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	NAPP2305931418
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)* **nAPP2305931418**
Contact mailing address: **614 Reilly Ave, Farmington, NM 87401**	

Location of Release Source

Latitude **36.35866** Longitude **-107.20433** *(NAD 83 in decimal degrees to 5 decimal places)*

Site Name **Trunk 11-S**	Site Type **Natural Gas Gathering Pipeline**
Date Release Discovered: **02/22/2023**	Serial Number *(if applicable)*: **N/A**

Unit Letter	Section	Township	Range	County
F	**35**	**25N**	**4W**	**Rio Arriba**

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

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 20 BBLS**	Volume Recovered (bbls): **None**
☒ Natural Gas	Volume Released (Mcf): **84 MCF**	Volume Recovered (Mcf): **None**
☐ Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

Cause of Release: On February 22, 2023, Enterprise had a release of natural gas and natural gas liquids from the Trunk 11-S pipeline. The pipeline was isolated, depressurized, locked and tagged out. No fire nor injuries occurred. Release liquids flowed approximately 600 feet to the southwest entering an ephemeral wash. The final pipeline excavation dimensions measured approximately 50 feet long by 17 feet wide by 8.5 feet deep. The flow path excavation dimensions measured 100 feet long by six (6) feet wide by 2.5 feet deep. A total of 453 cubic yards of hydrocarbon impacted soil was excavated and transported to a New Mexico Oil Conservation Division (NMOCD) approved land farm. On June 20, 2023, 300 gallons of potassium permanganate were applied to the upper flow path excavation for in-situ remediation of the residual hydrocarbons in the sandstone. On June 21, 2023, and June 22, 2024, hydro-excavation activities were performed at the at the lower pooling area at the base of the cliff. A third party closure report is included with this “Final” C-141.

Incident ID	NAPP2305931418
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Thomas Long Title: Senior Environmental Scientist

Signature: Thomas Long Date: 10-4-2023

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

OCD Only

Received by: Shelly Wells Date: 10/5/2023

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: _____ Date: _____

Printed Name: _____ Title: _____

ENSOLUM

CLOSURE REPORT

Property:

Trunk 11-S (02/22/23)
Unit Letter F, S36 T25N R4W
Rio Arriba County, New Mexico

New Mexico EMNRD OCD Incident ID No. NAPP2305931418

September 25, 2023

Ensolum Project No. 05A1226231

Prepared for:

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

Prepared by:

Ranee Deechilly
Project Manager

Kyle Summers
Senior Managing Geologist

TABLE OF CONTENTS

LIST OF APPENDICES

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Trunk 11-S (02/22/23) (Site)
NM EMNRD OCD Incident ID No.	NAPP2305931418
Location:	36.35866° North, 107.20433° West Unit Letter F, Section 36, Township 25 North, Range 4 West Rio Arriba County, New Mexico (NM)
Property:	Jicarilla Apache Nation
Regulatory:	Jicarilla Apache Nation Environmental Protection Office (JAN-EPO)

On February 22, 2023, a release of natural gas and associated liquids from the Trunk 11-S pipeline was discovered at the Site. The release was characterized by discoloration of the ground surface and a flow path that traveled southwest from the release point. Enterprise verified a leak and subsequently isolated and locked the pipeline out of service. Enterprise initiated activities to repair the pipeline and remediate petroleum hydrocarbon impact on March 6, 2023.

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 under the jurisdiction of the Jicarilla Apache Nation and is subject to regulatory oversight by the JAN-EPO. Ensolum, LLC (Ensolum) deferred to the 19.15.29 New Mexico Administrative Code (NMAC), as guidance, which establishes investigation and abatement action requirements for oil and gas release sites that are subject to reporting and/or corrective action. 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). Three PODs (SJ-02516, SJ-02516 DCL, and RG-50845-POD1) with recorded depths to water were identified in the adjacent Public Land Survey System (PLSS) sections (**Figure A**, **Appendix B**). However, based on the available records, POD RG-50845-POD1 is actually located in a different county. The recorded depths to water for SJ-02516 and SJ-02516 DCL are 650 feet below grade surface (bgs). These two PODs are located approximately 1.2 miles southeast of the Site and are 160 feet lower in elevation than the Site.

- No cathodic protection wells (CPWs) were identified in the NM EMNRD OCD imaging database in the same PLSS section as the Site, or in the adjacent PLSS sections (**Figure B**, **Appendix B**).

- The Site is located within 300 feet of a NM EMNRD OCD-defined continuously flowing watercourse or significant watercourse (**Figure C**, **Appendix B**). A first-order tributary to a United State Geological Survey (USGS) "blue line" was affected by the release.

- 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 March 6, 2023, Enterprise initiated activities to repair the pipeline and remediate petroleum hydrocarbon impact resulting from the release. During the remediation and corrective action activities, OFT Construction, Inc (OFT) provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final pipeline excavation measured approximately 50 feet long and 17 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 8.5 feet bgs. The upper flow path traveled approximately 235 feet to the southwest, with a maximum width of 15 feet. The sampled lower flow path measured approximately 100 feet long with a maximum width of 6 feet, with a predominant pooling area at the base of the cliff face having a maximum width of 28 feet. The maximum depth of the flow path excavation measured approximately 2.5 feet bgs. The lithology encountered during the completion of pipeline remediation activities consisted primarily of unconsolidated silty sandy clay and weathered shale, underlain by sandstone. The lithology encountered during the flow path remediation activities primarily consisted of sandstone with a thin (0 to 2.5 feet) covering of sandy/silty topsoil (upper flow path) or sand (lower flow path).

During the remediation activities of the flow path, sandstone was encountered at, and very near, the ground surface over most of the flow path. Where possible, affected soil from the flow path was removed from the sandstone utilizing a backhoe or hand tools. Enterprise met with the JAN-EPO and reached an agreement on a variance request and alternative remediation strategy that included power-washing the impacted sandstone on the upper portion of the flow path with a solution of Simple Green® biodegradable detergent and capturing the bulk of the wash-water utilizing a vacuum truck. On May 10, 2023, the Simple Green® power-wash activity was implemented by OFT. The washed sandstone in the flow path was sampled again on May 11, 2023. Subsequent soil analytical results demonstrated that the Simple Green® power-wash was ineffective.

Enterprise again met with JAN-EPO at the Site, and they agreed to try another alternative remediation method that included the application of potassium permanganate to the upper flow path and an attempt at hydro-excavation of the lower pooling area of the flow path that is inaccessible to vehicular traffic. Potassium permanganate is one of the few chemical treatment options that are approved by the Jicarilla Apache Nation and was selected for its ability to persistently degrade (through chemical oxidation via the permanganate anion) petroleum hydrocarbon COCs. Additionally, the permanganate anion oxidation reactions are relatively safe to apply as the oxidants and byproducts are not toxic, the reactions are not highly exothermic, pH monitoring is not necessary, no catalysts are needed to instigate oxidation, and soil carbonates do not appear to interfere with the oxidation processes. On June 20, 2023, 300 gallons of potassium permanganate were applied to the upper flow path excavation by Envirotech, Inc. (Envirotech). On June 21, 2023, and June 22, 2024, Riley Industrial Services, Inc. (Riley) performed remote hydro-excavation activities at the lower pooling area.

Approximately 453 cubic yards (yd^3) of petroleum hydrocarbon affected soils and 127 barrels (bbls) of hydro-excavation soil cuttings and water were transported to the Envirotech, Inc., (Envirotech) landfarm in San Juan County, NM for disposal/remediation. The executed C-138 solid waste acceptance forms are provided in **Appendix C**. The upper flow path excavation was backfilled with JAN-EPO approved native fill and was then contoured to surrounding grade. Enterprise has not yet determined a permanent repair strategy for the pipeline; therefore, a portion of the excavation has not yet been backfilled at the time this document was created. Once the permanent pipeline repairs are completed, the pipeline excavation will be backfilled with JAN-EPO approved native fill and then contoured to the surrounding grade.

Figure 3A is a map that identifies approximate soil sample locations and depicts the approximate dimensions of the primary excavation with respect to the pipeline (**Appendix A**). **Figure 3B** is a map that depicts the approximate extent of the flow path and soil sample locations (**Appendix A**). **Figure 3C** is a map that depicts the approximate extent of the lower flow path pooling area and soil sample locations (**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 (S-1 through S-11) from the pipeline excavation, 33 flow path composite soil samples (FP-1 through FP-23, FP-2a through FP-7a, and FP-9a through FP-12a), and 4 soil boring samples (LF-1 through LF-4) for laboratory analysis. The composite samples were comprised of five aliquots each and represent an estimated 200 square foot (ft^2) or less sample area per guidelines outlined in Section D of 19.15.29.12 NMAC. Hand tools were utilized to obtain fresh aliquots from each area of the excavations. Regulatory correspondence is provided in **Appendix E**.

First Sampling Event
On March 31, 2023, sampling was performed at the Site. The JAN-EPO was present during sampling activities. Composite soil samples S-1 (7'-8.5'), S-2 (6'-7'), and S-3 (5'-7') were collected from the floor of the pipeline excavation. Composite soil samples S-4 (0'-8.5'), S-5 (0'-8.5'), S-6 (0'-6'), S-7 (0'-7'), S-8 (2'-5'), and S-9 (0'-7') were collected from the walls of the pipeline excavation. Composite soil samples S-10 (0'-4') and S-11 (0'-4') contained aliquots from the floor and walls of the pipeline excavation.

Second Sampling Event
On April 5, 2023, a second sampling event was performed at the Site. The JAN-EPO was present during sampling activities. Composite soil samples FP-1 (0'-0.25'), FP-2 (0'-0.25'), FP-3 (0'-0.25'), FP-4 (0'-0.25'), FP-5 (0'-0.25'), FP-6 (0'-2'), FP-7 (0'-2'), FP-8 (0'-2'), FP-9 (0'-0.25'), FP-10 (0'-0.25'), FP-11 (0'-0.25'), FP-12 (0'-0.25'), FP-13 (2.5'), FP-14 (2.5'), FP-15 (0'-2.5'), and FP-16 (0'-2.5') were collected from the flow path. Subsequent soil analytical results identified TPH concentrations that exceeded the NM EMNRD OCD closure criteria for composite soil samples FP-2 through FP-7 and FP-9 through FP-12.

Third Sampling Event
On April 6, 2023, a third sampling event was performed at the Site. The JAN-EPO was present during sampling activities. Composite soil samples FP-17 (0'-2'), FP-18 (0'-2'), and FP-19 (0'-2') were collected from the walls and floor of the excavated flow path.

Fourth Sampling Event
Subsequent to the Simple Green® power-wash, a fourth sampling event was performed at the Site on May 11, 2023. The JAN-EPO was notified of the sampling event although no representative was present during sampling activities. Composite soil samples FP-2a (0'-0.25'), FP-3a (0'-0.25'), FP-4a (0'-0.25'), FP-5a (0'-0.25'), FP-6a (0'-2'), FP-7a (0'-2'), FP-9a (0'-0.25'), FP-10a (0'-0.25'), FP-11a (0'-0.25'), FP-12a (0'-0.25') were collected from the flow path. In addition, composite soil samples FP-20 (0'-0.25'), FP-21 (0'-0.25'), and FP-22 (0'-0.25') were collected from the lower flow path. Subsequent soil analytical results identified TPH concentrations that exceeded the NM EMNRD OCD closure criteria for composite soil samples FP-2a through FP-5a, FP-9a through FP-12a, FP-20, and FP-21.

Fifth Sampling Event

On June 2, 2023, a fifth sampling event was performed at the Site. The JAN-EPO was notified of the sampling event although no representative was present during sampling activities. Four boreholes were attempted in the lower flow path utilizing a hand auger. Each borehole met with refusal at less than one foot bgs due to sandstone. Grab samples were collected from each borehole at the respective total depths. Soil samples LF-1 (0.5'), LF-2 (0.5'), LF-3 (0.25'), and LF-4 (0.5') were submitted for laboratory analysis. Subsequent soil analytical results identified TPH concentrations that exceeded the NM EMNRD OCD closure criteria for soil sample LF-3.

Sixth Sampling Event

In response to the TPH exceedances in the lower flow path, a hydro-excavation vacuum truck was utilized to remove the heavily impacted soil at the base of the cliff. On June 21 and June 22, 2023, Riley performed remote hydro-excavation activities by laterally piping into the ravine. Subsequently, one composite soil sample (FP-23 (0'-2')) was collected and submitted for laboratory analysis. Subsequent soil analytical results identified TPH concentrations that exceeded the NM EMNRD OCD closure criteria for the soil sample but at much lower concentrations than the previous sample results.

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 soil samples (S-1 through S-11, FP-1 through FP-19, FP-21 through FP-23, FP-2a through FP-7a, FP-9a through FP-12a, and LF-1 through LF-4) to the applicable NM EMNRD OCD closure criteria. Soil associated with sample FP-20 was removed by excavation and is not included in the following discussion. The laboratory analytical results are summarized in **Table 1** (**Appendix F**).

- The laboratory analytical result for soil sample FP-4 indicates a benzene concentration of 0.059 mg/kg, which is less than the applicable NM EMNRD OCD criteria of 10 mg/kg. The laboratory analytical results for all other soil samples indicate benzene is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable NM EMNRD OCD criteria of 10 mg/kg.

- The laboratory analytical results for soil samples FP-4, FP-4a, FP-5 through FP-8, FP-10, FP-11, and FP-18 indicate total BTEX concentrations ranging from 0.048 mg/kg (FP-18) to 5.2 mg/kg (FP-5), which are less than the applicable NM EMNRD OCD criteria of 50 mg/kg. The laboratory analytical results for all other soil samples indicate that total BTEX is not present in

concentrations greater than the laboratory PQLs/RLs, which are less than the applicable NM EMNRD OCD closure criteria of 50 mg/kg.

- The laboratory analytical results for soil samples FP-2 though FP-7, FP-9 through FP-12, FP-2a though FP-5a, FP-9a through FP-12a, FP-21, FP-23, and LF-3 indicate combined TPH GRO/DRO/MRO concentrations ranging from 110 mg/kg (LF-3) to 4,900 mg/kg (FP-9), which are above the applicable NM EMNRD OCD criteria of 100 mg/kg. The laboratory analytical results for soil samples S-8, FP-1, FP-6a, FP-7a, FP-8, FP-17, FP-18, FP-22, LF-1, and LF-4 indicate combined TPH GRO/DRO/MRO concentrations ranging from 10 mg/kg (FP-17) to 85 mg/kg (FP-6a), which are less than the applicable NM EMNRD OCD criteria of 100 mg/kg. The laboratory analytical results for all other soil samples indicate combined TPH GRO/DRO/MRO is not present in concentrations greater than the laboratory PQLs/RLs, which are less than the applicable NM EMNRD OCD closure criteria of 100 mg/kg.

- The laboratory analytical results for all soil samples indicate that chloride is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable NM EMNRD OCD criteria of 600 mg/kg.

7.0 RECLAMATION AND REVEGETATION

The pipeline excavation was partially backfilled with JAN-EPO approved native fill. Enterprise has not yet determined a permanent repair strategy for the pipeline; therefore, a portion of the excavation has not yet been backfilled at the time this document was created. Once permanent pipeline repairs are completed, Enterprise will backfill the excavation with JAN-EPO approved native fill and then contoured to the surrounding grade. Following the application of potassium permanganate, the upper flow path excavation was backfilled with JAN-EPO approved native fill and then contoured to the surrounding grade.

8.0 FINDINGS AND RECOMMENDATION

- Forty-eight soil samples were collected from the Site. Based on laboratory analytical results, benzene, BTEX, chloride, and combined TPH GRO/DRO/MRO exceedances were identified in the soils remaining at the Site.

- JAN-EPO approved the variance request and alternative closure method proposed by Enterprise that included the final application of potassium permanganate to the flow path prior to backfill.

- Approximately 453 yd^3 of petroleum hydrocarbon-affected soils and 127 bbls of hydro-excavation soil cuttings and water were transported to the Envirotech landfarm for disposal/remediation.

The JAN-EPO approved the variances discussed herein. Additional sampling may be required at a future date to assess Site conditions.

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.

