills, and Quarries

Enterprise Field Services, LLC
Trunk 3A (01/24/23)
Project Number: 05A1226227
Unit Letter J, S33 T29N R12W, San Juan County, New Mexico
36.679161, -108.101733

FIGURE
G



Document Path: C:\Users\Peter Rodriguez\OneDrive - ENSOLUM, LLC\Desktop\GIS\File Path Structure\1 - Durango\05A1226227 - Trunk 3A\1 - Project\Fig 1_Template\Trunk 3A.aprx

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

100-Year Flood Plain Map

Enterprise Field Services, LLC
Trunk 3A (01/24/23)
Project Number: 05A1226227
Unit Letter J, S33 T29N R12W, San Juan County, New Mexico
36.679161, -108.101733

FIGURE
H

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

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

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

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

POD Number	POD Sub-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 00572	SJM2	SJ		1	3	27	29N	12W	223627	4065598*	35	28	7
SJ 00666	SJM2	SJ	4	3	1	27	29N	12W	223737	4065905*	35	17	18
SJ 00711	SJM2	SJ	4	2	1	29	29N	12W	220963	4066391*	20	8	12
SJ 00726	SJM2	SJ	1	3	1	27	29N	12W	223537	4066105*	50	30	20
SJ 00786	SJM2	SJ	4	1	1	29	29N	12W	220567	4066403*	21	8	13
SJ 00799	SJM2	SJ	4	1	1	29	29N	12W	220567	4066403*	20	8	12
SJ 00827	SJM2	SJ	3	3	1	27	29N	12W	223537	4065905*	55	30	25
SJ 00833	SJM2	SJ	2	3	1	29	29N	12W	220553	4066197*	17	9	8
SJ 00842	SJM2	SJ	4	1	1	29	29N	12W	220567	4066403*	15	5	10
SJ 00901	SJM2	SJ	3	1	3	27	29N	12W	223526	4065497*	32	15	17
SJ 00904	SJM2	SJ	1	1	3	27	29N	12W	223526	4065697*	32	14	18
SJ 00961	SJM2	SJ	2	3	1	29	29N	12W	220553	4066197*			
SJ 00966	SJM2	SJ	3	3	1	29	29N	12W	220353	4065997*	18	3	15
SJ 01008	SJM2	SJ	3	3	1	27	29N	12W	223537	4065905*	51	20	31
SJ 01133	SJM2	SJ	4	1	4	27	29N	12W	224526	4065462*	24	7	17
SJ 01431	SJM2	SJ	4	1	1	29	29N	12W	220567	4066403*	19	7	12
SJ 01590	SJM2	SJ		3	1	27	29N	12W	223638	4066006*	63	30	33
SJ 01643	SJM2	SJ	4	3	2	27	29N	12W	224539	4065869*	65	30	35
SJ 01677	SJM2	SJ			2	33	29N	12W	222996	4064603*	51	35	16
SJ 01690	SJM2	SJ	1	1	3	27	29N	12W	223526	4065697*	25	10	15
SJ 01700	SJM2	SJ		1	3	27	29N	12W	223627	4065598*	87	48	39
SJ 01728	SJM2	SJ		1	3	27	29N	12W	223627	4065598*	25	11	14
SJ 01775	SJM2	SJ		1	1	34	29N	12W	223604	4064782*	15		
SJ 01828	SJM2	SJ	4	3	1	27	29N	12W	223737	4065905*	45	25	20
SJ 01991	SJM2	SJ		2	4	27	29N	12W	224826	4065545*	50	13	37
SJ 02041	SJM2	SJ		3	2	27	29N	12W	224440	4065970*	37	8	29

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

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

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

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 02047	SJM2	SJ		2	4	28	29N	12W	223224	4065612*	40	25	15
SJ 02058	SJM2	SJ				27	29N	12W	224218	4065793*	60	25	35
SJ 02061	SJM2	SJ		2	4	28	29N	12W	223224	4065612*	39	23	16
SJ 02074	SJM2	SJ		3	2	27	29N	12W	224440	4065970*	60	25	35
SJ 02118	SJM2	SJ			1	27	29N	12W	223839	4066207*	29	6	23
SJ 02169	SJM2	SJ				27	29N	12W	224218	4065793*	36	19	17
SJ 02183	SJM2	SJ		1	4	27	29N	12W	224427	4065563*	40	26	14
SJ 02228	SJM2	SJ			1	29	29N	12W	220655	4066299*	19	8	11
SJ 02274	SJM2	SJ	4	3	2	27	29N	12W	224539	4065869*	47	22	25
SJ 02299	SJM2	SJ	3	1	1	29	29N	12W	220367	4066403*	27	7	20
SJ 02370	SJM2	SJ	2	2	1	29	29N	12W	220963	4066591*	16	5	11
SJ 02497	SJM2	SJ	2	3	1	29	29N	12W	220553	4066197*	17	8	9
SJ 02501	SJM2	SJ	2	3	1	29	29N	12W	220553	4066197*	17	17	0
SJ 02502	SJM2	SJ	3	1	4	27	29N	12W	224326	4065462*	40		
SJ 02506	SJM2	SJ	2	1	4	27	29N	12W	224526	4065662*	44	20	24
SJ 02640	SJM2	SJ	3	1	4	27	29N	12W	224326	4065462*	31	18	13
SJ 02654	SJM2	SJ	1	3	1	27	29N	12W	223537	4066105*	62	32	30
SJ 02658	SJM2	SJ	1	2	4	28	29N	12W	223123	4065711*	42	24	18
SJ 02864	SJM2	SJ	2	2	4	28	29N	12W	223323	4065711*	50		
SJ 02870	SJM2	SJ	4	3	1	27	29N	12W	223737	4065905*	39	24	15
SJ 02969	SJM2	SJ	4	1	4	27	29N	12W	224526	4065462*	40		
SJ 02973	SJM2	SJ	2	1	2	33	29N	12W	222901	4064910*	130	50	80
SJ 03105	SJM2	SJ	2	3	3	27	29N	12W	223714	4065289*	19	9	10
SJ 03167	SJM2	SJ	1	2	1	29	29N	12W	220763	4066591*	21	10	11
SJ 03168	SJM2	SJ	1	2	1	29	29N	12W	220763	4066591*	21	10	11
SJ 03169	SJM2	SJ	1	2	1	29	29N	12W	220763	4066591*	21	10	11
SJ 03170	SJM2	SJ	1	2	1	29	29N	12W	220763	4066591*	21	10	11
SJ 03171	SJM2	SJ	1	2	1	29	29N	12W	220763	4066591*	21	10	11
SJ 03312	SJM2	SJ	4	1	2	34	29N	12W	224499	4064646*	13	2	11