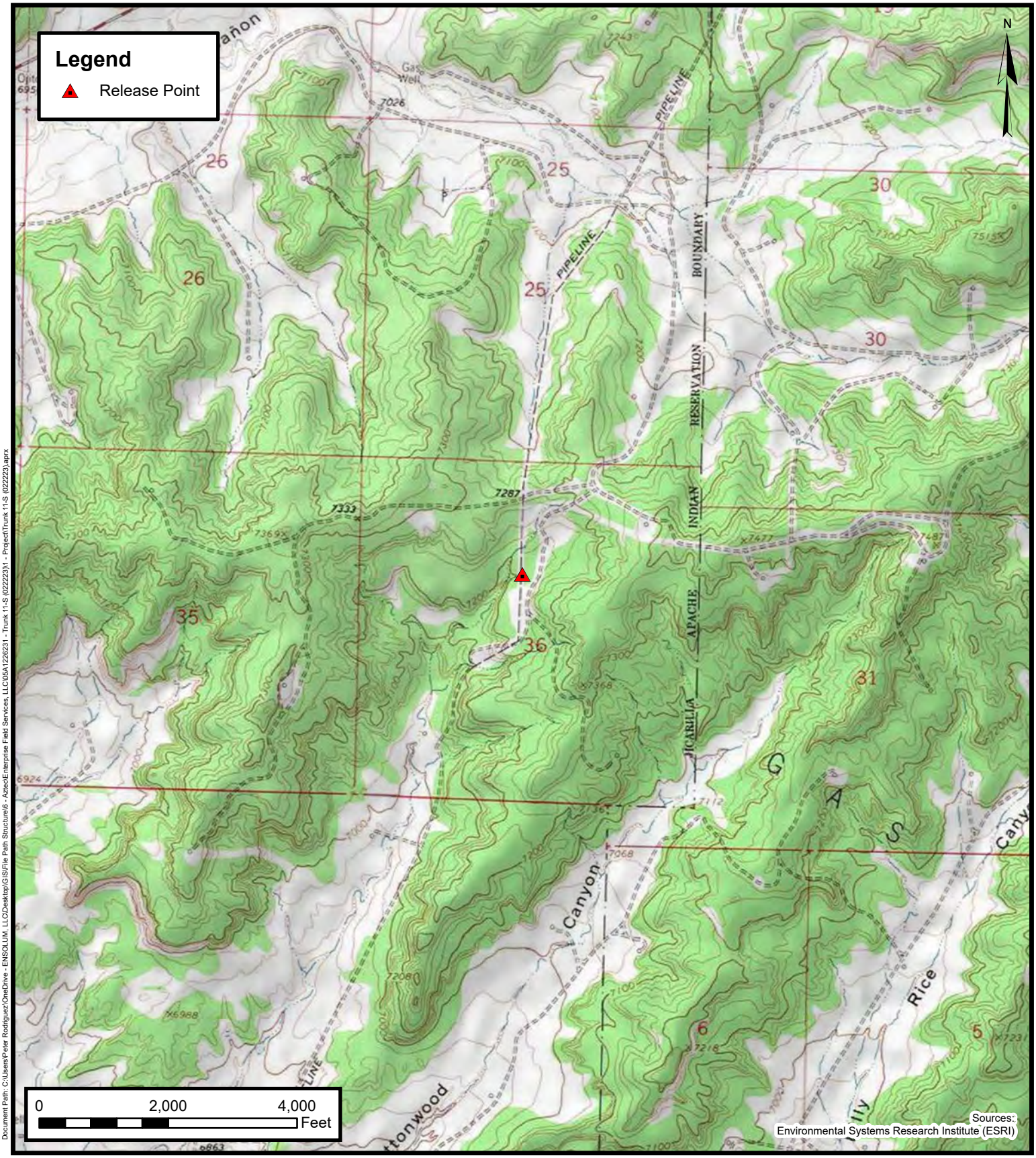
9.3 Reliance

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



Document Path: C:\Users\Peter Rodriguez\OneDrive - ENSOLUM, LLC\Desktop\GIS\File Path Structure\6 - Aztec\Enterprise Field Services, LLC\05A1226231 - Trunk 11-S (022223)\1 - Project\Trunk 11-S (022223).aprx

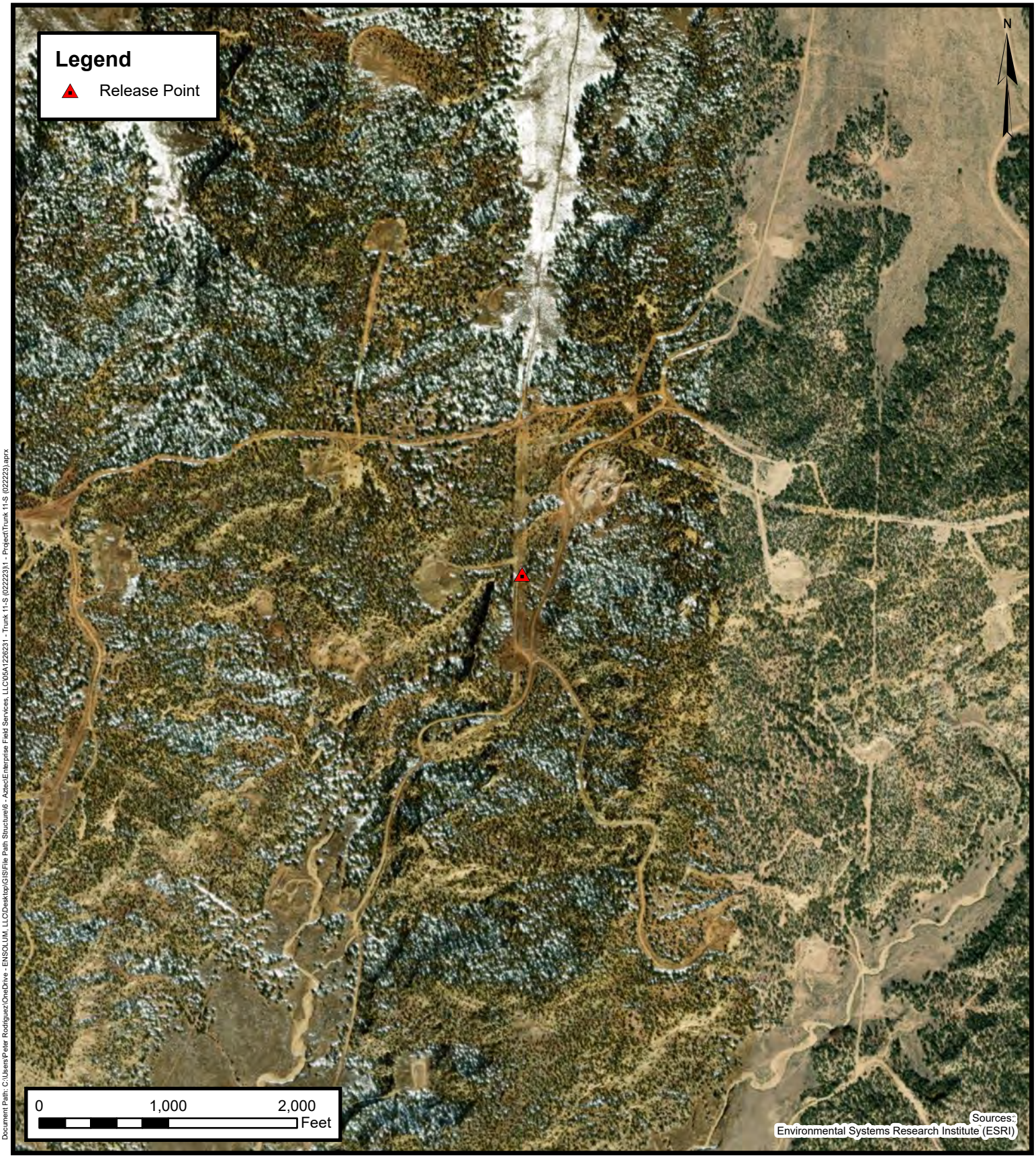
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Topographic Map

Enterprise Field Services, LLC
Trunk 11-S (02/22/23)
Project Number: 05A1226231
Unit Letter F, S36 T25N R4W, Rio Arriba County, New Mexico
36.35866, -107.20433

FIGURE

1



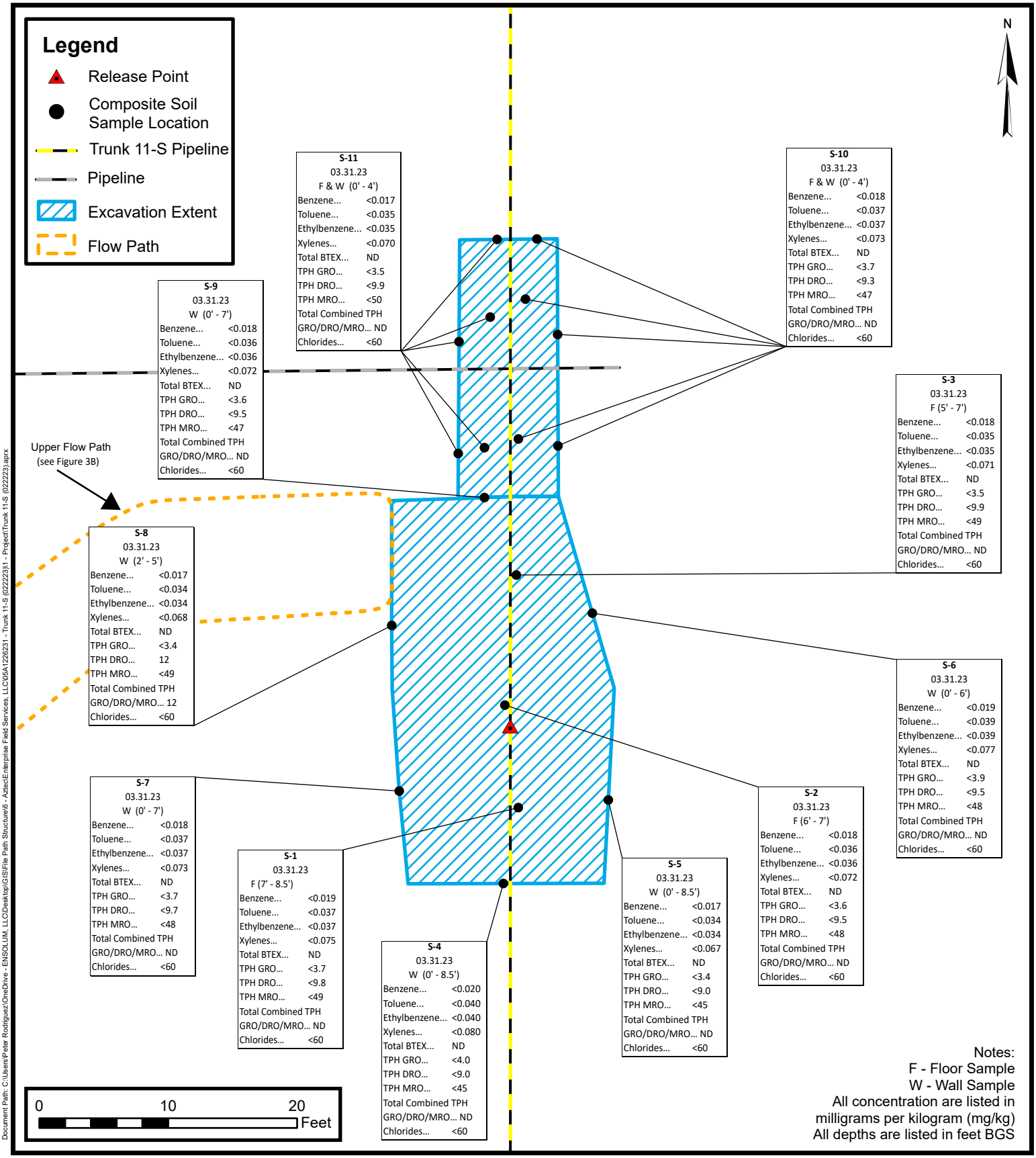
Document Path: C:\Users\Peter Rodriguez\OneDrive - ENSOLUM, LLC\Desktop\GIS\File Path Structure\6 - Aztec\Enterprise Field Services, LLC\05A1226231 - Trunk 11-S (022223)\1 - Project\Trunk 11-S (022223).aprx

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Site Vicinity Map

Enterprise Field Services, LLC
Trunk 11-S (02/22/23)
Project Number: 05A1226231
Unit Letter F, S36 T25N R4W, Rio Arriba County, New Mexico
36.35866, -107.20433

FIGURE
2



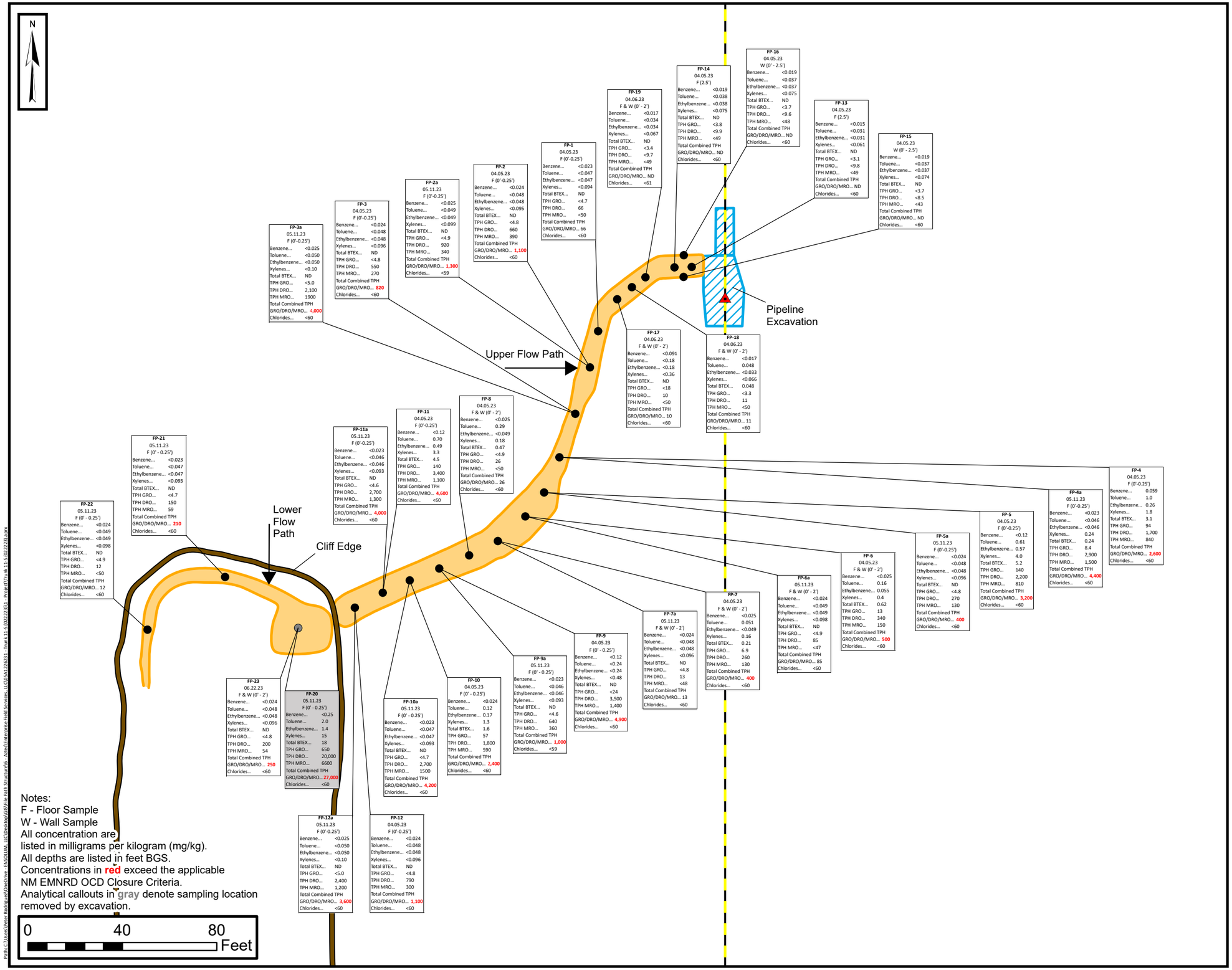
Document Path: C:\Users\Peter Rodriguez\OneDrive - ENSOLUM, LLC\Desktop\GIS\File Path Structure\6 - AztecEnterprise Field Services, LLC\05A1226231 - Trunk 11-S (022223)\1 - Project\Trunk 11-S (022223).aprx

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Pipeline Excavation Map with Soil Analytical Results

Enterprise Field Services, LLC
Trunk 11-S (02/22/23)
Project Number: 05A1226231
Unit Letter F, S36 T25N R4W, Rio Arriba County, New Mexico
36.35866, -107.20433

FIGURE
3A



LEGEND

- Release Point
- Composite Soil Sample Location
- Composite Soil Sample Removed by Excavation
- Pipeline Location
- Cliff Edge
- Excavation Extent
- Flow Path

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Flow Path Map

Enterprise Field Services, LLC
Trunk 11-S (02/22/23)

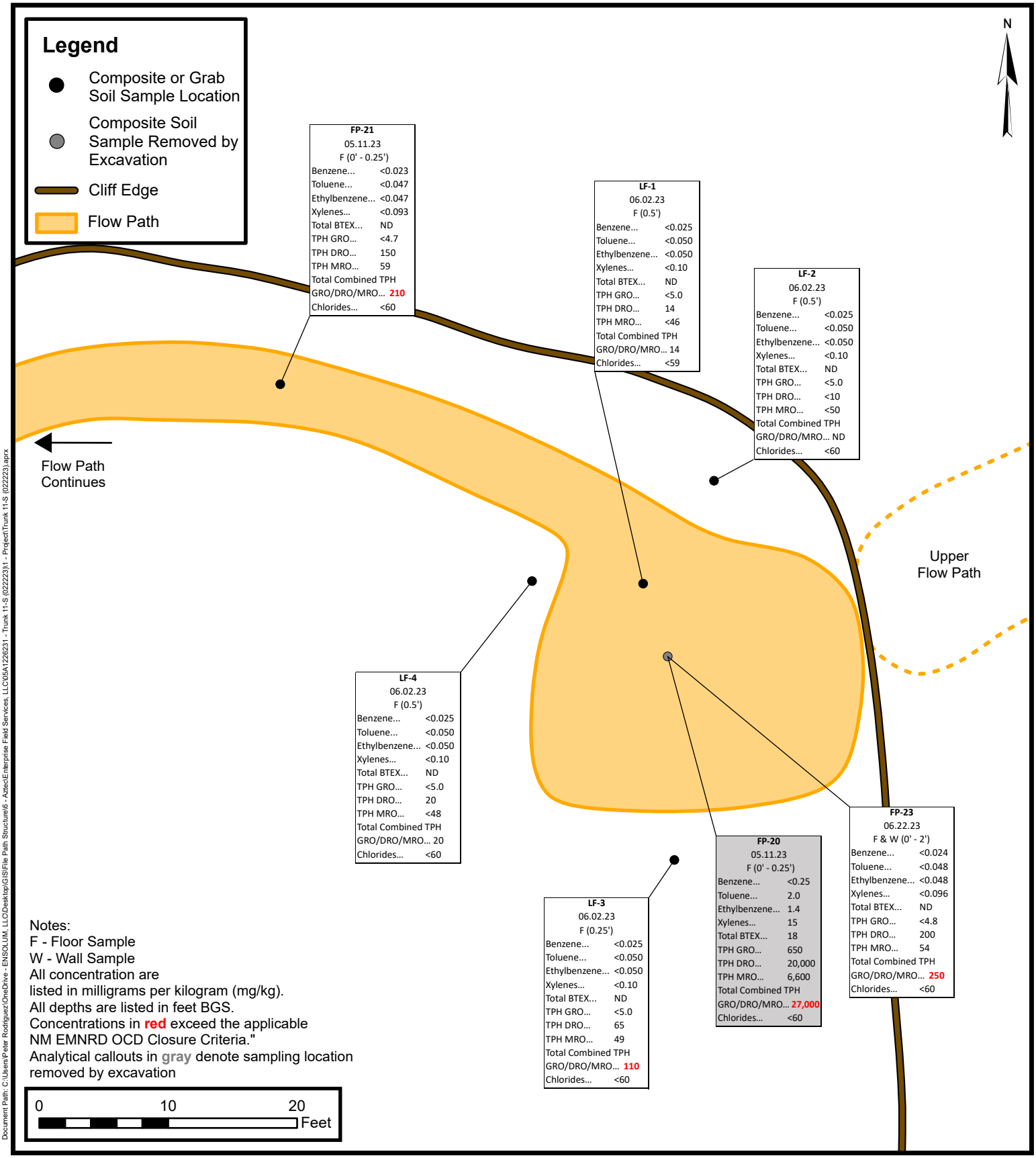
Unit Letter F, S36 T25N R4W
Rio Arriba County, New Mexico
36.35866, -107.20433

Figure

3B

Project Number: 05A1226231

Path: C:\Users\Peter Rodriguez\OneDrive - ENSOLUM, LLC\Desktop\GIS\Flow Path Structure\G - Active\Enterprise Field Services (1)\05A1226231 - Trunk 11-S (02222)\01 - Project\Trunk 11-S (022223).aprx



Document Path: C:\Users\Peter Rodriguez\OneDrive - ENSOLUM, LLC\Desktop\GIS\File Path Structure\6 - AztecEnterprise Field Services, LLC\05A1226231 - Trunk 11-S (022223)\1 - Project\Trunk 11-S (022223).aprx

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Lower Flow Path Pooling Area Map

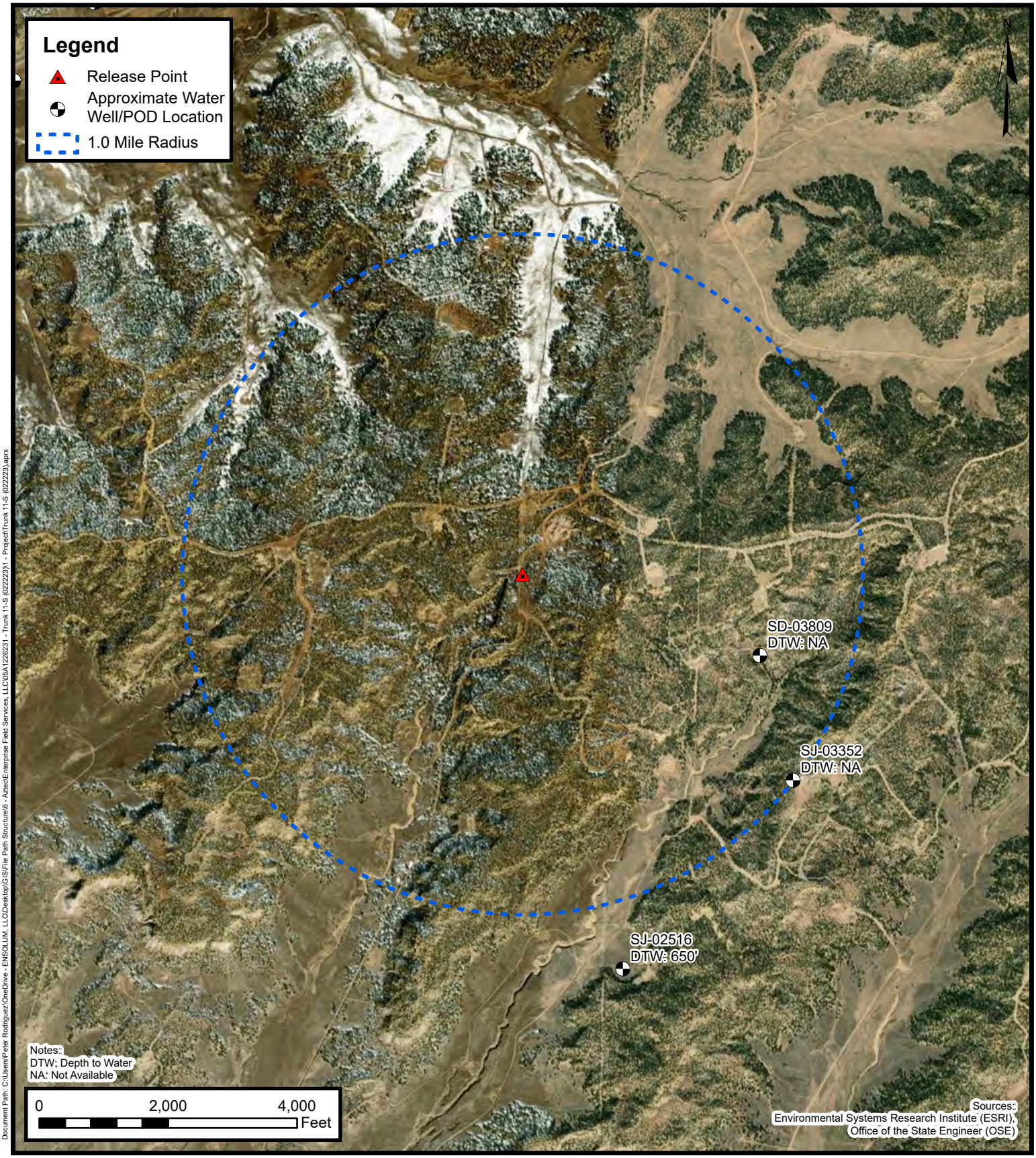
Enterprise Field Services, LLC
Trunk 11-S (02/22/23)
Project Number: 05A1226231
Unit Letter F, S36 T25N R4W, Rio Arriba County, New Mexico
36.35866, -107.20433

FIGURE
3C

ENSOLUM

APPENDIX B

Siting Figures and Documentation



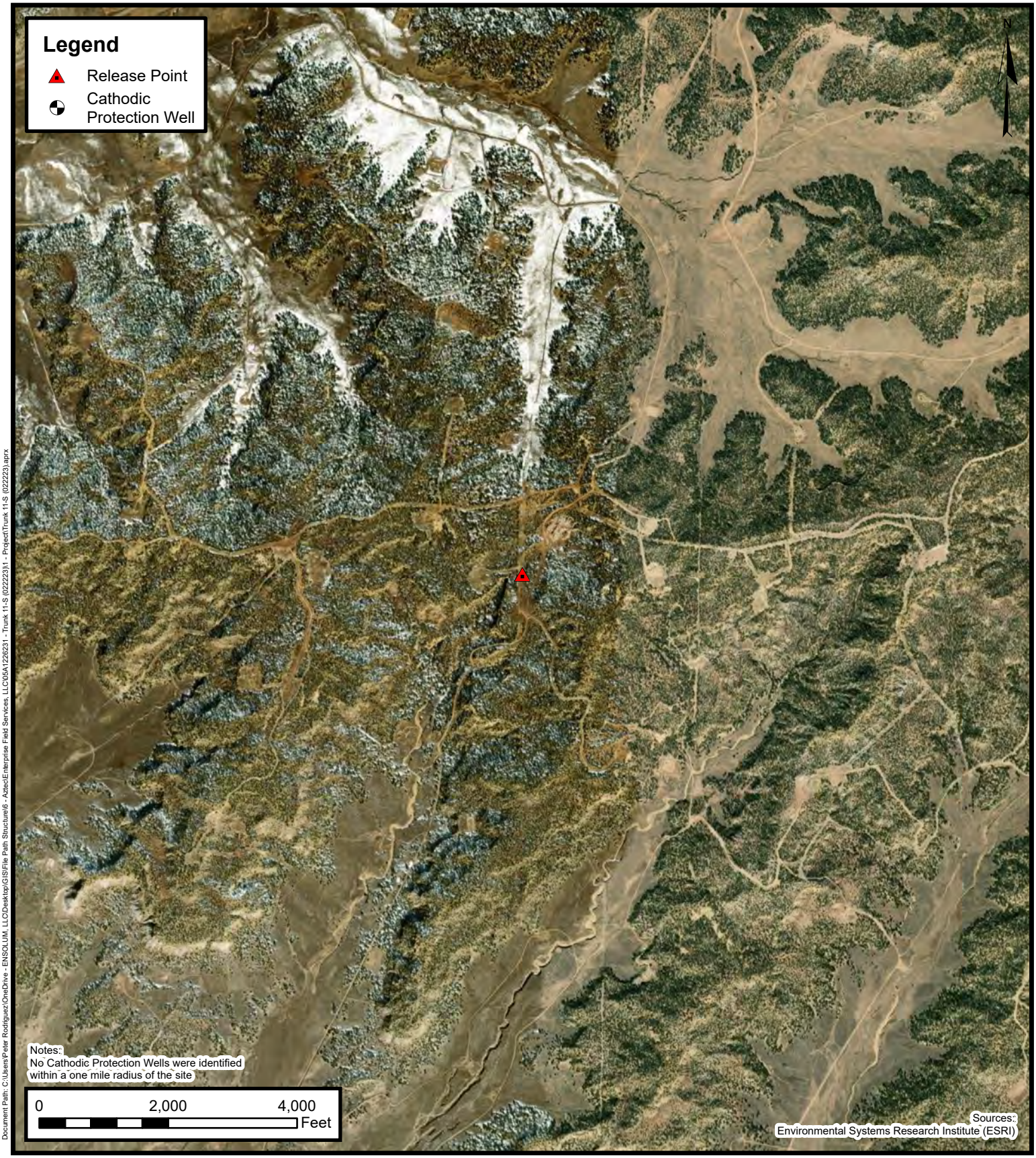
Document Path: C:\Users\Peter Rodriguez\OneDrive - ENSOLUM, LLC\Desktop\GIS\File Path Structure\6 - Aztec\Enterprise Field Services, LLC\05A1226231 - Trunk 11-S (022223)\1 - Project\Trunk 11-S (022223).aprx

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

1.0 Mile Radius Water Well/POD Location Map

Enterprise Field Services, LLC
Trunk 11-S (02/22/23)
Project Number: 05A1226231
Unit Letter F, S36 T25N R4W, Rio Arriba County, New Mexico
36.35866, -107.20433

FIGURE
A



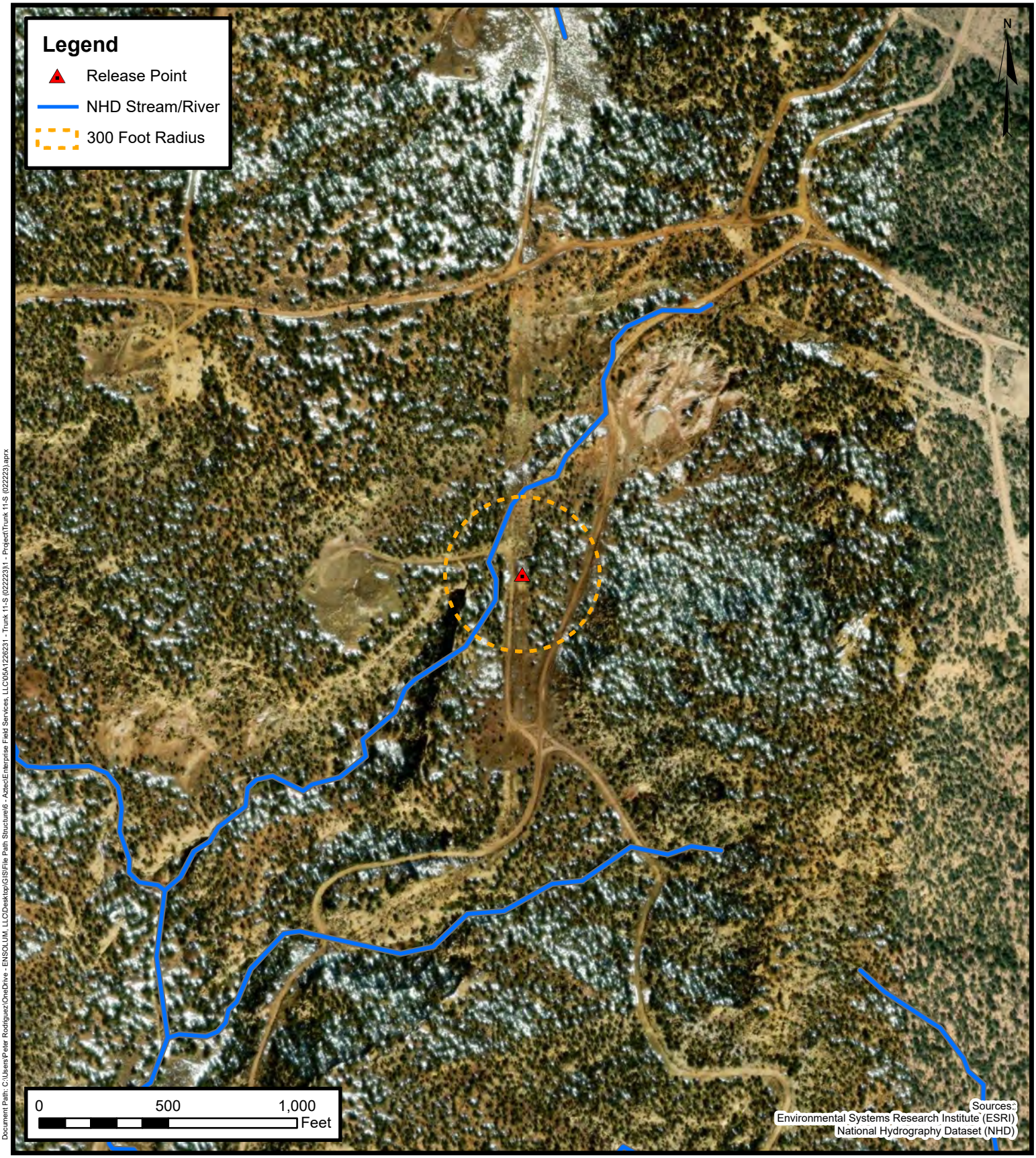
Document Path: C:\Users\Peter Rodriguez\OneDrive - ENSOLUM, LLC\Desktop\GIS\File Path Structure\6 - Aztec\Enterprise Field Services, LLC\05A1226231 - Trunk 11-S (022223)\1 - Project\Trunk 11-S (022223).aprx

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Cathodic Protection Well Recorded Depth to Water

Enterprise Field Services, LLC
Trunk 11-S (02/22/23)
Project Number: 05A1226231
Unit Letter F, S36 T25N R4W, Rio Arriba County, New Mexico
36.35866, -107.20433

FIGURE
B



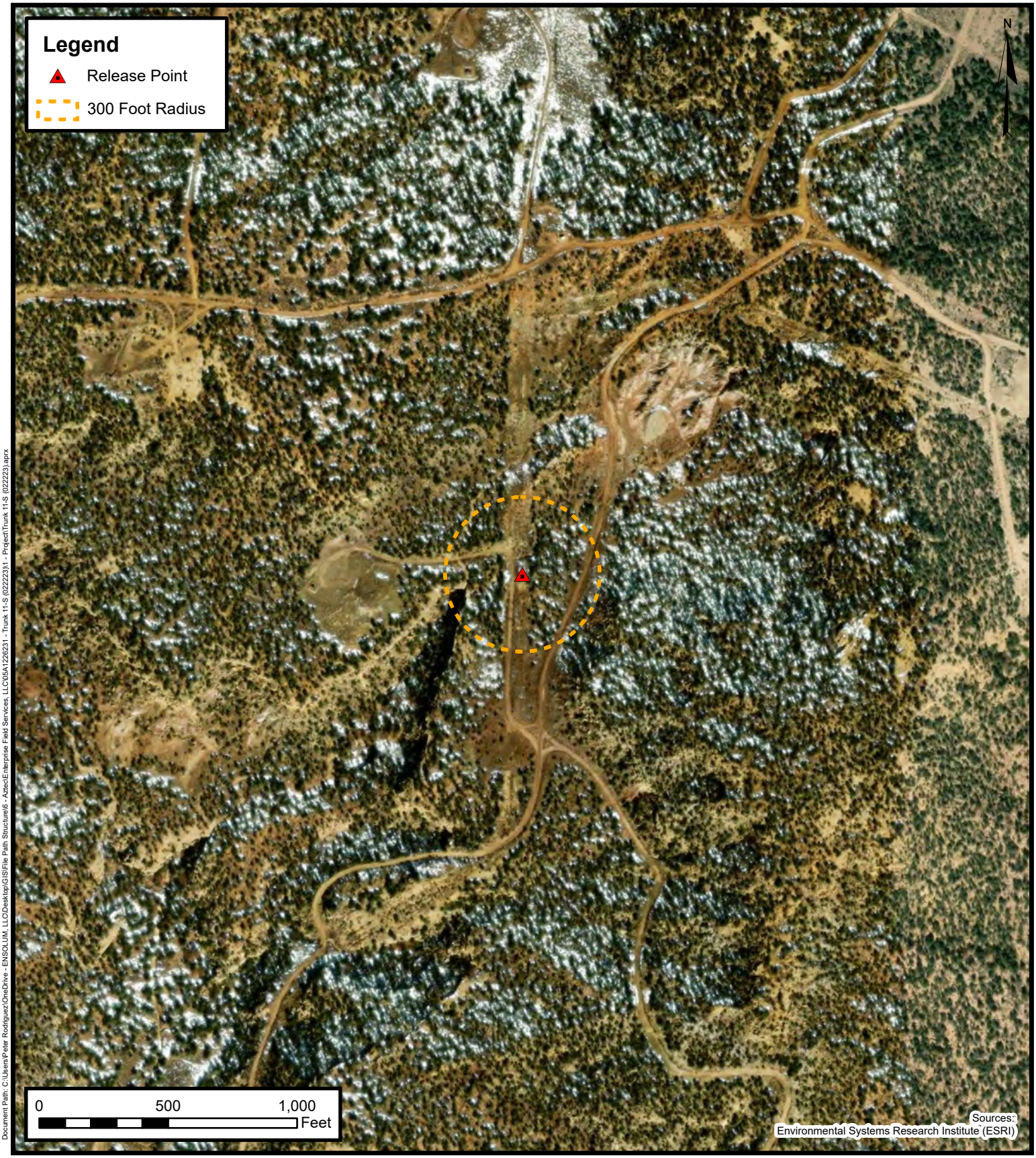
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

300 Foot Radius Watercourse and Drainage Identification

Enterprise Field Services, LLC
Trunk 11-S (02/22/23)
Project Number: 05A1226231
Unit Letter F, S36 T25N R4W, Rio Arriba County, New Mexico
36.35866, -107.20433

FIGURE

C



Document Path: C:\Users\Peter Rodriguez\OneDrive - ENSOLUM, LLC\Desktop\GIS\File Path Structure\6 - Aztec\Enterprise Field Services, LLC\05A1226231 - Trunk 11-S (022223)\1 - Project\Trunk 11-S (022223).aprx