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

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

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

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

POD Number	POD Sub-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 03376	SJM2	SJ	3	1	4	27	29N	12W	224326	4065462*	27	13	14
SJ 03384	SJM2	SJ	4	3	1	27	29N	12W	223737	4065905*	41	30	11
SJ 03394	SJM2	SJ	4	4	2	27	29N	12W	224938	4065851*	59	15	44
SJ 03422	SJM2	SJ	2	3	1	27	29N	12W	223737	4066105*	41	31	10
SJ 03634	SJM2	SJ	2	2	1	29	29N	12W	220963	4066591*	18	10	8
SJ 03711 POD1	SJM2	SJ	1	4	1	29	29N	12W	220751	4066185*	20	8	12
SJ 03792 POD1	SJM2	SJ	1	3	3	27	29N	12W	223604	4065351	21	10	11
SJ 03931 POD1	SJM2	SJ	3	1	4	27	29N	12W	224425	4065457	53	30	23
SJ 04024 POD1	SJM2	SJ	4	1	1	34	29N	12W	223714	4064589	27	10	17
SJ 04037 POD1	SJM2	SJ	1	2	4	27	29N	12W	224757	4065678	43	23	20
SJ 04361 POD1	SJ	SJ	3	1	4	28	29N	12W	222817	4065550	10	5	5
SJ 04361 POD2	SJ	SJ	3	1	4	28	29N	12W	222795	4065547	10	5	5
SJ 04361 POD3	SJ	SJ	3	1	4	28	29N	12W	222804	4065538	10	5	5
SJ 04361 POD4	SJ	SJ	3	1	4	28	29N	12W	222777	4065536	10	5	5
SJ 04503 POD1	SJAR	SJ	4	3	2	27	29N	12W	224582	4065899	100		
SJ 04515 POD1	SJM2	SJ		3	3	28	29N	12W	222203	4065356	40		
SJ 04527 POD1	SJM2	SJ	3	2	4	28	29N	12W	223138	4065498	30		

Average Depth to Water: **16 feet**

Minimum Depth: **2 feet**

Maximum Depth: **50 feet**

Record Count: 72

PLSS Search:

Section(s): 33, 27, 28, 29, 32, 34 **Township:** 29N **Range:** 12W

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

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

No records found.

PLSS Search:

Section(s): 9, 10, 11 **Township:** 28N **Range:** 12W

30-045-24168

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

(Submit 3 copies to OCD Aztec Office)

Operator EL PASO FIELD SERVICE Location: Unit E Sec. 27 Twp 29 Rng 12

Name of Well/Wells or Pipeline Serviced GALLEGOS CANYON UNIT 154E

Elevation _____ Completion Date 9-25-91 Total Depth 320 Land Type * ?

Casing, Sizes, Types & Depths 8 5/8 - P.V.C. 30'

If Casing is cemented, show amounts & types used ~~20 SX~~. 10 Bags Zia Type 1&2

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

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

Fresh, Clear, Salty, Sulphur, Etc. —

RECEIVED
JAN 20 1998
OIL CON. DIV.
DIST. 3

Depths gas encountered: —

Type & amount of coke breeze used: Loresco Sw - 3500 lbs

Depths anodes placed: 145' - 280'

Depths vent pipes placed: 285' -

Vent pipe perforations: 140'

Remarks: _____

Darrell

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.

THE LOFTIS COMPANY

DEEP WELL GROUNDBED DATA **DATE: September 25, 1997**

COMPANY: EPFS/Amoco **COUNTY: San Juan STATE: New Mexico**

CONTRACT NO: FC-96-1000 **UNIT NO: CPS 93623 WO 3465**

LOCATION: Gallegos Canyon #154E

GROUNDBED: DEPTH / FT 320' DIA / INCH: 7 7/8" ANODES: (15) 2 x60 SHA-2's

CASING: DEPTH / FT 30' SIZE: 8"

DEPTH IN FEET	DRILLERS LOG	RESISTIVITY OHMS	RESISTIVITY AMPS	ANODE NUMBER	DEPTH TO ANODE TOP	BEFORE COKE	AFTER COKE
5	Casing						
10							
15							
20							
25							
30							
35	Blue Sandstone						
40			2.2				
45			2.2				
50			1.4				
55			1.0				
60	(H2O)		0.9				
65			0.8				
70			1.0				
75			0.9				
80			0.9				
85			1.0				
90			1.0				
95			0.9				
100			0.9				
105			0.9				
110			0.9				
115			0.8				
120	Shale		0.7				
125			0.4				
130			0.2				
135			0.3				
140			1.0				
145			2.5	15	145	2.5	6.4
150			3.1				
155			2.7	14	155	2.8	7.6
160			2.1				
165			2.7	13	165	2.7	7.0
170			2.4				
175			2.5	12	175	2.6	6.6
180			2.0				
185			2.0	11	185	2.2	5.9
190			2.4				
195			2.3	10	195	2.3	6.5
200			2.6				
205			2.1	9	205	2.1	5.9
210	Shale		2.2				