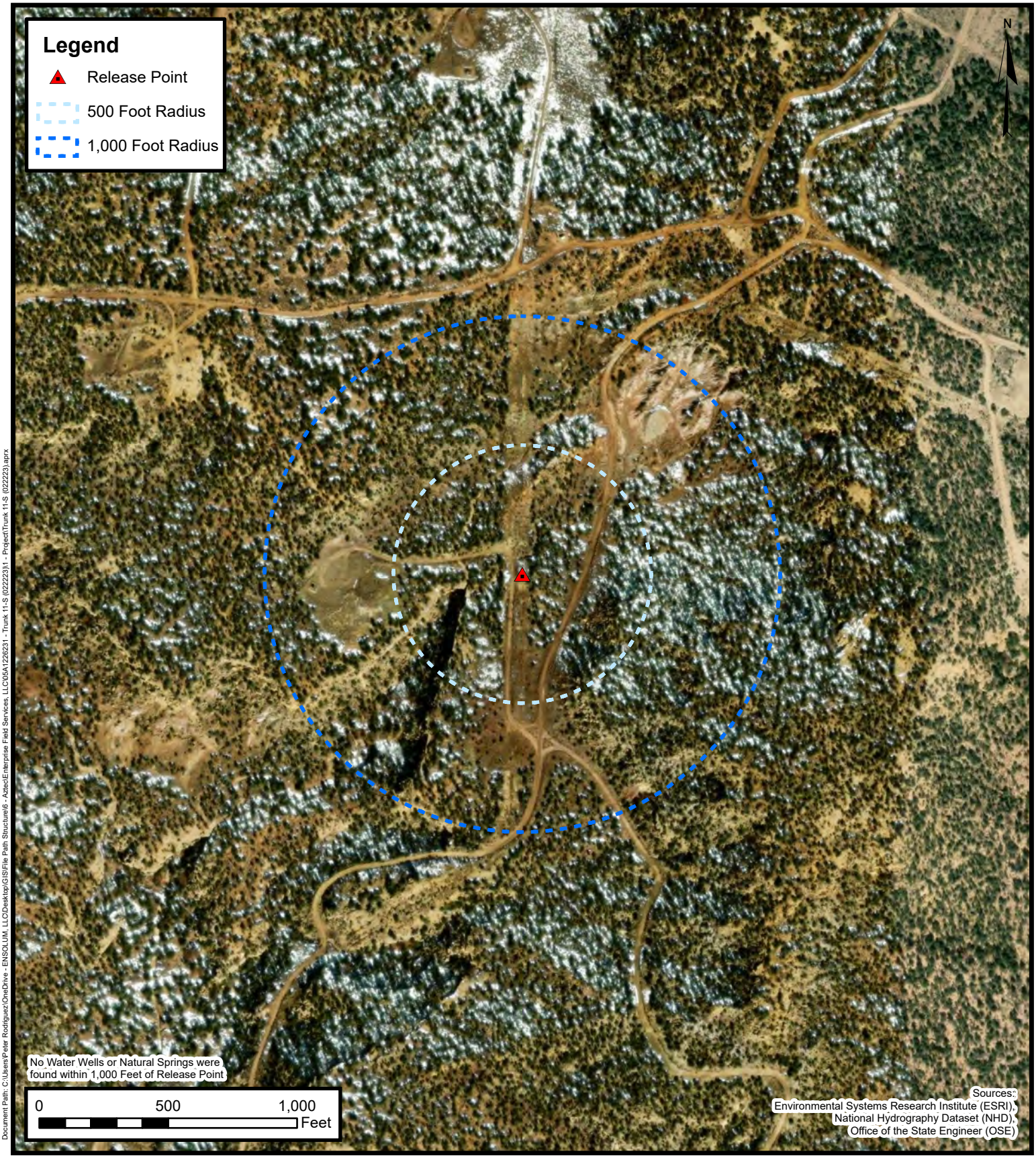
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

300 Foot Radius Occupied Structure Identification

Enterprise Field Services, LLC
Trunk 11-S (02/22/23)
Project Number: 05A1226231
Unit Letter F, S36 T25N R4W, Rio Arriba County, New Mexico
36.35866, -107.20433

FIGURE

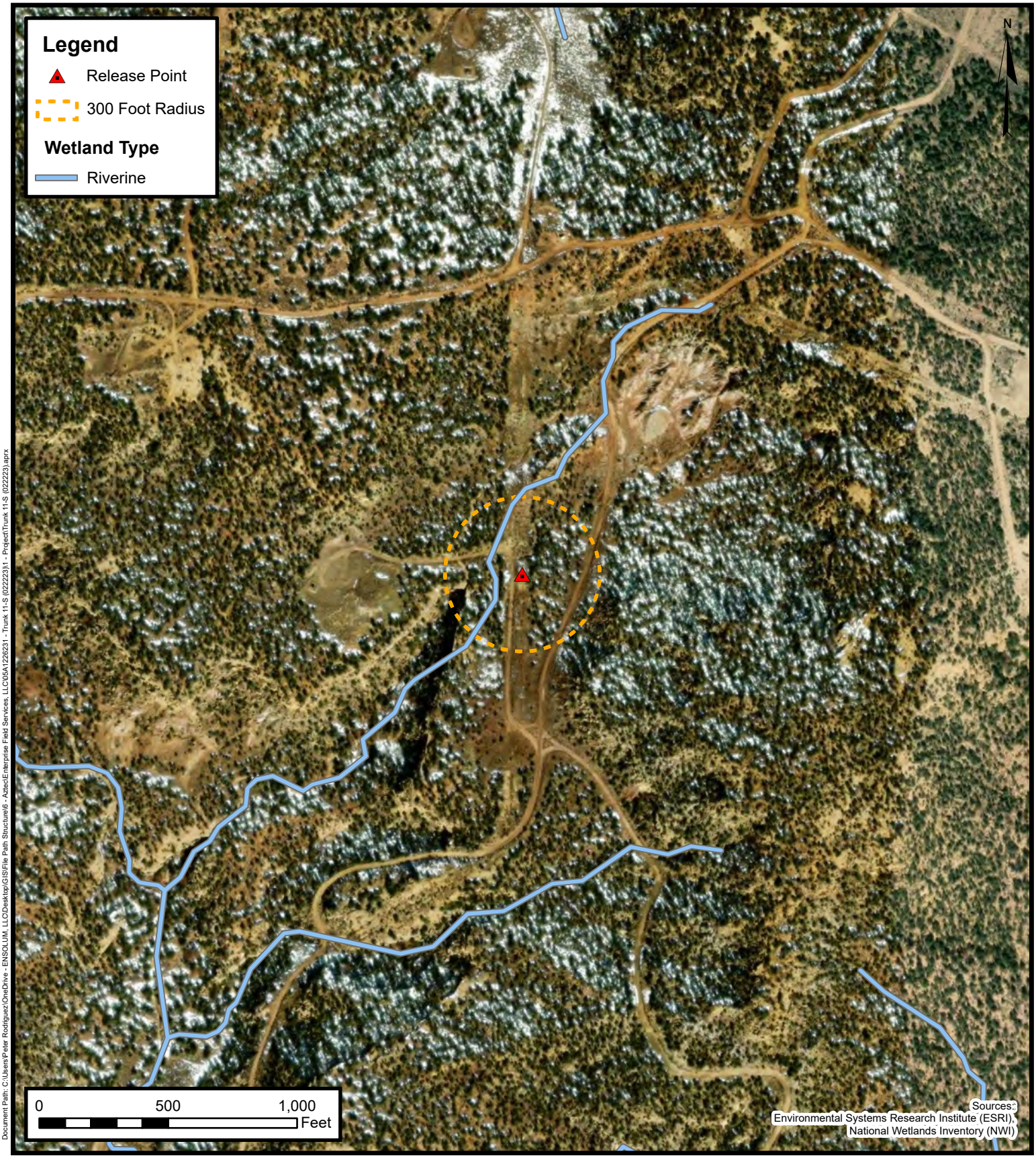
D



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Water Well and Natural Spring Location
Enterprise Field Services, LLC
Trunk 11-S (02/22/23)
Project Number: 05A1226231
Unit Letter F, S36 T25N R4W, Rio Arriba County, New Mexico
36.35866, -107.20433

FIGURE
E



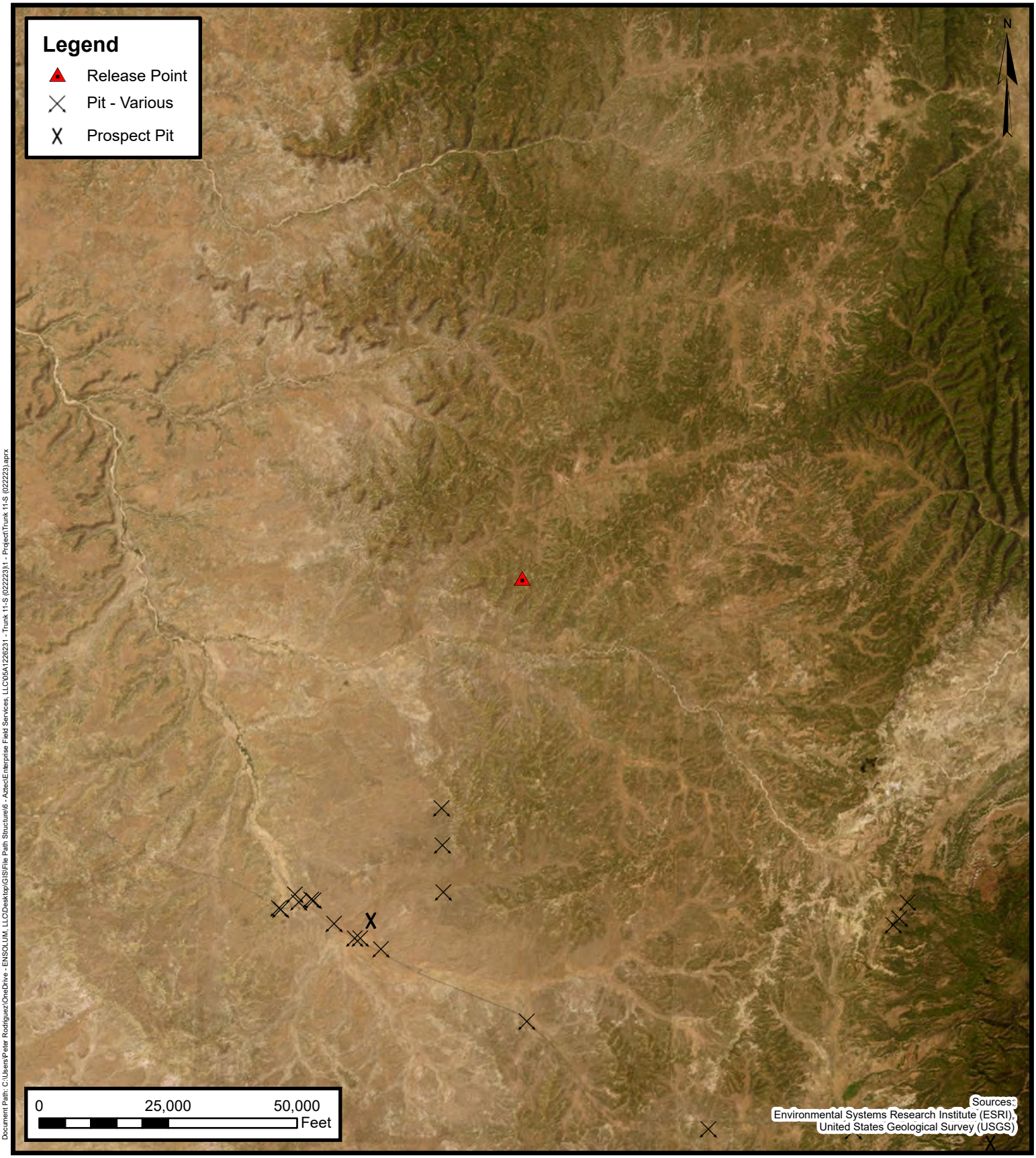
Document Path: C:\Users\Peter Rodriguez\OneDrive - ENSOLUM, LLC\Desktop\GIS\File Path Structure\6 - Aztec\Enterprise Field Services, LLC\05A1226231 - Trunk 11-S (022223)\1 - Project\Trunk 11-S (022223).aprx

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Wetlands

Enterprise Field Services, LLC
Trunk 11-S (02/22/23)
Project Number: 05A1226231
Unit Letter F, S36 T25N R4W, Rio Arriba County, New Mexico
36.35866, -107.20433

FIGURE
F



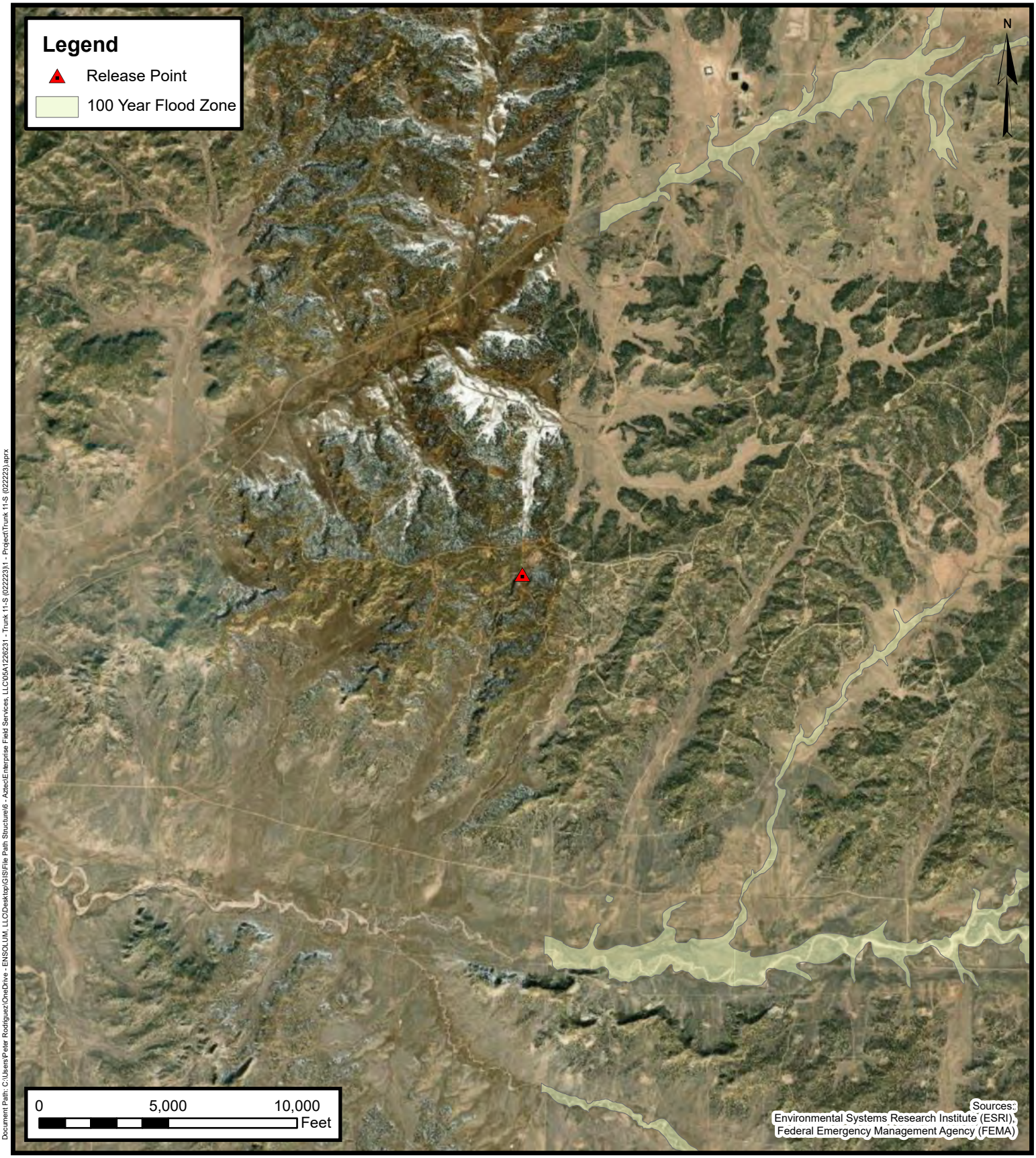
Document Path: C:\Users\Peter Rodriguez\OneDrive - ENSOLUM, LLC\Desktop\GIS\File Path Structure\6 - Aztec\Enterprise Field Services, LLC\05A1226231 - Trunk 11-S (022223)\1 - Project\Trunk 11-S (022223).aprx

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Mines, Mills, and Quarries

Enterprise Field Services, LLC
Trunk 11-S (02/22/23)
Project Number: 05A1226231
Unit Letter F, S36 T25N R4W, Rio Arriba County, New Mexico
36.35866, -107.20433

FIGURE
G



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

100-Year Flood Plain Map

Enterprise Field Services, LLC
Trunk 11-S (02/22/23)
Project Number: 05A1226231
Unit Letter F, S36 T25N R4W, Rio Arriba County, New Mexico
36.35866, -107.20433

FIGURE

H

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

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

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

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

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
RG 50845 POD1	MRG	SO			3	26	25N	04W	300247	4026989*	340	135	205

Average Depth to Water: **135 feet**

Minimum Depth: **135 feet**

Maximum Depth: **135 feet**

Record Count: 1

PLSS Search:

Section(s): 36, 25, 26, 35 **Township:** 25N **Range:** 04W

***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): 31, 30 **Township:** 25N **Range:** 03W

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

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

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

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

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 02516		SJ	RA	1	3	1	06	24N	03W	302693	4024121*	1000	650	350
SJ 02516 DCL	O		RA	1	3	1	06	24N	03W	302693	4024121*	1000	650	350

Average Depth to Water: **650 feet**

Minimum Depth: **650 feet**

Maximum Depth: **650 feet**

Record Count: 2

PLSS Search:

Section(s): 6 **Township:** 24N **Range:** 03W

***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): 1, 2 **Township:** 24N **Range:** 04W

ENSOLUM

APPENDIX C

Executed C-138 Solid Waste Acceptance Forms

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

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

Form C-138
Revised 08/01/11

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

97057-1125

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

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

2. Originating Site:
Trunk 11-S

AFE: N64995
PM: ME Eddleman
Pay Key: AM14058

2. Location of Material (Street Address, City, State or ULSTR):
UL F Section 35 T25N R4W; 36.35866, -107.20433

March/April 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) 443/15 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) 3-2-2023, representative for Enterprise Products Operating authorize to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, _____, 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: OFT and Subcontractors

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: 3/6/23

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

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.

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 11-S

AFE: N64995
PM: ME Eddleman
Pay Key: AM14058

2. Location of Material (Street Address, City, State or ULSTR):
UL F Section 35 T25N R4W; 36.35866, -107.20433

May 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) 16 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) 5-10-2023, 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: OFT and Subcontractors

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: 5/10/23

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

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.

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 11S

AFE: N64995
PM: Dwayne Dixon
Pay Key: AM14058

2. Location of Material (Street Address, City, State or ULSTR):
UL F Section 35 T25N R4W; 36.35866, -107.20433

4. Source and Description of Waste:
Source: Hydrocarbon contaminated soil/water/sludge associated with cleaning a natural condensate tank.
Description: Hydrocarbon contaminated soil/water/sludge associated with cleaning a natural condensate tank.
Estimated Volume 20 (yd³) / bbls Known Volume (to be entered by the operator at the end of the haul) 10 yd 96 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 6-19-2023, representative for Enterprise Products Operating authorize to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, _____, 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: OFT and Riley Industrial

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: 6/19/23

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

ENSOLUM

APPENDIX D

Photographic Documentation

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Trunk 11-S (02/22/23)
Ensolum Project No. 05A1226231

ENSOLUM

Photograph 1 Photograph Description: View of in process pipeline excavation activities.	
Photograph 2 Photograph Description: View of in process pipeline excavation activities.	
Photograph 3 Photograph Description: View of the final pipeline excavation.	

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Trunk 11-S (02/22/23)
Ensolum Project No. 05A1226231

ENSOLUM

Photograph 4 Photograph Description: View of the upper flow path (second sampling event).	
Photograph 5 Photograph Description: View of the upper flow path (second sampling event).	
Photograph 6 Photograph Description: View of the upper flow path.	

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Trunk 11-S (02/22/23)
Ensolum Project No. 05A1226231

ENSOLUM

Photograph 7 Photograph Description: View of the upper flow path after Simple Green® solution application.	
Photograph 8 Photograph Description: View of the upper flow path after Simple Green® solution application.	
Photograph 9 Photograph Description: View of the upper flow path after potassium permanganate application.	

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Trunk 11-S (02/22/23)
Ensolum Project No. 05A1226231

ENSOLUM

Photograph 10 Photograph Description: View of the upper flow path after potassium permanganate application.	
Photograph 11 Photograph Description: View of the lower pooling area after hydro-excavation.	
Photograph 12 Photograph Description: View of the upper flow path after initial restoration.	

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Trunk 11-S (02/22/23)
Ensolum Project No. 05A1226231

ENSOLUM

Photograph 13 Photograph Description: View of the upper flow path after initial restoration.	

ENSOLUM

APPENDIX E

Regulatory Correspondence

From: Yahoo Warning
To: Long, Thomas
Subject: Re: [EXTERNAL] Re: Trunk 11S - Section 35 T25N R4W; 36.35886, -107.20443
Date: Monday, June 19, 2023 9:02:00 PM

[Use caution with links/attachments]

Tom Long,

K.C. Manwell will be present at proposed remediation project Trunk 11S, any questions will be discussed in person on location. Thank You for the information and plan to see you on June 20, 2023.

Thank You,
K.C. Manwell

On Monday, June 19, 2023 at 07:09:19 AM PDT, Long, Thomas <tjlong@eprod.com> wrote:

Keith,

This email is a follow up to our phone conversation last week and a notification that Enterprise will begin the in-situ remediation beginning tomorrow morning. OFT will be removing residual soil from the flow path on the sandstone today. Envirotech will apply the potassium permanganate solution tomorrow. Riley Industrial will be removing soil from the base of the cliff on Thursday. If you have any questions, please call or email.

Thomas J. Long

Senior Environmental Scientist

Enterprise Products Company

614 Reilly Ave.

Farmington, New Mexico 87401

505-599-2286 (office)

505-215-4727 (Cell)

tjlong@eprod.com

Enterprise Products

From: Long, Thomas
Sent: Tuesday, June 6, 2023 8:51 AM
To: 'Yahoo Warning' <kcmanwell@yahoo.com>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: FW: [EXTERNAL] Re: Trunk 11S - Section 35 T25N R4W; 36.35886, -107.20443

Keith,

Please find the attached revised remediation plan for the Trunk 11S. Please let me know if you have any questions. I will keep you informed on the schedule.

Thomas J. Long

Senior Environmental Scientist

Enterprise Products Company

614 Reilly Ave.

Farmington, New Mexico 87401

505-599-2286 (office)

505-215-4727 (Cell)

tjlong@eprod.com

Enterprise Products

From: Long, Thomas
Sent: Friday, May 19, 2023 8:18 AM
To: 'Yahoo Warning' <kcmanwell@yahoo.com>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: FW: [EXTERNAL] Re: Trunk 11S - Section 35 T25N R4W; 36.35886, -107.20443

Keith,

Please find the attached site sketch and lab report for Trunk 11-S flow path. These samples were collected after the simple green application. Please let me know on how you would like to proceed.

Thomas J. Long

Senior Environmental Scientist

Enterprise Products Company

614 Reilly Ave.

Farmington, New Mexico 87401

505-599-2286 (office)

505-215-4727 (Cell)

tjlong@eprod.com

From: Long, Thomas
Sent: Friday, May 5, 2023 8:46 AM
To: 'Yahoo Warning' <kcmanwell@yahoo.com>
Cc: Stone, Brian <bmstone@eprod.com>; 'Kyle Summers' <ksummers@ensolum.com>; 'Velez, Nelson, EMNRD' <Nelson.Velez@state.nm.us>
Subject: RE: [EXTERNAL] Re: Trunk 11S - Section 35 T25N R4W; 36.35886, -107.20443

Keith,

This email is a notification that Enterprise has scheduled the in-situ remediation of the flow path at the Trunk 11S release site to begin Wednesday, May 10, 2023. Field work is anticipated to take 2-3 days. If you have any questions, please call or email.

Thomas J. Long

Senior Environmental Scientist

Enterprise Products Company

614 Reilly Ave.

Farmington, New Mexico 87401

505-599-2286 (office)

505-215-4727 (Cell)

tjlong@eprod.com

Enterprise Products

From: Yahoo Warning <kcmanwell@yahoo.com>
Sent: Friday, April 28, 2023 1:43 PM
To: Long, Thomas <tjlong@eprod.com>
Subject: Re: [EXTERNAL] Re: Trunk 11S - Section 35 T25N R4W; 36.35886, -107.20443

[Use caution with links/attachments]

Thomas Long,

After review of proposed addendum's, as discussed at the site location. JANEPO has granted approval on proposed plan as submitted, please contact K.C. Manwell on start dates. JANEPO would like to Thank Enterprise Products for their cooperation in resolving the non-compliance issue at hand, JANEPO looks forward to a continued transparent working relationship. Any questions or comments please contact myself at 505-330-8031.

Thank You,

K.C. Manwell

On Friday, April 28, 2023 at 07:38:21 AM PDT, Long, Thomas <tjlong@eprod.com> wrote:

Keith,

Please find the attached revised remediation plan for the Trunk 11S release site. I will keep you informed as to when we initiate the field work. If you have any questions, please call or email.

Thomas J. Long

Senior Environmental Scientist

Enterprise Products Company

614 Reilly Ave.

Farmington, New Mexico 87401

505-599-2286 (office)

505-215-4727 (Cell)

tjlong@eprod.com

From: Long, Thomas
Sent: Monday, April 24, 2023 9:18 AM
To: 'Yahoo Warning' <kcmanwell@yahoo.com>
Cc: Stone, Brian <bmstone@eprod.com>; 'Velez, Nelson, EMNRD' <Nelson.Velez@state.nm.us>
Subject: FW: [EXTERNAL] Re: Trunk 11S - Section 35 T25N R4W; 36.35886, -107.20443

Keith,

I just wanted to see if you had a chance to review this data? What are your thoughts on going forward?

Thomas J. Long

Senior Environmental Scientist

Enterprise Products Company

614 Reilly Ave.

Farmington, New Mexico 87401

505-599-2286 (office)

505-215-4727 (Cell)

tjlong@eprod.com

From: Long, Thomas
Sent: Tuesday, April 11, 2023 1:28 PM
To: 'Yahoo Warning' <kcmanwell@yahoo.com>
Cc: Stone, Brian <bmstone@eprod.com>; 'Velez, Nelson, EMNRD' <Nelson.Velez@state.nm.us>; 'Kyle Summers' <ksummers@ensolum.com>
Subject: RE: [EXTERNAL] Re: Trunk 11S - Section 35 T25N R4W; 36.35886, -107.20443

Keith,

Please find the attached site sketch and lab reports for the Trunk 11S flow path to the southeast. Most of the samples exceed the 100 ppm TPH remediation standard. All samples were collected from depths where bedrock sandstone was encountered and mechanical excavation was becoming difficult. Additional excavating will require utilizing rock teeth on the track hoe or back hoe. In-situ remediation, such as an application of potassium permanganate solution or a microbial solution (warm weather application) may be a more effective and less destructive remediation option. In addition, the canyon where the released fluids ran off the cliff and propagated downgradient needs to be evaluated prior to any in-situ remediation. Please let me know your thoughts. If you have any questions, please call or email.

Thomas J. Long

Senior Environmental Scientist

Enterprise Products Company

614 Reilly Ave.

Farmington, New Mexico 87401

505-599-2286 (office)

505-215-4727 (Cell)

tjlong@eprod.com

From: Yahoo Warning <kcmanwell@yahoo.com>
Sent: Tuesday, April 4, 2023 9:42 PM
To: Long, Thomas <tjlong@eprod.com>
Subject: Re: [EXTERNAL] Re: Trunk 11S - Section 35 T25N R4W; 36.35886, -107.20443

[Use caution with links/attachments]

Thomas Long,

FYI, K.C. Manwell is planning to attend proposed sampling event as scheduled.

Thank You,

K.C. MANWELL

On Tuesday, April 4, 2023 at 01:51:51 PM PDT, Long, Thomas <tjlong@eprod.com> wrote:

Keith,

This email is a notification that Enterprise will be collecting soil samples for laboratory analysis at the Trunk 11S release site tomorrow April 5, 2023 at 11:00 a.m. The samples will be collected from the flow path area towards the canyon. If you have any questions, please call or email.

Thomas J. Long

Senior Environmental Scientist

Enterprise Products Company

614 Reilly Ave.

Farmington, New Mexico 87401

505-599-2286 (office)

505-215-4727 (Cell)

tjlong@eprod.com

Enterprise Products

From: Long, Thomas
Sent: Tuesday, April 4, 2023 8:18 AM
To: 'Yahoo Warning' <kcmanwell@yahoo.com>
Cc: Stone, Brian <bmstone@eprod.com>; 'Velez, Nelson, EMNRD' <Nelson.Velez@state.nm.us>
Subject: RE: [EXTERNAL] Re: Trunk 11S - Section 35 T25N R4W; 36.35886, -107.20443

Keith,

Please find the attached site sketch and lab report for the Trunk 11S excavation. We will be stock piling clean soil onsite and remediating the flow path today. Please let me know 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

From: Yahoo Warning <kcmanwell@yahoo.com>
Sent: Friday, March 31, 2023 6:38 AM
To: Long, Thomas <tjlong@eprod.com>
Subject: Re: [EXTERNAL] Re: Trunk 11S - Section 35 T25N R4W; 36.35886, -107.20443

[Use caution with links/attachments]

Re: Proposed sampling, K.C. Manwell will be present during sampling event.

Thank You,

K.C. Manwell

On Thursday, March 30, 2023 at 02:16:49 PM MDT, Long, Thomas <tjlong@eprod.com> wrote:

Keith,

The email is a notification that Enterprise will be collecting soil samples for laboratory analysis at the Trunk 11S excavation tomorrow, March 31, 2023 at 12:00 p.m. If you have any questions, please call or email.

Thomas J. Long

Senior Environmental Scientist

Enterprise Products Company

614 Reilly Ave.

Farmington, New Mexico 87401

505-599-2286 (office)

505-215-4727 (Cell)

tjlong@eprod.com

Enterprise Products

From: Yahoo Warning <kcmanwell@yahoo.com>
Sent: Friday, February 24, 2023 9:57 AM
To: Long, Thomas <tjlong@eprod.com>
Subject: [EXTERNAL] Re: Trunk 11S - Section 35 T25N R4W; 36.35886, -107.20443

[Use caution with links/attachments]

Thomas Long,

Upon receiving the proposed remediation plan for Enterprise Trunk 11S, JANEPO has reviewed and will approve the plan as submitted. Please be advised that the proposed plan should remain in draft form, due to unforeseen circumstances that may occur. JANEPO would like Thank Enterprise for prompt response to this non-compliance issue, and May we continue with a transparent working relationship.

Thank You,

K.C. Manwell

On Friday, February 24, 2023 at 08:24:56 AM MST, Long, Thomas <tjlong@eprod.com> wrote:

Keith,

Please find the attached remediation plan for the Trunk 11S release. If you have any questions, please call or email.

Thomas J. Long

Senior Environmental Scientist

Enterprise Products Company

614 Reilly Ave.

Farmington, New Mexico 87401

505-599-2286 (office)

505-215-4727 (Cell)

tjlong@eprod.com

From: Long, Thomas
Sent: Thursday, February 23, 2023 9:53 AM
To: 'Yahoo Warning' <kcmanwell@yahoo.com>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: Trunk 11S - Section 35T25N R4W; 36.35886, -107.20443

Keith,

This email is a notification that Enterprise has a release of natural gas on the Trunk 11S pipeline yesterday at approximately 11:33 a.m. No liquids were observed on the ground surface. No washes were affected. The pipeline has been isolated, depressurized, locked and tagged out. I will keep you informed on the repair and remediation schedule. If you have any questions, please call or email.

Thomas J. Long

Senior Environmental Scientist

Enterprise Products Company

614 Reilly Ave.

Farmington, New Mexico 87401

505-599-2286 (office)

505-215-4727 (Cell)

tjlong@eprod.com

Enterprise Products

ENSOLUM

APPENDIX F

Table 1 – Soil Analytical Summary

ENSOLUM

TABLE 1
Trunk 11S (02/22/23)
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 Disposal/Remediation													
FP-20	05.11.23	C	0 to 0.25	<0.25	2.0	1.4	15	18	650	20,000	6,600	**27,000**	<60
Excavation Composite Soil Samples													
S-1	03.31.23	C	7 to 8.5	<0.019	<0.037	<0.037	<0.075	ND	<3.7	<9.8	<49	ND	<60
S-2	03.31.23	C	6 to 7	<0.018	<0.036	<0.036	<0.072	ND	<3.6	<9.5	<48	ND	<60
S-3	03.31.23	C	5 to 7	<0.018	<0.035	<0.035	<0.071	ND	<3.5	<9.9	<49	ND	<60
S-4	03.31.23	C	0 to 8.5	<0.020	<0.040	<0.040	<0.080	ND	<4.0	<9.0	<45	ND	<60
S-5	03.31.23	C	0 to 8.5	<0.017	<0.034	<0.034	<0.067	ND	<3.4	<9.0	<45	ND	<60
S-6	03.31.23	C	0 to 6	<0.019	<0.039	<0.039	<0.077	ND	<3.9	<9.5	<48	ND	<60
S-7	03.31.23	C	0 to 7	<0.018	<0.037	<0.037	<0.073	ND	<3.7	<9.7	<48	ND	<60
S-8	03.31.23	C	2 to 5	<0.017	<0.034	<0.034	<0.068	ND	<3.4	12	<49	12	<60
S-9	03.31.23	C	0 to 7	<0.018	<0.036	<0.036	<0.072	ND	<3.6	<9.5	<47	ND	<60
S-10	03.31.23	C	0 to 4	<0.018	<0.037	<0.037	<0.073	ND	<3.7	<9.3	<47	ND	<60
S-11	03.31.23	C	0 to 4	<0.017	<0.035	<0.035	<0.070	ND	<3.5	<9.9	<50	ND	<60
Flowpath Composite Soil Samples													
FP-1	04.05.23	C	0 to 0.25	<0.023	<0.047	<0.047	<0.094	ND	<4.7	66	<50	66	<60
FP-2	04.05.23	C	0 to 0.25	<0.024	<0.048	<0.048	<0.095	ND	<4.8	660	390	**1,100**	<60
FP-2a	05.11.23	C	0 to 0.25	<0.025	<0.049	<0.049	<0.099	ND	<4.9	920	340	**1,300**	<59
FP-3	04.05.23	C	0 to 0.25	<0.024	<0.048	<0.048	<0.096	ND	<4.8	550	270	**820**	<60
FP-3a	05.11.23	C	0 to 0.25	<0.025	<0.050	<0.050	<0.10	ND	<5.0	2,100	1,900	**4,000**	<60
FP-4	04.05.23	C	0 to 0.25	0.059	1.0	0.26	1.8	3.1	94	1,700	840	**2,600**	<60
FP-4a	05.11.23	C	0 to 0.25	<0.023	<0.046	<0.046	0.24	0.24	8.4	2,900	1,500	**4,400**	<60
FP-5	04.05.23	C	0 to 0.25	<0.12	0.61	0.57	4.0	5.2	140	2,200	810	**3,200**	<60
FP-5a	05.11.23	C	0 to 0.25	<0.024	<0.048	<0.048	<0.096	ND	<4.8	270	130	**400**	<60