JOB # TDM 1350

THE LOFTIS COMPANY

DEPTH IN FEET	DRILLERS LOG	RESISTIVITY OHMS	RESISTIVITY AMPS	ANODE NUMBER	DEPTH TO ANODE TOP	BEFORE COKE	AFTER COKE
215	Shale		2.4	8	215	2.6	6.7
220			2.6				
225			2.5	7	225	2.6	6.5
230			2.5				
235			2.6	6	234	2.6	6.4
240			2.4				
245			2.3	5	242	2.5	6.4
250			2.5	4	250	2.5	6.5
255			2.6				
260			2.4	3	260	2.5	6.6
265			2.3				
270			1.9	2	270	1.9	6.1
275			2.1				
280			2.2	1	280	2.2	6.4
285			2.1				
290			2.2				
295			2.1				
300			1.8				
305							
310							
315							
320	Shale						

JOB # TDM 1350

30-045-11574

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

Operator EPFS. Location: Unit K Sec. 34 Twp 29 Rng 12

Name of Well/Wells or Pipeline Serviced Gallegos Canyon Unit 199E

Elevation _____ Completion Date 10-27-97 Total Depth 400 Land Type * ?

Casing, Sizes, Types & Depths 8 5/8 - P.V.C. - 20'

If Casing is cemented, show amounts & types used 4 sx. ZIA Type I & II

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

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

Fresh, Clear, Salty, Sulphur, Etc. wtr. @ 140 - Drill with air & wtr injection

Depths gas encountered: —

Type & amount of coke breeze used: Loresco SW - 5300 lbs

Depths anodes placed: 140 - 380

Depths vent pipes placed: 380

Vent pipe perforations: 240

Remarks: _____

RECEIVED
JAN 20 1998
OIL CON. DIV.
DIST. 3

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

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

THE LOFTIS COMPANY

DEEP WELL GROUNDBED DATA **DATE: October 27, I997**

COMPANY: EPFS/Amoco **COUNTY: San Juan STATE: New Mexico**

CONTRACT NO: Agreement No. A96-24 **UNIT NO: CPS 93484 WO 3463**

LOCATION: G.C.U. #199E

GROUNDBED: DEPTH / FT 400' DIA / INCH: 7 7/8" ANODES: (15) 2 x 60 SHA-2

CASING: DEPTH / FT 20' SIZE: 8"

DEPTH IN FEET	DRILLERS LOG	RESISTIVITY OHMS	RESISTIVITY AMPS	ANODE NUMBER	DEPTH TO ANODE TOP	BEFORE COKE	AFTER COKE
5	Casing						
10							
15							
20	Sandstone						
25							
30							
35							
40							
45							
50							
55							
60							
65							
70							
75							
80							
85							
90							
95							
100							
105							
110							
115							
120							
125							
130							
135	Shale						
140	(Water)		1.4	15	140	1.5	4.8
145			1.4	14	147	1.5	5.0
150			1.5				
155			1.5	13	154	1.5	5.0
160			0.9				
165			1.1	12	165	1.1	4.9
170			1.8	11	172	1.8	5.3
175			1.7				
180			1.3	10	179	1.6	4.9
185	Sandstone Conglomerate		0.9				
190			0.7				
195			0.5				
200			0.4				
205			0.4				
210			0.4				

JOB # TDMI350

THE LOFTIS COMPANY

DEPTH IN FEET	DRILLERS LOG	RESISTIVITY OHMS	RESISTIVITY AMPS	ANODE NUMBER	DEPTH TO ANODE TOP	BEFORE COKE	AFTER COKE
215			0.4				
220			0.5				
225			0.4				
230			0.4				
235			0.3				
240			0.5				
245			0.4				
250			0.6				
255			0.6				
260			0.5				
265			1.1				
270			0.5				
275			0.7				
280	(Water)		0.6				
285			0.7				
290			0.7				
295			0.8				
300			0.6				
305	Shale		0.5				
310			1.2				
315			2.0	9	313	1.3	3.3
320			1.8	8	319	1.8	3.1
325			1.1	7	325	1.6	3.4
330			0.7				
335			0.4				
340			0.2				
345			0.6				
350			3.3	6	350	2.8	3.5
355			2.9	5	356	3.2	6.5
360			2.9	4	362	2.9	6.0
365			3.0				
370			2.6	3	368		6.8
375			2.4	2	374		6.6
380			2.2	1	380		4.3
385			2.0				
390							
395							
400	Shale						

JOB # TDMI350

ENSOLUM

APPENDIX C

Executed C-138 Solid Waste Acceptance Form

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

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

Form C-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.
91057-1125

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

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

2. Originating Site:
Trunk 3A Pipeline

AFE: Pending
PM: ME Eddleman
Pay Key: RB21200

2. Location of Material (Street Address, City, State or ULSTR):
UL J Section 33 T29N R12W; 36.681654, -108.103253

Jan/Feb 2023

4. Source and Description of Waste:
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 50 (yd³) / bbls Known Volume (to be entered by the operator at the end of the haul) 504 yd³ / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

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

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

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

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

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long Thomas Long 1-23-2023, representative for Enterprise Products Operating authorize to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, Greg Crabtree, representative for Envirotech, Inc. do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: TBD

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: 1/27/23

SIGNATURE: Greg Crabtree TELEPHONE NO.: 505-632-0615
Surface Waste Management Facility Authorized Agent

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APPENDIX D

Photographic Documentation

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Trunk 3A (01/24/23)
Ensolum Project No. 05A1226227

ENSOLUM

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 excavation (first sampling event).	

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Trunk 3A (01/24/23)
Ensolum Project No. 05A1226227

ENSOLUM

Photograph 4 Photograph Description: View of the site after initial restoration.	

ENSOLUM

APPENDIX E

Regulatory Correspondence

From: Kyle Summers
To: Chad D"Aponti
Cc: Ranee Deechilly
Subject: FW: Trunk 3A - UL J Section 33 T29N R12W; 36.679161, -108.101733; Incident # nAPP2302448038
Date: Friday, January 27, 2023 8:10:32 AM
Attachments: image003.png
image004.png
image005.png

Kyle Summers
Principal
903-821-5603
Ensolum, LLC

PLEASE NOTE OUR NEW CORPORATE ADDRESS:
Ensolum, LLC
8330 LBJ Freeway, Ste. 830
Dallas, TX 75243

From: Long, Thomas <tjlong@eprod.com>
Sent: Friday, January 27, 2023 7:29 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>; slandon@blm.gov
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: Trunk 3A - UL J Section 33 T29N R12W; 36.679161, -108.101733; Incident # nAPP2302448038

[**EXTERNAL EMAIL**]

Nelson/Sherrie,

This email is a notification that Enterprise will be collecting soil samples for laboratory analysis on Monday, January 30, 2023 at 10:00 a.m. Please call or email if you have any questions.

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

Enterprise Products

ENSOLUM

APPENDIX F

Table 1 – Soil Analytical Summary

ENSOLUM

TABLE 1
Trunk 3A (01/24/23)
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[1] (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO/MRO)[1] (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria (Tier I)				**10**	**NE**	**NE**	**NE**	**50**	**NE**	**NE**	**NE**	**100**	**600**
Composite Soil Samples Removed by Excavation and Transported to the Landfarm for Diposal/Remediation													
TS-1	1.25.23	C	14	0.13	0.53	<0.18	0.59	1.3	<18	<9.6	<48	ND	<60
Excavation Composite Soil Samples													
S-1	1.30.23	C	16	0.028	0.32	0.057	0.57	0.98	7.9	<9.0	<45	7.9	<60
S-2	1.30.23	C	16	0.064	0.55	0.087	0.74	1.4	17	<9.5	<47	17	<60
S-3	1.30.23	C	0 to 16	<0.017	<0.034	<0.034	<0.067	ND	<3.4	<9.7	<48	ND	<60
S-4	1.30.23	C	0 to 16	<0.017	<0.033	<0.033	<0.066	ND	<3.3	<9.4	<47	ND	<60
S-5	1.30.23	C	0 to 16	0.065	0.26	<0.037	0.26	0.59	<3.7	<9.2	<46	ND	<60
S-6	1.30.23	C	0 to 16	0.058	0.29	<0.057	0.33	0.68	<5.7	<9.5	<47	ND	<60
S-7	1.30.23	C	0 to 16	<0.019	0.045	<0.038	0.23	0.28	<3.8	<9.6	<48	ND	<60
S-8	1.30.23	C	0 to 16	<0.019	0.067	<0.038	0.40	0.47	<3.8	<9.7	<48	ND	<60
S-9	1.30.23	C	0 to 16	<0.018	<0.035	<0.035	0.085	0.085	<3.5	<9.6	<48	ND	<60
S-10	1.30.23	C	0 to 16	<0.019	0.050	<0.037	0.12	0.17	4.9	<9.3	<47	4.9	<60

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

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

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

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

ENSOLUM

APPENDIX G

Laboratory Data Sheets & Chain of Custody Documentation

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

January 30, 2023

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

RE: Trunk 3A OrderNo.: 2301982

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/26/2023 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 or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2301982**
Date Reported: **1/30/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** TS-1
Project: Trunk 3A **Collection Date:** 1/25/2023 2:30:00 PM
Lab ID: 2301982-001 **Matrix:** MEOH (SOIL) **Received Date:** 1/26/2023 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	1/26/2023 12:18:15 PM	72840
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/26/2023 11:02:08 AM	72833
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/26/2023 11:02:08 AM	72833
Surr: DNOP	109	69-147		%Rec	1	1/26/2023 11:02:08 AM	72833
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**	
Gasoline Range Organics (GRO)	ND	18		mg/Kg	5	1/26/2023 11:20:07 AM	R94196
Surr: BFB	112	37.7-212		%Rec	5	1/26/2023 11:20:07 AM	R94196
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	0.13	0.092		mg/Kg	5	1/26/2023 11:20:07 AM	BS9419€
Toluene	0.53	0.18		mg/Kg	5	1/26/2023 11:20:07 AM	BS9419€
Ethylbenzene	ND	0.18		mg/Kg	5	1/26/2023 11:20:07 AM	BS9419€
Xylenes, Total	0.59	0.37		mg/Kg	5	1/26/2023 11:20:07 AM	BS9419€
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	5	1/26/2023 11:20:07 AM	BS9419€

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	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2301982**

30-Jan-23

Client: ENSOLUM

Project: Trunk 3A

Sample ID: **MB-72840** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **72840** RunNo: **94206**

Prep Date: **1/26/2023** Analysis Date: **1/26/2023** SeqNo: **3402754** Units: **mg/Kg**

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

Sample ID: **LCS-72840** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **72840** RunNo: **94206**

Prep Date: **1/26/2023** Analysis Date: **1/26/2023** SeqNo: **3402755** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	100	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of 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#: **2301982**

30-Jan-23

Client: ENSOLUM

Project: Trunk 3A

Sample ID: **LCS-72833** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **72833** RunNo: **94207**

Prep Date: **1/26/2023** Analysis Date: **1/26/2023** SeqNo: **3402219** 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	87.3	61.9	130			
Surr: DNOP	5.4		5.000		108	69	147			

Sample ID: **MB-72833** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **72833** RunNo: **94207**

Prep Date: **1/26/2023** Analysis Date: **1/26/2023** SeqNo: **3402220** 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	11		10.00		109	69	147			

Sample ID: **2301982-001AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **TS-1** Batch ID: **72833** RunNo: **94207**