ENSOLUM

TABLE 1
Trunk 11S (02/22/23)
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**
FP-6	04.05.23	C	0 to 2	<0.025	0.16	0.055	0.40	0.62	13	340	150	**500**	<60
FP-6a	05.11.23	C	0 to 2	<0.024	<0.049	<0.049	<0.098	ND	<4.9	85	<47	85	<60
FP-7	04.05.23	C	0 to 2	<0.025	0.051	<0.049	0.16	0.21	6.9	260	130	**400**	<60
FP-7a	05.11.23	C	0 to 2	<0.024	<0.048	<0.048	<0.096	ND	<4.8	13	<48	13	<60
FP-8	04.05.23	C	0 to 2	<0.025	0.29	<0.049	0.18	0.47	<4.9	26	<50	26	<60
FP-9	04.05.23	C	0 to 0.25	<0.12	<0.24	<0.24	<0.48	ND	<24	3,500	1,400	**4,900**	<60
FP-9a	05.11.23	C	0 to 0.25	<0.023	<0.046	<0.046	<0.093	ND	<4.6	640	360	**1,000**	<59
FP-10	04.05.23	C	0 to 0.25	<0.024	0.12	0.17	1.3	1.6	57	1,800	590	**2,400**	<60
FP-10a	05.11.23	C	0 to 0.25	<0.023	<0.047	<0.047	<0.093	ND	<4.7	2,700	1,500	**4,200**	<60
FP-11	04.05.23	C	0 to 0.25	<0.12	0.70	0.49	3.3	4.5	140	3,400	1,100	**4,600**	<60
FP-11a	05.11.23	C	0 to 0.25	<0.023	<0.046	<0.046	<0.093	ND	<4.6	2,700	1,300	**4,000**	<60
FP-12	04.05.23	C	0 to 0.25	<0.024	<0.048	<0.048	<0.096	ND	<4.8	790	300	**1,100**	<60
FP-12a	05.11.23	C	0 to 0.25	<0.025	<0.050	<0.050	<0.10	ND	<5.0	2,400	1,200	**3,600**	<60
FP-13	04.05.23	C	2.5	<0.015	<0.031	<0.031	<0.061	ND	<3.1	<9.8	<49	ND	<60
FP-14	04.05.23	C	2.5	<0.019	<0.038	<0.038	<0.075	ND	<3.8	<9.9	<49	ND	<60
FP-15	04.05.23	C	0 to 2.5	<0.019	<0.037	<0.037	<0.074	ND	<3.7	<8.5	<43	ND	<60
FP-16	04.05.23	C	0 to 2.5	<0.019	<0.037	<0.037	<0.075	ND	<3.7	<9.6	<48	ND	<60
FP-17	04.06.23	C	0 to 2	<0.091	<0.18	<0.18	<0.36	ND	<18	10	<50	10	<60
FP-18	04.06.23	C	0 to 2	<0.017	0.048	<0.033	<0.066	0.048	<3.3	11	<50	11	<60
FP-19	04.06.23	C	0 to 2	<0.017	<0.034	<0.034	<0.067	ND	<3.4	<9.7	<49	ND	<61
FP-21	05.11.23	C	0 to 0.25	<0.023	<0.047	<0.047	<0.093	ND	<4.7	150	59	**210**	<60
FP-22	05.11.23	C	0 to 0.25	<0.024	<0.049	<0.049	<0.098	ND	<4.9	12	<50	12	<60
FP-23	06.22.23	C	0 to 2	<0.024	<0.048	<0.048	<0.096	ND	<4.8	200	54	**250**	<60

ENSOLUM

TABLE 1
Trunk 11S (02/22/23)
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**
Lower Flowpath Soil Boring Soil Samples													
LF-1	06.02.23	G	0.5	<0.025	<0.050	<0.050	<0.10	ND	<5.0	14	<46	14	<59
LF-2	06.02.23	G	0.5	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<10	<50	ND	<60
LF-3	06.02.23	G	0.25	<0.025	<0.050	<0.050	<0.10	ND	<5.0	65	49	**110**	<60
LF-4	06.02.23	G	0.5	<0.025	<0.050	<0.050	<0.10	ND	<5.0	20	<48	20	<60

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

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

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

NA = Not Analyzed

NE = Not established

mg/kg = milligrams per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Total Xylenes

TPH = Total Petroleum Hydrocarbons

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics

ENSOLUM

APPENDIX G

Laboratory Data Sheets & Chain of Custody Documentation

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

April 06, 2023

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

RE: Trunk 11S Feb 2023 OrderNo.: 2304001

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 11 sample(s) on 4/1/2023 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued April 5, 2023.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2304001**
Date Reported: **4/6/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-1
Project: Trunk 11S Feb 2023 **Collection Date:** 3/31/2023 12:00:00 PM
Lab ID: 2304001-001 **Matrix:** MEOH (SOIL) **Received Date:** 4/1/2023 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	4/3/2023 10:24:45 AM	74081
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/3/2023 12:12:57 PM	74073
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/3/2023 12:12:57 PM	74073
Surr: DNOP	192	69-147	S	%Rec	1	4/3/2023 12:12:57 PM	74073
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	4/3/2023 11:29:00 AM	GS9573
Surr: BFB	88.6	37.7-212		%Rec	1	4/3/2023 11:29:00 AM	GS9573
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.019		mg/Kg	1	4/3/2023 11:29:00 AM	BS9573
Toluene	ND	0.037		mg/Kg	1	4/3/2023 11:29:00 AM	BS9573
Ethylbenzene	ND	0.037		mg/Kg	1	4/3/2023 11:29:00 AM	BS9573
Xylenes, Total	ND	0.075		mg/Kg	1	4/3/2023 11:29:00 AM	BS9573
Surr: 4-Bromofluorobenzene	86.7	70-130		%Rec	1	4/3/2023 11:29:00 AM	BS9573

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 **2304001**
Date Reported: **4/6/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-2
Project: Trunk 11S Feb 2023 **Collection Date:** 3/31/2023 12:05:00 PM
Lab ID: 2304001-002 **Matrix:** MEOH (SOIL) **Received Date:** 4/1/2023 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	4/3/2023 10:37:09 AM	74081
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	4/3/2023 12:37:25 PM	74073
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/3/2023 12:37:25 PM	74073
Surr: DNOP	198	69-147	S	%Rec	1	4/3/2023 12:37:25 PM	74073
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	4/3/2023 11:51:00 AM	GS9573
Surr: BFB	90.0	37.7-212		%Rec	1	4/3/2023 11:51:00 AM	GS9573
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.018		mg/Kg	1	4/3/2023 11:51:00 AM	BS9573
Toluene	ND	0.036		mg/Kg	1	4/3/2023 11:51:00 AM	BS9573
Ethylbenzene	ND	0.036		mg/Kg	1	4/3/2023 11:51:00 AM	BS9573
Xylenes, Total	ND	0.072		mg/Kg	1	4/3/2023 11:51:00 AM	BS9573
Surr: 4-Bromofluorobenzene	85.5	70-130		%Rec	1	4/3/2023 11:51:00 AM	BS9573

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 **2304001**
Date Reported: **4/6/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-3
Project: Trunk 11S Feb 2023 **Collection Date:** 3/31/2023 12:10:00 PM
Lab ID: 2304001-003 **Matrix:** MEOH (SOIL) **Received Date:** 4/1/2023 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	4/3/2023 10:49:34 AM	74081
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/3/2023 1:01:32 PM	74073
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/3/2023 1:01:32 PM	74073
Surr: DNOP	199	69-147	S	%Rec	1	4/3/2023 1:01:32 PM	74073
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	4/3/2023 12:12:00 PM	GS9573
Surr: BFB	89.1	37.7-212		%Rec	1	4/3/2023 12:12:00 PM	GS9573
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.018		mg/Kg	1	4/3/2023 12:12:00 PM	BS9573
Toluene	ND	0.035		mg/Kg	1	4/3/2023 12:12:00 PM	BS9573
Ethylbenzene	ND	0.035		mg/Kg	1	4/3/2023 12:12:00 PM	BS9573
Xylenes, Total	ND	0.071		mg/Kg	1	4/3/2023 12:12:00 PM	BS9573
Surr: 4-Bromofluorobenzene	86.4	70-130		%Rec	1	4/3/2023 12:12:00 PM	BS9573

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 **2304001**
Date Reported: **4/6/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-4
Project: Trunk 11S Feb 2023 **Collection Date:** 3/31/2023 12:15:00 PM
Lab ID: 2304001-004 **Matrix:** MEOH (SOIL) **Received Date:** 4/1/2023 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	4/3/2023 11:26:48 AM	74081
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	4/3/2023 1:25:52 PM	74073
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	4/3/2023 1:25:52 PM	74073
Surr: DNOP	204	69-147	S	%Rec	1	4/3/2023 1:25:52 PM	74073
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	4/3/2023 12:34:00 PM	GS9573
Surr: BFB	90.6	37.7-212		%Rec	1	4/3/2023 12:34:00 PM	GS9573
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.020		mg/Kg	1	4/3/2023 12:34:00 PM	BS9573
Toluene	ND	0.040		mg/Kg	1	4/3/2023 12:34:00 PM	BS9573
Ethylbenzene	ND	0.040		mg/Kg	1	4/3/2023 12:34:00 PM	BS9573
Xylenes, Total	ND	0.080		mg/Kg	1	4/3/2023 12:34:00 PM	BS9573
Surr: 4-Bromofluorobenzene	88.9	70-130		%Rec	1	4/3/2023 12:34:00 PM	BS9573

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 **2304001**
Date Reported: **4/6/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-5
Project: Trunk 11S Feb 2023 **Collection Date:** 3/31/2023 12:20:00 PM
Lab ID: 2304001-005 **Matrix:** MEOH (SOIL) **Received Date:** 4/1/2023 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	4/3/2023 11:39:13 AM	74081
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	4/3/2023 11:31:50 AM	74073
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	4/3/2023 11:31:50 AM	74073
Surr: DNOP	169	69-147	S	%Rec	1	4/3/2023 11:31:50 AM	74073
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	4/3/2023 12:55:00 PM	GS9573
Surr: BFB	90.7	37.7-212		%Rec	1	4/3/2023 12:55:00 PM	GS9573
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.017		mg/Kg	1	4/3/2023 12:55:00 PM	BS9573
Toluene	ND	0.034		mg/Kg	1	4/3/2023 12:55:00 PM	BS9573
Ethylbenzene	ND	0.034		mg/Kg	1	4/3/2023 12:55:00 PM	BS9573
Xylenes, Total	ND	0.067		mg/Kg	1	4/3/2023 12:55:00 PM	BS9573
Surr: 4-Bromofluorobenzene	85.0	70-130		%Rec	1	4/3/2023 12:55:00 PM	BS9573

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 **2304001**
Date Reported: **4/6/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-6
Project: Trunk 11S Feb 2023 **Collection Date:** 3/31/2023 12:25:00 PM
Lab ID: 2304001-006 **Matrix:** MEOH (SOIL) **Received Date:** 4/1/2023 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	4/3/2023 11:51:37 AM	74081
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	4/3/2023 11:55:50 AM	74073
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/3/2023 11:55:50 AM	74073
Surr: DNOP	86.1	69-147		%Rec	1	4/3/2023 11:55:50 AM	74073
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	4/3/2023 1:17:00 PM	GS9573
Surr: BFB	90.3	37.7-212		%Rec	1	4/3/2023 1:17:00 PM	GS9573
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.019		mg/Kg	1	4/3/2023 1:17:00 PM	BS9573
Toluene	ND	0.039		mg/Kg	1	4/3/2023 1:17:00 PM	BS9573
Ethylbenzene	ND	0.039		mg/Kg	1	4/3/2023 1:17:00 PM	BS9573
Xylenes, Total	ND	0.077		mg/Kg	1	4/3/2023 1:17:00 PM	BS9573
Surr: 4-Bromofluorobenzene	85.8	70-130		%Rec	1	4/3/2023 1:17:00 PM	BS9573

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 **2304001**
Date Reported: **4/6/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-7
Project: Trunk 11S Feb 2023 **Collection Date:** 3/31/2023 12:30:00 PM
Lab ID: 2304001-007 **Matrix:** MEOH (SOIL) **Received Date:** 4/1/2023 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	4/3/2023 12:04:02 PM	74081
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/3/2023 12:19:53 PM	74073
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/3/2023 12:19:53 PM	74073
Surr: DNOP	84.1	69-147		%Rec	1	4/3/2023 12:19:53 PM	74073
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	4/3/2023 1:39:00 PM	GS9573
Surr: BFB	88.3	37.7-212		%Rec	1	4/3/2023 1:39:00 PM	GS9573
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.018		mg/Kg	1	4/3/2023 1:39:00 PM	BS9573
Toluene	ND	0.037		mg/Kg	1	4/3/2023 1:39:00 PM	BS9573
Ethylbenzene	ND	0.037		mg/Kg	1	4/3/2023 1:39:00 PM	BS9573
Xylenes, Total	ND	0.073		mg/Kg	1	4/3/2023 1:39:00 PM	BS9573
Surr: 4-Bromofluorobenzene	86.7	70-130		%Rec	1	4/3/2023 1:39:00 PM	BS9573

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 **2304001**
Date Reported: **4/6/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-8
Project: Trunk 11S Feb 2023 **Collection Date:** 3/31/2023 12:35:00 PM
Lab ID: 2304001-008 **Matrix:** MEOH (SOIL) **Received Date:** 4/1/2023 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	4/3/2023 12:16:27 PM	74081
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	12	9.9		mg/Kg	1	4/3/2023 12:44:01 PM	74073
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/3/2023 12:44:01 PM	74073
Surr: DNOP	82.6	69-147		%Rec	1	4/3/2023 12:44:01 PM	74073
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	4/3/2023 2:00:00 PM	GS9573
Surr: BFB	88.0	37.7-212		%Rec	1	4/3/2023 2:00:00 PM	GS9573
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.017		mg/Kg	1	4/3/2023 2:00:00 PM	BS9573
Toluene	ND	0.034		mg/Kg	1	4/3/2023 2:00:00 PM	BS9573
Ethylbenzene	ND	0.034		mg/Kg	1	4/3/2023 2:00:00 PM	BS9573
Xylenes, Total	ND	0.068		mg/Kg	1	4/3/2023 2:00:00 PM	BS9573
Surr: 4-Bromofluorobenzene	85.4	70-130		%Rec	1	4/3/2023 2:00:00 PM	BS9573

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 **2304001**
Date Reported: **4/6/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-9
Project: Trunk 11S Feb 2023 **Collection Date:** 3/31/2023 12:40:00 PM
Lab ID: 2304001-009 **Matrix:** MEOH (SOIL) **Received Date:** 4/1/2023 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**SNS**
Chloride	ND	60		mg/Kg	20	4/3/2023 12:28:52 PM	74081
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	4/3/2023 1:08:13 PM	74073
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/3/2023 1:08:13 PM	74073
Surr: DNOP	86.3	69-147		%Rec	1	4/3/2023 1:08:13 PM	74073
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**CCM**
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	4/3/2023 2:22:00 PM	GS9573
Surr: BFB	89.8	37.7-212		%Rec	1	4/3/2023 2:22:00 PM	GS9573
EPA METHOD 8021B: VOLATILES						Analyst:	**CCM**
Benzene	ND	0.018		mg/Kg	1	4/3/2023 2:22:00 PM	BS9573
Toluene	ND	0.036		mg/Kg	1	4/3/2023 2:22:00 PM	BS9573
Ethylbenzene	ND	0.036		mg/Kg	1	4/3/2023 2:22:00 PM	BS9573
Xylenes, Total	ND	0.072		mg/Kg	1	4/3/2023 2:22:00 PM	BS9573
Surr: 4-Bromofluorobenzene	87.6	70-130		%Rec	1	4/3/2023 2:22:00 PM	BS9573

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 **2304001**
Date Reported: **4/6/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-10
Project: Trunk 11S Feb 2023 **Collection Date:** 3/31/2023 12:45:00 PM
Lab ID: 2304001-010 **Matrix:** MEOH (SOIL) **Received Date:** 4/1/2023 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	4/3/2023 12:41:17 PM	74081
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	4/3/2023 1:32:03 PM	74073
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/3/2023 1:32:03 PM	74073
Surr: DNOP	87.1	69-147		%Rec	1	4/3/2023 1:32:03 PM	74073
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	4/3/2023 2:43:00 PM	GS9573
Surr: BFB	86.1	37.7-212		%Rec	1	4/3/2023 2:43:00 PM	GS9573
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.018		mg/Kg	1	4/3/2023 2:43:00 PM	BS9573
Toluene	ND	0.037		mg/Kg	1	4/3/2023 2:43:00 PM	BS9573
Ethylbenzene	ND	0.037		mg/Kg	1	4/3/2023 2:43:00 PM	BS9573
Xylenes, Total	ND	0.073		mg/Kg	1	4/3/2023 2:43:00 PM	BS9573
Surr: 4-Bromofluorobenzene	81.3	70-130		%Rec	1	4/3/2023 2:43:00 PM	BS9573

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 **2304001**
Date Reported: **4/6/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-11
Project: Trunk 11S Feb 2023 **Collection Date:** 3/31/2023 12:50:00 PM
Lab ID: 2304001-011 **Matrix:** MEOH (SOIL) **Received Date:** 4/1/2023 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	4/3/2023 12:53:41 PM	74081
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/3/2023 1:55:50 PM	74073
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/3/2023 1:55:50 PM	74073
Surr: DNOP	89.9	69-147		%Rec	1	4/3/2023 1:55:50 PM	74073
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	4/3/2023 3:26:00 PM	GS9573
Surr: BFB	86.6	37.7-212		%Rec	1	4/3/2023 3:26:00 PM	GS9573
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.017		mg/Kg	1	4/3/2023 3:26:00 PM	BS9573
Toluene	ND	0.035		mg/Kg	1	4/3/2023 3:26:00 PM	BS9573
Ethylbenzene	ND	0.035		mg/Kg	1	4/3/2023 3:26:00 PM	BS9573
Xylenes, Total	ND	0.070		mg/Kg	1	4/3/2023 3:26:00 PM	BS9573
Surr: 4-Bromofluorobenzene	84.6	70-130		%Rec	1	4/3/2023 3:26:00 PM	BS9573

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#: **2304001**
06-Apr-23

Client: ENSOLUM
Project: Trunk 11S Feb 2023

Sample ID: **MB-74081**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **74081**	RunNo: **95740**							
Prep Date: **4/3/2023**	Analysis Date: **4/3/2023**	SeqNo: **3466259**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-74081**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **74081**	RunNo: **95740**							
Prep Date: **4/3/2023**	Analysis Date: **4/3/2023**	SeqNo: **3466260**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.5	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical 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#: **2304001**
06-Apr-23

Client: ENSOLUM
Project: Trunk 11S Feb 2023

Sample ID: **MB-74073** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **74073** RunNo: **95739**
Prep Date: **4/3/2023** Analysis Date: **4/3/2023** SeqNo: **3465252** 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	19		10.00		192	69	147			S

Sample ID: **LCS-74073** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **74073** RunNo: **95739**
Prep Date: **4/3/2023** Analysis Date: **4/3/2023** SeqNo: **3465253** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.9	61.9	130			
Surr: DNOP	5.1		5.000		101	69	147			

Sample ID: **2304001-001AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-1** Batch ID: **74073** RunNo: **95739**
Prep Date: **4/3/2023** Analysis Date: **4/3/2023** SeqNo: **3465255** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.2	45.79	0	98.6	54.2	135			
Surr: DNOP	5.0		4.579		109	69	147			

Sample ID: **2304001-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-1** Batch ID: **74073** RunNo: **95739**
Prep Date: **4/3/2023** Analysis Date: **4/3/2023** SeqNo: **3465348** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.7	48.50	0	98.6	54.2	135	5.73	29.2	
Surr: DNOP	5.3		4.850		109	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#: **2304001**
06-Apr-23

Client: ENSOLUM
Project: Trunk 11S Feb 2023

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **GS95736**	RunNo: **95736**
Prep Date:	Analysis Date: **4/3/2023**	SeqNo: **3465155** 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	95.6	70	130			
Surr: BFB	2200		1000		222	37.7	212			S

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **GS95736**	RunNo: **95736**
Prep Date:	Analysis Date: **4/3/2023**	SeqNo: **3465156** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		99.6	37.7	212			

Sample ID: **2304001-001ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-1**	Batch ID: **GS95736**	RunNo: **95736**
Prep Date:	Analysis Date: **4/3/2023**	SeqNo: **3466186** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	3.7	18.67	0	87.8	70	130			
Surr: BFB	1400		746.8		194	37.7	212			

Sample ID: **2304001-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-1**	Batch ID: **GS95736**	RunNo: **95736**
Prep Date:	Analysis Date: **4/3/2023**	SeqNo: **3466187** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	17	3.7	18.67	0	90.5	70	130	3.01	20	
Surr: BFB	1400		746.8		187	37.7	212	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#: **2304001**
06-Apr-23

Client: ENSOLUM
Project: Trunk 11S Feb 2023

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **BS95736**	RunNo: **95736**
Prep Date:	Analysis Date: **4/3/2023**	SeqNo: **3465178** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	93.8	80	120			
Toluene	0.95	0.050	1.000	0	95.1	80	120			
Ethylbenzene	0.96	0.050	1.000	0	95.6	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.3	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		100	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **BS95736**	RunNo: **95736**
Prep Date:	Analysis Date: **4/3/2023**	SeqNo: **3465179** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.98		1.000		97.9	70	130			

Sample ID: **2304001-002ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-2**	Batch ID: **BS95736**	RunNo: **95736**
Prep Date:	Analysis Date: **4/3/2023**	SeqNo: **3466204** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.66	0.018	0.7194	0	91.6	68.8	120			
Toluene	0.66	0.036	0.7194	0	91.9	73.6	124			
Ethylbenzene	0.65	0.036	0.7194	0	90.4	72.7	129			
Xylenes, Total	1.9	0.072	2.158	0	89.6	75.7	126			
Surr: 4-Bromofluorobenzene	0.63		0.7194		87.2	70	130			

Sample ID: **2304001-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-2**	Batch ID: **BS95736**	RunNo: **95736**
Prep Date:	Analysis Date: **4/3/2023**	SeqNo: **3466205** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.64	0.018	0.7194	0	88.3	68.8	120	3.69	20	
Toluene	0.64	0.036	0.7194	0	88.7	73.6	124	3.53	20	
Ethylbenzene	0.63	0.036	0.7194	0	87.3	72.7	129	3.48	20	
Xylenes, Total	1.9	0.072	2.158	0	86.8	75.7	126	3.17	20	
Surr: 4-Bromofluorobenzene	0.62		0.7194		86.6	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	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.		

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: 2304001 RcptNo: 1

Received By: Cheyenne Cason 4/1/2023 8:50:00 AM

Completed By: Cheyenne Cason 4/1/2023 9:04:09 AM

Reviewed By: TMC 4/1/23

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: CMC 4/1/23

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:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.0	Good	Yes	Yogi		

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande Suite A
Aztec, NM 87410

Phone #:

email or Fax#: ksummers@ensolum.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: SAME DAY
☐ Standard ☒ Rush 100%

Project Name: Trunk 113 (Feb 2023)

Project #: See notes

Project Manager: ksummers

Sampler: RDeechilly

On Ice: ☒ Yes ☐ No Yog.

# of Coolers: 1

Cooler Temp(Including CF): 0.1-0.1=0.0 (°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. 230400	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)	Chloride
3/31/23	1200	S	S-1	(1) 4oz Jar	cool	~~001~~ 001	X	X									X
3/31/23	1205	S	S-2	(1) 4oz Jar	cool	002 cmc 4/1/23	X	X									X
3/31/23	1210	S	S-3	(1) 4oz Jar	cool	003	X	X									X
3/31/23	1215	S	S-4	(1) 4oz Jar	cool	004	X	X									X
3/31/23	1220	S	S-5	(1) 4oz Jar	cool	005	X	X									X
3/31/23	1225	S	S-6	(1) 4oz Jar	cool	006	X	X									X
3/31/23	1230	S	S-7	(1) 4oz Jar	cool	007	X	X									X
3/31/23	1235	S	S-8	(1) 4oz Jar	cool	008	X	X									X
3/31/23	1240	S	S-9	(1) 4oz Jar	cool	009	X	X									X
3/31/23	1245	S	S-10	(1) 4oz Jar	cool	010	X	X									X
3/31/23	1250	S	S-11	(1) 4oz Jar	cool	011	X	X									X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
3/31/23	1548				3/31/23	1548
3/31/23	1809		cmc Courier	cmc 4/1/23	4/1/23	0850

Remarks: SAME DAY
PM - Tom Long (EDDOD)
Non AFE - N64995
Pay Key - RB21200

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

April 12, 2023

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

RE: Trunk 11S Feb 2023 OrderNo.: 2304254

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 12 sample(s) on 4/6/2023 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 **2304254**
Date Reported: **4/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-1
Project: Trunk 11S Feb 2023
Collection Date: 4/5/2023 10:30:00 AM
Lab ID: 2304254-001 **Matrix:** SOIL **Received Date:** 4/6/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/8/2023 2:10:12 AM	74211
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	66	10		mg/Kg	1	4/10/2023 11:36:51 AM	74198
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/10/2023 11:36:51 AM	74198
Surr: DNOP	92.0	69-147		%Rec	1	4/10/2023 11:36:51 AM	74198
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/8/2023 11:21:59 PM	74179
Surr: BFB	95.5	37.7-212		%Rec	1	4/8/2023 11:21:59 PM	74179
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	ND	0.023		mg/Kg	1	4/10/2023 1:04:39 PM	74179
Toluene	ND	0.047		mg/Kg	1	4/10/2023 1:04:39 PM	74179
Ethylbenzene	ND	0.047		mg/Kg	1	4/10/2023 1:04:39 PM	74179
Xylenes, Total	ND	0.094		mg/Kg	1	4/10/2023 1:04:39 PM	74179
Surr: 4-Bromofluorobenzene	81.8	70-130		%Rec	1	4/10/2023 1:04:39 PM	74179

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 **2304254**
Date Reported: **4/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** FP-2
Project: Trunk 11S Feb 2023 **Collection Date:** 4/5/2023 10:35:00 AM
Lab ID: 2304254-002 **Matrix:** SOIL **Received Date:** 4/6/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/8/2023 2:22:37 AM	74211
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	660	9.7		mg/Kg	1	4/10/2023 11:47:27 AM	74202
Motor Oil Range Organics (MRO)	390	48		mg/Kg	1	4/10/2023 11:47:27 AM	74202
Surr: DNOP	91.9	69-147		%Rec	1	4/10/2023 11:47:27 AM	74202
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/8/2023 12:46:00 AM	74186
Surr: BFB	98.0	37.7-212		%Rec	1	4/8/2023 12:46:00 AM	74186
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	4/8/2023 12:46:00 AM	74186
Toluene	ND	0.048		mg/Kg	1	4/8/2023 12:46:00 AM	74186
Ethylbenzene	ND	0.048		mg/Kg	1	4/8/2023 12:46:00 AM	74186
Xylenes, Total	ND	0.095		mg/Kg	1	4/8/2023 12:46:00 AM	74186
Surr: 4-Bromofluorobenzene	88.8	70-130		%Rec	1	4/8/2023 12:46:00 AM	74186

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 **2304254**
Date Reported: **4/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-3
Project: Trunk 11S Feb 2023
Collection Date: 4/5/2023 10:40:00 AM
Lab ID: 2304254-003 **Matrix:** SOIL **Received Date:** 4/6/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/8/2023 2:35:01 AM	74211
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	550	9.8		mg/Kg	1	4/10/2023 12:28:57 PM	74202
Motor Oil Range Organics (MRO)	270	49		mg/Kg	1	4/10/2023 12:28:57 PM	74202
Surr: DNOP	86.8	69-147		%Rec	1	4/10/2023 12:28:57 PM	74202
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/8/2023 1:51:00 AM	74186
Surr: BFB	95.7	37.7-212		%Rec	1	4/8/2023 1:51:00 AM	74186
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	4/8/2023 1:51:00 AM	74186
Toluene	ND	0.048		mg/Kg	1	4/8/2023 1:51:00 AM	74186
Ethylbenzene	ND	0.048		mg/Kg	1	4/8/2023 1:51:00 AM	74186
Xylenes, Total	ND	0.096		mg/Kg	1	4/8/2023 1:51:00 AM	74186
Surr: 4-Bromofluorobenzene	87.0	70-130		%Rec	1	4/8/2023 1:51:00 AM	74186

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 **2304254**
Date Reported: **4/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-4
Project: Trunk 11S Feb 2023
Collection Date: 4/5/2023 10:45:00 AM
Lab ID: 2304254-004 **Matrix:** SOIL **Received Date:** 4/6/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/8/2023 2:47:25 AM	74211
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	1700	100		mg/Kg	10	4/10/2023 1:48:08 PM	74202
Motor Oil Range Organics (MRO)	840	500		mg/Kg	10	4/10/2023 1:48:08 PM	74202
Surr: DNOP	0	69-147	S	%Rec	10	4/10/2023 1:48:08 PM	74202
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	94	5.0		mg/Kg	1	4/8/2023 2:55:00 AM	74186
Surr: BFB	146	37.7-212		%Rec	1	4/8/2023 2:55:00 AM	74186
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	0.059	0.025		mg/Kg	1	4/8/2023 2:55:00 AM	74186
Toluene	1.0	0.050		mg/Kg	1	4/8/2023 2:55:00 AM	74186
Ethylbenzene	0.26	0.050		mg/Kg	1	4/8/2023 2:55:00 AM	74186
Xylenes, Total	1.8	0.099		mg/Kg	1	4/8/2023 2:55:00 AM	74186
Surr: 4-Bromofluorobenzene	126	70-130		%Rec	1	4/8/2023 2:55:00 AM	74186

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 **2304254**
Date Reported: **4/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-5
Project: Trunk 11S Feb 2023
Collection Date: 4/5/2023 10:50:00 AM
Lab ID: 2304254-005 **Matrix:** SOIL **Received Date:** 4/6/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/8/2023 12:18:29 AM	74211
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	2200	96		mg/Kg	10	4/10/2023 2:17:20 PM	74202
Motor Oil Range Organics (MRO)	810	480		mg/Kg	10	4/10/2023 2:17:20 PM	74202
Surr: DNOP	0	69-147	S	%Rec	10	4/10/2023 2:17:20 PM	74202
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	140	24		mg/Kg	5	4/8/2023 3:17:00 AM	74186
Surr: BFB	215	37.7-212	S	%Rec	5	4/8/2023 3:17:00 AM	74186
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.12		mg/Kg	5	4/8/2023 3:17:00 AM	74186
Toluene	0.61	0.24		mg/Kg	5	4/8/2023 3:17:00 AM	74186
Ethylbenzene	0.57	0.24		mg/Kg	5	4/8/2023 3:17:00 AM	74186
Xylenes, Total	4.0	0.48		mg/Kg	5	4/8/2023 3:17:00 AM	74186
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	5	4/8/2023 3:17:00 AM	74186

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 **2304254**
Date Reported: **4/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-6
Project: Trunk 11S Feb 2023
Collection Date: 4/5/2023 10:55:00 AM
Lab ID: 2304254-006 **Matrix:** SOIL **Received Date:** 4/6/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/8/2023 12:30:53 AM	74211
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	340	9.5		mg/Kg	1	4/10/2023 4:01:40 PM	74202
Motor Oil Range Organics (MRO)	150	48		mg/Kg	1	4/10/2023 4:01:40 PM	74202
Surr: DNOP	84.6	69-147		%Rec	1	4/10/2023 4:01:40 PM	74202
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	13	5.0		mg/Kg	1	4/8/2023 3:38:00 AM	74186
Surr: BFB	143	37.7-212		%Rec	1	4/8/2023 3:38:00 AM	74186
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.025		mg/Kg	1	4/8/2023 3:38:00 AM	74186
Toluene	0.16	0.050		mg/Kg	1	4/8/2023 3:38:00 AM	74186
Ethylbenzene	0.055	0.050		mg/Kg	1	4/8/2023 3:38:00 AM	74186
Xylenes, Total	0.40	0.099		mg/Kg	1	4/8/2023 3:38:00 AM	74186
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	4/8/2023 3:38:00 AM	74186

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 **2304254**
Date Reported: **4/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-7
Project: Trunk 11S Feb 2023
Collection Date: 4/5/2023 11:00:00 AM
Lab ID: 2304254-007 **Matrix:** SOIL **Received Date:** 4/6/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/8/2023 1:08:08 AM	74211
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	260	9.5		mg/Kg	1	4/10/2023 4:22:46 PM	74202
Motor Oil Range Organics (MRO)	130	47		mg/Kg	1	4/10/2023 4:22:46 PM	74202
Surr: DNOP	91.4	69-147		%Rec	1	4/10/2023 4:22:46 PM	74202
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	6.9	4.9		mg/Kg	1	4/8/2023 4:00:00 AM	74186
Surr: BFB	123	37.7-212		%Rec	1	4/8/2023 4:00:00 AM	74186
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.025		mg/Kg	1	4/8/2023 4:00:00 AM	74186
Toluene	0.051	0.049		mg/Kg	1	4/8/2023 4:00:00 AM	74186
Ethylbenzene	ND	0.049		mg/Kg	1	4/8/2023 4:00:00 AM	74186
Xylenes, Total	0.16	0.099		mg/Kg	1	4/8/2023 4:00:00 AM	74186
Surr: 4-Bromofluorobenzene	96.8	70-130		%Rec	1	4/8/2023 4:00:00 AM	74186

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

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

Analytical Report
Lab Order **2304254**
Date Reported: **4/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-8
Project: Trunk 11S Feb 2023
Collection Date: 4/5/2023 11:05:00 AM
Lab ID: 2304254-008 **Matrix:** SOIL **Received Date:** 4/6/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/8/2023 1:20:33 AM	74211
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	26	10		mg/Kg	1	4/10/2023 1:13:03 PM	74202
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/10/2023 1:13:03 PM	74202
Surr: DNOP	103	69-147		%Rec	1	4/10/2023 1:13:03 PM	74202
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/8/2023 4:21:00 AM	74186
Surr: BFB	90.6	37.7-212		%Rec	1	4/8/2023 4:21:00 AM	74186
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.025		mg/Kg	1	4/8/2023 4:21:00 AM	74186
Toluene	0.29	0.049		mg/Kg	1	4/8/2023 4:21:00 AM	74186
Ethylbenzene	ND	0.049		mg/Kg	1	4/8/2023 4:21:00 AM	74186
Xylenes, Total	0.18	0.099		mg/Kg	1	4/8/2023 4:21:00 AM	74186
Surr: 4-Bromofluorobenzene	88.8	70-130		%Rec	1	4/8/2023 4:21:00 AM	74186

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 **2304254**
Date Reported: **4/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-9
Project: Trunk 11S Feb 2023
Collection Date: 4/5/2023 11:10:00 AM
Lab ID: 2304254-009 **Matrix:** SOIL **Received Date:** 4/6/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/8/2023 1:32:58 AM	74211
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	3500	95		mg/Kg	10	4/10/2023 2:39:56 PM	74202
Motor Oil Range Organics (MRO)	1400	480		mg/Kg	10	4/10/2023 2:39:56 PM	74202
Surr: DNOP	0	69-147	S	%Rec	10	4/10/2023 2:39:56 PM	74202
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	4/8/2023 4:43:00 AM	74186
Surr: BFB	117	37.7-212		%Rec	5	4/8/2023 4:43:00 AM	74186
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.12		mg/Kg	5	4/8/2023 4:43:00 AM	74186
Toluene	ND	0.24		mg/Kg	5	4/8/2023 4:43:00 AM	74186
Ethylbenzene	ND	0.24		mg/Kg	5	4/8/2023 4:43:00 AM	74186
Xylenes, Total	ND	0.48		mg/Kg	5	4/8/2023 4:43:00 AM	74186
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	5	4/8/2023 4:43:00 AM	74186

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 **2304254**
Date Reported: **4/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-10
Project: Trunk 11S Feb 2023
Collection Date: 4/5/2023 11:15:00 AM
Lab ID: 2304254-010 **Matrix:** SOIL **Received Date:** 4/6/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/8/2023 1:45:23 AM	74211
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	1800	100		mg/Kg	10	4/10/2023 3:01:12 PM	74202
Motor Oil Range Organics (MRO)	590	500		mg/Kg	10	4/10/2023 3:01:12 PM	74202
Surr: DNOP	0	69-147	S	%Rec	10	4/10/2023 3:01:12 PM	74202
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	57	4.8		mg/Kg	1	4/8/2023 5:05:00 AM	74186
Surr: BFB	163	37.7-212		%Rec	1	4/8/2023 5:05:00 AM	74186
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	4/8/2023 5:05:00 AM	74186
Toluene	0.12	0.048		mg/Kg	1	4/8/2023 5:05:00 AM	74186
Ethylbenzene	0.17	0.048		mg/Kg	1	4/8/2023 5:05:00 AM	74186
Xylenes, Total	1.3	0.097		mg/Kg	1	4/8/2023 5:05:00 AM	74186
Surr: 4-Bromofluorobenzene	148	70-130	S	%Rec	1	4/8/2023 5:05:00 AM	74186