Prep Date: **1/26/2023** Analysis Date: **1/26/2023** SeqNo: **3403438** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	9.7	48.40	0	82.5	54.2	135			
Surr: DNOP	5.5		4.840		114	69	147			

Sample ID: **2301982-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **TS-1** Batch ID: **72833** RunNo: **94207**

Prep Date: **1/26/2023** Analysis Date: **1/26/2023** SeqNo: **3403439** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	9.1	45.37	0	83.5	54.2	135	5.19	29.2	
Surr: DNOP	5.2		4.537		114	69	147	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of 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#: **2301982**

30-Jan-23

Client: ENSOLUM

Project: Trunk 3A

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R94196**	RunNo: **94196**
Prep Date:	Analysis Date: **1/26/2023**	SeqNo: **3401757** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	88.3	72.3	137			
Surr: BFB	1900		1000		192	37.7	212			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R94196**	RunNo: **94196**
Prep Date:	Analysis Date: **1/26/2023**	SeqNo: **3401758** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		105	37.7	212			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of 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#: **2301982**
30-Jan-23

Client: ENSOLUM
Project: Trunk 3A

Sample ID: **100ng btex lcs** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **BS94196** RunNo: **94196**
Prep Date: Analysis Date: **1/26/2023** SeqNo: **3401764** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	90.6	80	120			
Toluene	0.95	0.050	1.000	0	94.9	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.0	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.1	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **BS94196** RunNo: **94196**
Prep Date: Analysis Date: **1/26/2023** SeqNo: **3401765** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			

Sample ID: **2301982-001ams** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **TS-1** Batch ID: **BS94196** RunNo: **94196**
Prep Date: Analysis Date: **1/26/2023** SeqNo: **3402078** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.2	0.092	3.688	0.1346	82.4	68.8	120			
Toluene	3.8	0.18	3.688	0.5314	88.9	73.6	124			
Ethylbenzene	3.3	0.18	3.688	0.09735	87.5	72.7	129			
Xylenes, Total	10	0.37	11.06	0.5918	87.7	75.7	126			
Surr: 4-Bromofluorobenzene	3.8		3.688		104	70	130			

Sample ID: **2301982-001amsd** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **TS-1** Batch ID: **BS94196** RunNo: **94196**
Prep Date: Analysis Date: **1/26/2023** SeqNo: **3402079** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.1	0.092	3.688	0.1346	79.8	68.8	120	3.04	20	
Toluene	3.7	0.18	3.688	0.5314	85.3	73.6	124	3.63	20	
Ethylbenzene	3.2	0.18	3.688	0.09735	85.2	72.7	129	2.62	20	
Xylenes, Total	10	0.37	11.06	0.5918	86.3	75.7	126	1.52	20	
Surr: 4-Bromofluorobenzene	3.8		3.688		103	70	130	0	0	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 2301982 RcptNo: 1

Received By: Juan Rojas 1/26/2023 7:10:00 AM

Completed By: Tracy Casarrubias 1/26/2023 7:44:57 AM

Reviewed By: SCL 1/26/23

Chain of Custody

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

Log In

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

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: JM 1/26/23

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 and Email are missing on COC- TMC 1/26/23

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.3	Good	Yes			

Chain-of-Custody Record

Client: Ensolum LLC

Mailing Address: 606 S Rio Grande Suite A 87410

Phone #:

email or Fax#:

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 10 D
☐ Standard ☒ Rush 1-26-23

Project Name: Trunk 3A

Project #:

Project Manager: K Summers

Sampler:

On Ice: ☐ ~~Yes~~ ☐ No

# of Coolers: 1 Yoa:

Cooler Temp (Including CF): 0.3-0=0.3 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2301982	BTEX / ~~MTBE~~ / ~~TMB's~~ (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
1/25	1430	S	TS-1	1 4oz Jar	Cool	001	X	X					X			

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
1/25/23	1648				1/25/23	1648
1/25/23	1811			Courier	1/26/23	7:10

Remarks: Tom Long RB21000

Same Day

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

February 03, 2023

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

RE: Trunk 3A OrderNo.: 2301B28

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 10 sample(s) on 1/31/2023 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 or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2301B28**
Date Reported: **2/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-1
Project: Trunk 3A
Collection Date: 1/30/2023 10:00:00 AM
Lab ID: 2301B28-001 **Matrix:** SOIL **Received Date:** 1/31/2023 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	1/31/2023 12:34:17 PM	72917
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	1/31/2023 11:41:15 AM	72912
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/31/2023 11:41:15 AM	72912
Surr: DNOP	104	69-147		%Rec	1	1/31/2023 11:41:15 AM	72912
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	7.9	3.9		mg/Kg	1	1/31/2023 10:58:00 AM	GS94291
Surr: BFB	138	37.7-212		%Rec	1	1/31/2023 10:58:00 AM	GS94291
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	0.028	0.019		mg/Kg	1	1/31/2023 10:58:00 AM	BS94291
Toluene	0.32	0.039		mg/Kg	1	1/31/2023 10:58:00 AM	BS94291
Ethylbenzene	0.057	0.039		mg/Kg	1	1/31/2023 10:58:00 AM	BS94291
Xylenes, Total	0.57	0.077		mg/Kg	1	1/31/2023 10:58:00 AM	BS94291
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	1	1/31/2023 10:58:00 AM	BS94291

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	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2301B28**
Date Reported: **2/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-2
Project: Trunk 3A
Collection Date: 1/30/2023 10:05:00 AM
Lab ID: 2301B28-002 **Matrix:** SOIL **Received Date:** 1/31/2023 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JMT**
Chloride	ND	60		mg/Kg	20	1/31/2023 12:46:37 PM	72917
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/31/2023 11:51:46 AM	72912
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/31/2023 11:51:46 AM	72912
Surr: DNOP	98.4	69-147		%Rec	1	1/31/2023 11:51:46 AM	72912
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**CCM**
Gasoline Range Organics (GRO)	17	3.8		mg/Kg	1	1/31/2023 11:17:00 AM	GS94291
Surr: BFB	192	37.7-212		%Rec	1	1/31/2023 11:17:00 AM	GS94291
EPA METHOD 8021B: VOLATILES						Analyst:	**CCM**
Benzene	0.064	0.019		mg/Kg	1	1/31/2023 11:17:00 AM	BS94291
Toluene	0.55	0.038		mg/Kg	1	1/31/2023 11:17:00 AM	BS94291
Ethylbenzene	0.087	0.038		mg/Kg	1	1/31/2023 11:17:00 AM	BS94291
Xylenes, Total	0.74	0.077		mg/Kg	1	1/31/2023 11:17:00 AM	BS94291
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/31/2023 11:17:00 AM	BS94291

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	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2301B28**
Date Reported: **2/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-3
Project: Trunk 3A
Collection Date: 1/30/2023 10:10:00 AM
Lab ID: 2301B28-003 **Matrix:** SOIL **Received Date:** 1/31/2023 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JMT**
Chloride	ND	61		mg/Kg	20	1/31/2023 12:58:56 PM	72917
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/31/2023 12:02:19 PM	72912
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/31/2023 12:02:19 PM	72912
Surr: DNOP	102	69-147		%Rec	1	1/31/2023 12:02:19 PM	72912
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**CCM**
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	1/31/2023 11:37:00 AM	GS94291
Surr: BFB	110	37.7-212		%Rec	1	1/31/2023 11:37:00 AM	GS94291
EPA METHOD 8021B: VOLATILES						Analyst:	**CCM**
Benzene	ND	0.017		mg/Kg	1	1/31/2023 11:37:00 AM	BS94291
Toluene	ND	0.034		mg/Kg	1	1/31/2023 11:37:00 AM	BS94291
Ethylbenzene	ND	0.034		mg/Kg	1	1/31/2023 11:37:00 AM	BS94291
Xylenes, Total	ND	0.067		mg/Kg	1	1/31/2023 11:37:00 AM	BS94291
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	1/31/2023 11:37:00 AM	BS94291

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	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2301B28**
Date Reported: **2/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-4
Project: Trunk 3A
Collection Date: 1/30/2023 10:15:00 AM
Lab ID: 2301B28-004 **Matrix:** SOIL **Received Date:** 1/31/2023 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	1/31/2023 1:11:17 PM	72917
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	1/31/2023 12:12:55 PM	72912
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/31/2023 12:12:55 PM	72912
Surr: DNOP	96.9	69-147		%Rec	1	1/31/2023 12:12:55 PM	72912
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	1/31/2023 11:57:00 AM	GS94291
Surr: BFB	110	37.7-212		%Rec	1	1/31/2023 11:57:00 AM	GS94291
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.017		mg/Kg	1	1/31/2023 11:57:00 AM	BS94291
Toluene	ND	0.033		mg/Kg	1	1/31/2023 11:57:00 AM	BS94291
Ethylbenzene	ND	0.033		mg/Kg	1	1/31/2023 11:57:00 AM	BS94291
Xylenes, Total	ND	0.066		mg/Kg	1	1/31/2023 11:57:00 AM	BS94291
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	1/31/2023 11:57:00 AM	BS94291

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	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2301B28**
Date Reported: **2/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-5
Project: Trunk 3A
Collection Date: 1/30/2023 10:20:00 AM
Lab ID: 2301B28-005 **Matrix:** SOIL **Received Date:** 1/31/2023 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	1/31/2023 1:23:38 PM	72917
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	1/31/2023 12:23:31 PM	72912
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/31/2023 12:23:31 PM	72912
Surr: DNOP	103	69-147		%Rec	1	1/31/2023 12:23:31 PM	72912
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	1/31/2023 12:16:00 PM	GS94291
Surr: BFB	109	37.7-212		%Rec	1	1/31/2023 12:16:00 PM	GS94291
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	0.065	0.019		mg/Kg	1	1/31/2023 12:16:00 PM	BS94291
Toluene	0.26	0.037		mg/Kg	1	1/31/2023 12:16:00 PM	BS94291
Ethylbenzene	ND	0.037		mg/Kg	1	1/31/2023 12:16:00 PM	BS94291
Xylenes, Total	0.26	0.074		mg/Kg	1	1/31/2023 12:16:00 PM	BS94291
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	1/31/2023 12:16:00 PM	BS94291

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	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2301B28**
Date Reported: **2/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-6
Project: Trunk 3A
Collection Date: 1/30/2023 10:25:00 AM
Lab ID: 2301B28-006 **Matrix:** SOIL **Received Date:** 1/31/2023 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JMT**
Chloride	ND	60		mg/Kg	20	1/31/2023 1:35:59 PM	72917
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/31/2023 12:34:07 PM	72912
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/31/2023 12:34:07 PM	72912
Surr: DNOP	101	69-147		%Rec	1	1/31/2023 12:34:07 PM	72912
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**CCM**
Gasoline Range Organics (GRO)	ND	5.7		mg/Kg	1	1/31/2023 12:36:00 PM	GS94291
Surr: BFB	116	37.7-212		%Rec	1	1/31/2023 12:36:00 PM	GS94291
EPA METHOD 8021B: VOLATILES						Analyst:	**CCM**
Benzene	0.058	0.029		mg/Kg	1	1/31/2023 12:36:00 PM	BS94291
Toluene	0.29	0.057		mg/Kg	1	1/31/2023 12:36:00 PM	BS94291
Ethylbenzene	ND	0.057		mg/Kg	1	1/31/2023 12:36:00 PM	BS94291
Xylenes, Total	0.33	0.11		mg/Kg	1	1/31/2023 12:36:00 PM	BS94291
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	1/31/2023 12:36:00 PM	BS94291

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	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2301B28**
Date Reported: **2/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-7
Project: Trunk 3A **Collection Date:** 1/30/2023 10:30:00 AM
Lab ID: 2301B28-007 **Matrix:** SOIL **Received Date:** 1/31/2023 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	1/31/2023 1:48:20 PM	72917
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/31/2023 12:44:44 PM	72912
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/31/2023 12:44:44 PM	72912
Surr: DNOP	114	69-147		%Rec	1	1/31/2023 12:44:44 PM	72912
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	1/31/2023 12:56:00 PM	GS94291
Surr: BFB	113	37.7-212		%Rec	1	1/31/2023 12:56:00 PM	GS94291
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.019		mg/Kg	1	1/31/2023 12:56:00 PM	BS94291
Toluene	0.045	0.038		mg/Kg	1	1/31/2023 12:56:00 PM	BS94291
Ethylbenzene	ND	0.038		mg/Kg	1	1/31/2023 12:56:00 PM	BS94291
Xylenes, Total	0.23	0.077		mg/Kg	1	1/31/2023 12:56:00 PM	BS94291
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	1/31/2023 12:56:00 PM	BS94291

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	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2301B28**
Date Reported: **2/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-8
Project: Trunk 3A
Collection Date: 1/30/2023 10:35:00 AM
Lab ID: 2301B28-008 **Matrix:** SOIL **Received Date:** 1/31/2023 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JMT**
Chloride	ND	60		mg/Kg	20	1/31/2023 2:00:40 PM	72917
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/31/2023 12:55:18 PM	72912
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/31/2023 12:55:18 PM	72912
Surr: DNOP	104	69-147		%Rec	1	1/31/2023 12:55:18 PM	72912
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**CCM**
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	1/31/2023 1:15:00 PM	GS94291
Surr: BFB	118	37.7-212		%Rec	1	1/31/2023 1:15:00 PM	GS94291
EPA METHOD 8021B: VOLATILES						Analyst:	**CCM**
Benzene	ND	0.019		mg/Kg	1	1/31/2023 1:15:00 PM	BS94291
Toluene	0.067	0.038		mg/Kg	1	1/31/2023 1:15:00 PM	BS94291
Ethylbenzene	ND	0.038		mg/Kg	1	1/31/2023 1:15:00 PM	BS94291
Xylenes, Total	0.40	0.076		mg/Kg	1	1/31/2023 1:15:00 PM	BS94291
Surr: 4-Bromofluorobenzene	108	70-130		%Rec	1	1/31/2023 1:15:00 PM	BS94291

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	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2301B28**
Date Reported: **2/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-9
Project: Trunk 3A
Collection Date: 1/30/2023 10:40:00 AM
Lab ID: 2301B28-009 **Matrix:** SOIL **Received Date:** 1/31/2023 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JMT**
Chloride	ND	60		mg/Kg	20	1/31/2023 2:37:43 PM	72917
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/31/2023 1:05:57 PM	72912
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/31/2023 1:05:57 PM	72912
Surr: DNOP	104	69-147		%Rec	1	1/31/2023 1:05:57 PM	72912
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**CCM**
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	1/31/2023 1:35:00 PM	GS94291
Surr: BFB	116	37.7-212		%Rec	1	1/31/2023 1:35:00 PM	GS94291
EPA METHOD 8021B: VOLATILES						Analyst:	**CCM**
Benzene	ND	0.018		mg/Kg	1	1/31/2023 1:35:00 PM	BS94291
Toluene	ND	0.035		mg/Kg	1	1/31/2023 1:35:00 PM	BS94291
Ethylbenzene	ND	0.035		mg/Kg	1	1/31/2023 1:35:00 PM	BS94291
Xylenes, Total	0.085	0.070		mg/Kg	1	1/31/2023 1:35:00 PM	BS94291
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	1/31/2023 1:35:00 PM	BS94291

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	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2301B28**
Date Reported: **2/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-10
Project: Trunk 3A
Collection Date: 1/30/2023 10:45:00 AM
Lab ID: 2301B28-010 **Matrix:** SOIL **Received Date:** 1/31/2023 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	1/31/2023 2:50:03 PM	72917
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/31/2023 1:16:34 PM	72912
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/31/2023 1:16:34 PM	72912
Surr: DNOP	102	69-147		%Rec	1	1/31/2023 1:16:34 PM	72912
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	4.9	3.7		mg/Kg	1	1/31/2023 1:55:00 PM	GS94291
Surr: BFB	117	37.7-212		%Rec	1	1/31/2023 1:55:00 PM	GS94291
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.019		mg/Kg	1	1/31/2023 1:55:00 PM	BS94291
Toluene	0.050	0.037		mg/Kg	1	1/31/2023 1:55:00 PM	BS94291
Ethylbenzene	ND	0.037		mg/Kg	1	1/31/2023 1:55:00 PM	BS94291
Xylenes, Total	0.12	0.074		mg/Kg	1	1/31/2023 1:55:00 PM	BS94291
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	1/31/2023 1:55:00 PM	BS94291

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	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2301B28**
03-Feb-23

Client: ENSOLUM
Project: Trunk 3A

Sample ID: **MB-72917**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **72917**	RunNo: **94310**							
Prep Date: **1/31/2023**	Analysis Date: **1/31/2023**	SeqNo: **3406872**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-72917**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **72917**	RunNo: **94310**							
Prep Date: **1/31/2023**	Analysis Date: **1/31/2023**	SeqNo: **3406873**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.7	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of 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#: **2301B28**
03-Feb-23

Client: ENSOLUM
Project: Trunk 3A

Sample ID: **LCS-72912**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **72912**	RunNo: **94303**
Prep Date: **1/31/2023**	Analysis Date: **1/31/2023**	SeqNo: **3406298** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	79.9	61.9	130			
Surr: DNOP	4.6		5.000		91.3	69	147			

Sample ID: **MB-72912**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **72912**	RunNo: **94303**
Prep Date: **1/31/2023**	Analysis Date: **1/31/2023**	SeqNo: **3406301** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.5		10.00		94.7	69	147			

Sample ID: **2301B28-010AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-10**	Batch ID: **72912**	RunNo: **94303**
Prep Date: **1/31/2023**	Analysis Date: **1/31/2023**	SeqNo: **3407501** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	35	9.2	46.04	0	75.7	54.2	135			
Surr: DNOP	4.9		4.604		106	69	147			

Sample ID: **2301B28-010AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-10**	Batch ID: **72912**	RunNo: **94303**
Prep Date: **1/31/2023**	Analysis Date: **1/31/2023**	SeqNo: **3407502** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	9.3	46.34	0	83.4	54.2	135	10.3	29.2	
Surr: DNOP	5.0		4.634		107	69	147	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of 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#: **2301B28**
03-Feb-23

Client: ENSOLUM
Project: Trunk 3A

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **GS94291**	RunNo: **94291**							
Prep Date:	Analysis Date: **1/31/2023**	SeqNo: **3405679**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.4	72.3	137			
Surr: BFB	2200		1000		216	37.7	212			S

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **PBS**	Batch ID: **GS94291**	RunNo: **94291**							
Prep Date:	Analysis Date: **1/31/2023**	SeqNo: **3405683**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		105	37.7	212			

Sample ID: **2301B28-001ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **S-1**	Batch ID: **GS94291**	RunNo: **94291**							
Prep Date:	Analysis Date: **1/31/2023**	SeqNo: **3406856**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	42	3.9	38.70	7.887	89.2	70	130			
Surr: BFB	1800		774.0		227	37.7	212			S

Sample ID: **2301B28-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **S-1**	Batch ID: **GS94291**	RunNo: **94291**							
Prep Date:	Analysis Date: **1/31/2023**	SeqNo: **3406857**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	39	3.9	38.70	7.887	81.3	70	130	7.52	20	
Surr: BFB	1600		774.0		208	37.7	212	0	0	

Qualifiers:

*	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2301B28**
03-Feb-23

Client: ENSOLUM
Project: Trunk 3A

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **BS94291**	RunNo: **94291**
Prep Date:	Analysis Date: **1/31/2023**	SeqNo: **3405681** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.4	80	120			
Toluene	0.98	0.050	1.000	0	97.8	80	120			
Ethylbenzene	0.99	0.050	1.000	0	99.0	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.0	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		105	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **BS94291**	RunNo: **94291**
Prep Date:	Analysis Date: **1/31/2023**	SeqNo: **3405684** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		102	70	130			

Sample ID: **2301B28-002ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-2**	Batch ID: **BS94291**	RunNo: **94291**
Prep Date:	Analysis Date: **1/31/2023**	SeqNo: **3406858** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.74	0.019	0.7686	0.06414	88.4	68.8	120			
Toluene	1.1	0.038	0.7686	0.5526	69.2	73.6	124			S
Ethylbenzene	0.83	0.038	0.7686	0.08743	96.5	72.7	129			
Xylenes, Total	2.9	0.077	2.306	0.7391	93.2	75.7	126			
Surr: 4-Bromofluorobenzene	0.82		0.7686		107	70	130			

Sample ID: **2301B28-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-2**	Batch ID: **BS94291**	RunNo: **94291**
Prep Date:	Analysis Date: **1/31/2023**	SeqNo: **3406859** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.72	0.019	0.7686	0.06414	85.1	68.8	120	3.40	20	
Toluene	1.0	0.038	0.7686	0.5526	64.4	73.6	124	3.43	20	S
Ethylbenzene	0.80	0.038	0.7686	0.08743	93.0	72.7	129	3.34	20	
Xylenes, Total	2.8	0.077	2.306	0.7391	89.4	75.7	126	3.09	20	
Surr: 4-Bromofluorobenzene	0.81		0.7686		105	70	130	0	0	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 2301B28 RcptNo: 1

Received By: Juan Rojas 1/31/2023 7:05:00 AM

Completed By: Juan Rojas 1/31/2023 7:17:19 AM

Reviewed By: JR 1/31/23

Chain of Custody

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

Log In

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

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: JR 1/31/23

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: _____

16. Additional remarks:

Client missing phone number and email address. JR 1/31/23.

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.7	Good	No	Morty		
2	0.5	Good	No	Morty		

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S Rio Grande Suit A 87410

Phone #:

email or Fax#:

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 10 days
☐ Standard ☒ Rush 1-31-23

Project Name: Trunk 3A

Project #: 05A1226227

Project Manager: K Summers

Sampler: C Whorton

On Ice: ☐ Yes ☐ No

# of Coolers: 2 Morty

Cooler Temp(Including CF): 0.6+0.1=0.7 (°C) ~~0.6~~ 0.4+0.1=0.5

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / ~~MTBE~~ / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
1/30	1000	S	S-1	4oz Jar	Jan 31 23 Cool	2301826-001	✓	✓					✓			
1/30	1005	S	S-2		Cool	-002	✓	✓					✓			
1/30	1010	S	S-3		Cool	-003	✓	✓					✓			
1/30	1015	S	S-4		Cool	-004	✓	✓					✓			
1/30	1020	S	S-5		Cool	-005	✓	✓					✓			
1/30	1025	S	S-6		Cool	-006	✓	✓					✓			
1/30	1030	S	S-7		Cool	-007	✓	✓					✓			
1/30	1035	S	S-8		Cool	-008	✓	✓					✓			
1/30	1040	S	S-9		Cool	-009	✓	✓					✓			
1/30	1045	S	S-10		Cool	-010	✓	✓					✓			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
1/30/23	1143		Christian Walters		1/30/23	1143
1/30/23	1807	Christian Walters		courier	1/31/23	7:05

Remarks: Tom Long
R1321200
AFE #641149

Same Day

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

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

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

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 219302
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	5/23/2023