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 **2304254**
Date Reported: **4/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-11
Project: Trunk 11S Feb 2023
Collection Date: 4/5/2023 11:20:00 AM
Lab ID: 2304254-011 **Matrix:** SOIL **Received Date:** 4/6/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/10/2023 1:44:09 PM	74213
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	3400	99		mg/Kg	10	4/11/2023 11:32:29 AM	74202
Motor Oil Range Organics (MRO)	1100	500		mg/Kg	10	4/11/2023 11:32:29 AM	74202
Surr: DNOP	0	69-147	S	%Rec	10	4/11/2023 11:32:29 AM	74202
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	140	25		mg/Kg	5	4/8/2023 5:26:00 AM	74186
Surr: BFB	204	37.7-212		%Rec	5	4/8/2023 5:26:00 AM	74186
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.12		mg/Kg	5	4/8/2023 5:26:00 AM	74186
Toluene	0.70	0.25		mg/Kg	5	4/8/2023 5:26:00 AM	74186
Ethylbenzene	0.49	0.25		mg/Kg	5	4/8/2023 5:26:00 AM	74186
Xylenes, Total	3.3	0.49		mg/Kg	5	4/8/2023 5:26:00 AM	74186
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	5	4/8/2023 5:26:00 AM	74186

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 **2304254**
Date Reported: **4/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-12
Project: Trunk 11S Feb 2023
Collection Date: 4/5/2023 11:25:00 AM
Lab ID: 2304254-012 **Matrix:** SOIL **Received Date:** 4/6/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/10/2023 1:56:34 PM	74213
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	790	9.7		mg/Kg	1	4/10/2023 1:24:13 PM	74202
Motor Oil Range Organics (MRO)	300	48		mg/Kg	1	4/10/2023 1:24:13 PM	74202
Surr: DNOP	102	69-147		%Rec	1	4/10/2023 1:24:13 PM	74202
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/8/2023 6:09:00 AM	74186
Surr: BFB	115	37.7-212		%Rec	1	4/8/2023 6:09:00 AM	74186
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	4/8/2023 6:09:00 AM	74186
Toluene	ND	0.048		mg/Kg	1	4/8/2023 6:09:00 AM	74186
Ethylbenzene	ND	0.048		mg/Kg	1	4/8/2023 6:09:00 AM	74186
Xylenes, Total	ND	0.096		mg/Kg	1	4/8/2023 6:09:00 AM	74186
Surr: 4-Bromofluorobenzene	92.8	70-130		%Rec	1	4/8/2023 6:09:00 AM	74186

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#: **2304254**

12-Apr-23

Client: ENSOLUM

Project: Trunk 11S Feb 2023

Sample ID: **MB-74211**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **74211**	RunNo: **95862**							
Prep Date: **4/7/2023**	Analysis Date: **4/7/2023**	SeqNo: **3471550**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-74211**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **74211**	RunNo: **95862**							
Prep Date: **4/7/2023**	Analysis Date: **4/7/2023**	SeqNo: **3471551**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	96.9	90	110			

Sample ID: **MB-74213**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **74213**	RunNo: **95905**							
Prep Date: **4/7/2023**	Analysis Date: **4/10/2023**	SeqNo: **3472742**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-74213**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **74213**	RunNo: **95905**							
Prep Date: **4/7/2023**	Analysis Date: **4/10/2023**	SeqNo: **3472743**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.8	90	110			

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#: **2304254**

12-Apr-23

Client: ENSOLUM

Project: Trunk 11S Feb 2023

Sample ID: **LCS-74202**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **74202**	RunNo: **95894**
Prep Date: **4/7/2023**	Analysis Date: **4/10/2023**	SeqNo: **3472132** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	84.3	61.9	130			
Surr: DNOP	4.5		5.000		90.2	69	147			

Sample ID: **MB-74202**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **74202**	RunNo: **95894**
Prep Date: **4/7/2023**	Analysis Date: **4/10/2023**	SeqNo: **3472133** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.7		10.00		87.2	69	147			

Sample ID: **MB-74198**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **74198**	RunNo: **95898**
Prep Date: **4/7/2023**	Analysis Date: **4/10/2023**	SeqNo: **3472268** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.3		10.00		83.4	69	147			

Sample ID: **LCS-74198**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **74198**	RunNo: **95898**
Prep Date: **4/7/2023**	Analysis Date: **4/10/2023**	SeqNo: **3472269** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.8	61.9	130			
Surr: DNOP	4.4		5.000		88.5	69	147			

Sample ID: **2304254-002AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **FP-2**	Batch ID: **74202**	RunNo: **95894**
Prep Date: **4/7/2023**	Analysis Date: **4/11/2023**	SeqNo: **3472598** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	770	9.4	47.21	663.8	215	54.2	135			S
Surr: DNOP	4.1		4.721		86.0	69	147			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical 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#: **2304254**

12-Apr-23

Client: ENSOLUM

Project: Trunk 11S Feb 2023

Sample ID: **2304254-002AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **FP-2** Batch ID: **74202** RunNo: **95894**

Prep Date: **4/7/2023** Analysis Date: **4/11/2023** SeqNo: **3472599** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	700	9.6	48.22	663.8	85.4	54.2	135	8.21	29.2	
Surr: DNOP	3.9		4.822		81.4	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#: **2304254**

12-Apr-23

Client: ENSOLUM

Project: Trunk 11S Feb 2023

Sample ID: **lcs-74186**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **74186**	RunNo: **95861**
Prep Date: **4/6/2023**	Analysis Date: **4/7/2023**	SeqNo: **3471592** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.0	70	130			
Surr: BFB	2000		1000		200	37.7	212			

Sample ID: **mb-74186**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **74186**	RunNo: **95861**
Prep Date: **4/6/2023**	Analysis Date: **4/8/2023**	SeqNo: **3471593** 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	890		1000		88.8	37.7	212			

Sample ID: **2304254-002ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **FP-2**	Batch ID: **74186**	RunNo: **95861**
Prep Date: **4/6/2023**	Analysis Date: **4/8/2023**	SeqNo: **3471595** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.8	23.90	0	102	70	130			
Surr: BFB	2000		956.0		212	37.7	212			S

Sample ID: **2304254-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **FP-2**	Batch ID: **74186**	RunNo: **95861**
Prep Date: **4/6/2023**	Analysis Date: **4/8/2023**	SeqNo: **3471596** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.8	23.99	0	102	70	130	0.972	20	
Surr: BFB	2000		959.7		210	37.7	212	0	0	

Sample ID: **lcs-74179**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **74179**	RunNo: **95869**
Prep Date: **4/6/2023**	Analysis Date: **4/8/2023**	SeqNo: **3471789** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.2	70	130			
Surr: BFB	1900		1000		185	37.7	212			

Sample ID: **mb-74179**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **74179**	RunNo: **95869**
Prep Date: **4/6/2023**	Analysis Date: **4/8/2023**	SeqNo: **3471791** Units: **mg/Kg**

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

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#: **2304254**

12-Apr-23

Client: ENSOLUM

Project: Trunk 11S Feb 2023

Sample ID: **mb-74179**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **74179**	RunNo: **95869**
Prep Date: **4/6/2023**	Analysis Date: **4/8/2023**	SeqNo: **3471791** 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	970		1000		96.7	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#: **2304254**

12-Apr-23

Client: ENSOLUM

Project: Trunk 11S Feb 2023

Sample ID: **lcs-74186**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **74186**	RunNo: **95861**
Prep Date: **4/6/2023**	Analysis Date: **4/8/2023**	SeqNo: **3471696** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.025	1.000	0	83.7	80	120			
Toluene	0.85	0.050	1.000	0	84.8	80	120			
Ethylbenzene	0.83	0.050	1.000	0	83.4	80	120			
Xylenes, Total	2.5	0.10	3.000	0	82.2	80	120			
Surr: 4-Bromofluorobenzene	0.91		1.000		91.0	70	130			

Sample ID: **mb-74186**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **74186**	RunNo: **95861**
Prep Date: **4/6/2023**	Analysis Date: **4/8/2023**	SeqNo: **3471699** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.88		1.000		88.1	70	130			

Sample ID: **2304254-003ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **FP-3**	Batch ID: **74186**	RunNo: **95861**
Prep Date: **4/6/2023**	Analysis Date: **4/8/2023**	SeqNo: **3471710** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.024	0.9625	0	91.0	68.8	120			
Toluene	0.90	0.048	0.9625	0	93.7	73.6	124			
Ethylbenzene	0.91	0.048	0.9625	0	94.2	72.7	129			
Xylenes, Total	2.7	0.096	2.887	0	92.6	75.7	126			
Surr: 4-Bromofluorobenzene	0.86		0.9625		89.1	70	130			

Sample ID: **2304254-003amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **FP-3**	Batch ID: **74186**	RunNo: **95861**
Prep Date: **4/6/2023**	Analysis Date: **4/8/2023**	SeqNo: **3471712** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.024	0.9615	0	90.9	68.8	120	0.167	20	
Toluene	0.91	0.048	0.9615	0	95.1	73.6	124	1.40	20	
Ethylbenzene	0.92	0.048	0.9615	0	95.4	72.7	129	1.13	20	
Xylenes, Total	2.7	0.096	2.885	0	94.2	75.7	126	1.64	20	
Surr: 4-Bromofluorobenzene	0.89		0.9615		92.3	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	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#: **2304254**

12-Apr-23

Client: ENSOLUM

Project: Trunk 11S Feb 2023

Sample ID: **LCS-74179**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **74179**	RunNo: **95869**
Prep Date: **4/6/2023**	Analysis Date: **4/8/2023**	SeqNo: **3473502** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	1.000	0	85.0	80	120			
Toluene	0.87	0.050	1.000	0	86.6	80	120			
Ethylbenzene	0.85	0.050	1.000	0	85.0	80	120			
Xylenes, Total	2.5	0.10	3.000	0	84.5	80	120			
Surr: 4-Bromofluorobenzene	0.84		1.000		84.2	70	130			

Sample ID: **mb-74179**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **74179**	RunNo: **95869**
Prep Date: **4/6/2023**	Analysis Date: **4/8/2023**	SeqNo: **3473503** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.83		1.000		83.3	70	130			

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.		

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: 2304254 RcptNo: 1

Received By: Tracy Casarrubias 4/6/2023 6:15:00 AM

Completed By: Tracy Casarrubias 4/6/2023 6:39:11 AM

Reviewed By: 4/6/23

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: JN 4/6/23

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: Missing phone number on COC - TMC 4/6/23

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0	Good	Yes	Morty		

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande Suite A
Aztec, NM 87410

Phone #:

email or Fax#: ksummers@ensolum.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush 3-DAY

Project Name: Trunk 11S (Feb 2023)

Project #: See notes

Project Manager: Ksummers

Sampler: RDeechilly
On Ice: ☒ Yes ☐ No morty
# of Coolers: 1
Cooler Temp(Including CF): 0.1 - 0.1 = 0 (°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. 2304254	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)	Chloride
4/5/23	1030	S	FP-1	(1) 4oz Jar	cool	001	X	X									X
4/5/23	1035	S	FP-2	(1) 4oz Jar	cool	002	X	X									X
4/5/23	1040	S	FP-3	(1) 4oz Jar	cool	003	X	X									X
4/5/23	1045	S	FP-4	(1) 4oz Jar	cool	004	X	X									X
4/5/23	1050	S	FP-5	(1) 4oz Jar	cool	005	X	X									X
4/5/23	1055	S	FP-6	(1) 4oz Jar	cool	006	X	X									X
4/5/23	1100	S	FP-7	(1) 4oz Jar	cool	007	X	X									X
4/5/23	1105	S	FP-8	(1) 4oz Jar	cool	008	X	X									X
4/5/23	1110	S	FP-9	(1) 4oz Jar	cool	009	X	X									X
4/5/23	1115	S	FP-10	(1) 4oz Jar	cool	010	X	X									X
4/5/23	1120	S	FP-11	(1) 4oz Jar	cool	011	X	X									X
4/5/23	1125	S	FP-12	(1) 4oz Jar	cool	012	X	X									X

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
4/5/23	1625				4/5/23	1625
4/5/23	1806			courier	4/10/23	6:15

Remarks: PM - Tom Long (EPROD)
Pay Key - RB21200
Nan AFE - N64995

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

April 07, 2023

Kyle Summers

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

RE: Trunk 11S (Feb 2023) OrderNo.: 2304253

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 4/6/2023 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 **2304253**
Date Reported: **4/7/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** FP-13
Project: Trunk 11S (Feb 2023) **Collection Date:** 4/5/2023 12:50:00 PM
Lab ID: 2304253-001 **Matrix:** MEOH (SOIL) **Received Date:** 4/6/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JMT**
Chloride	ND	60		mg/Kg	20	4/6/2023 11:47:43 AM	74167
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/6/2023 12:09:41 PM	74160
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/6/2023 12:09:41 PM	74160
Surr: DNOP	87.5	69-147		%Rec	1	4/6/2023 12:09:41 PM	74160
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**CCM**
Gasoline Range Organics (GRO)	ND	3.1		mg/Kg	1	4/6/2023 11:07:00 AM	GS9583(
Surr: BFB	97.0	37.7-212		%Rec	1	4/6/2023 11:07:00 AM	GS9583(
EPA METHOD 8021B: VOLATILES						Analyst:	**CCM**
Benzene	ND	0.015		mg/Kg	1	4/6/2023 11:07:00 AM	R95830
Toluene	ND	0.031		mg/Kg	1	4/6/2023 11:07:00 AM	R95830
Ethylbenzene	ND	0.031		mg/Kg	1	4/6/2023 11:07:00 AM	R95830
Xylenes, Total	ND	0.061		mg/Kg	1	4/6/2023 11:07:00 AM	R95830
Surr: 4-Bromofluorobenzene	94.1	70-130		%Rec	1	4/6/2023 11:07:00 AM	R95830

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 **2304253**
Date Reported: **4/7/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** FP-14
Project: Trunk 11S (Feb 2023) **Collection Date:** 4/5/2023 12:55:00 PM
Lab ID: 2304253-002 **Matrix:** MEOH (SOIL) **Received Date:** 4/6/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/6/2023 12:00:08 PM	74167
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/6/2023 12:22:35 PM	74160
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/6/2023 12:22:35 PM	74160
Surr: DNOP	86.8	69-147		%Rec	1	4/6/2023 12:22:35 PM	74160
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	4/6/2023 11:29:00 AM	GS9583(
Surr: BFB	96.0	37.7-212		%Rec	1	4/6/2023 11:29:00 AM	GS9583(
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.019		mg/Kg	1	4/6/2023 11:29:00 AM	BS9583(
Toluene	ND	0.038		mg/Kg	1	4/6/2023 11:29:00 AM	BS9583(
Ethylbenzene	ND	0.038		mg/Kg	1	4/6/2023 11:29:00 AM	BS9583(
Xylenes, Total	ND	0.075		mg/Kg	1	4/6/2023 11:29:00 AM	BS9583(
Surr: 4-Bromofluorobenzene	93.9	70-130		%Rec	1	4/6/2023 11:29:00 AM	BS9583(

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 **2304253**
Date Reported: **4/7/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** FP-15
Project: Trunk 11S (Feb 2023) **Collection Date:** 4/5/2023 1:00:00 PM
Lab ID: 2304253-003 **Matrix:** MEOH (SOIL) **Received Date:** 4/6/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/6/2023 12:37:21 PM	74167
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	8.5		mg/Kg	1	4/6/2023 12:35:48 PM	74160
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	4/6/2023 12:35:48 PM	74160
Surr: DNOP	89.8	69-147		%Rec	1	4/6/2023 12:35:48 PM	74160
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	4/6/2023 11:50:00 AM	GS9583(
Surr: BFB	91.2	37.7-212		%Rec	1	4/6/2023 11:50:00 AM	GS9583(
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.019		mg/Kg	1	4/6/2023 11:50:00 AM	BS9583(
Toluene	ND	0.037		mg/Kg	1	4/6/2023 11:50:00 AM	BS9583(
Ethylbenzene	ND	0.037		mg/Kg	1	4/6/2023 11:50:00 AM	BS9583(
Xylenes, Total	ND	0.074		mg/Kg	1	4/6/2023 11:50:00 AM	BS9583(
Surr: 4-Bromofluorobenzene	92.8	70-130		%Rec	1	4/6/2023 11:50:00 AM	BS9583(

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 **2304253**
Date Reported: **4/7/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** FP-16
Project: Trunk 11S (Feb 2023) **Collection Date:** 4/5/2023 1:05:00 PM
Lab ID: 2304253-004 **Matrix:** MEOH (SOIL) **Received Date:** 4/6/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/6/2023 12:49:45 PM	74167
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/6/2023 12:48:38 PM	74160
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/6/2023 12:48:38 PM	74160
Surr: DNOP	90.5	69-147		%Rec	1	4/6/2023 12:48:38 PM	74160
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	4/6/2023 12:12:00 PM	GS9583(
Surr: BFB	96.4	37.7-212		%Rec	1	4/6/2023 12:12:00 PM	GS9583(
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.019		mg/Kg	1	4/6/2023 12:12:00 PM	BS9583(
Toluene	ND	0.037		mg/Kg	1	4/6/2023 12:12:00 PM	BS9583(
Ethylbenzene	ND	0.037		mg/Kg	1	4/6/2023 12:12:00 PM	BS9583(
Xylenes, Total	ND	0.075		mg/Kg	1	4/6/2023 12:12:00 PM	BS9583(
Surr: 4-Bromofluorobenzene	93.6	70-130		%Rec	1	4/6/2023 12:12:00 PM	BS9583(

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#: **2304253**
07-Apr-23

Client: ENSOLUM
Project: Trunk 11S (Feb 2023)

Sample ID: **MB-74167**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **74167**	RunNo: **95836**							
Prep Date: **4/6/2023**	Analysis Date: **4/6/2023**	SeqNo: **3470272**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-74167**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **74167**	RunNo: **95836**							
Prep Date: **4/6/2023**	Analysis Date: **4/6/2023**	SeqNo: **3470273**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.0	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical 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#: **2304253**
07-Apr-23

Client: ENSOLUM
Project: Trunk 11S (Feb 2023)

Sample ID: **MB-74160**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **74160**	RunNo: **95835**
Prep Date: **4/6/2023**	Analysis Date: **4/6/2023**	SeqNo: **3469229** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.7		10.00		86.6	69	147			

Sample ID: **LCS-74160**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **74160**	RunNo: **95835**
Prep Date: **4/6/2023**	Analysis Date: **4/6/2023**	SeqNo: **3469230** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.8	61.9	130			
Surr: DNOP	4.1		5.000		82.6	69	147			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical 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#: **2304253**
07-Apr-23

Client: ENSOLUM
Project: Trunk 11S (Feb 2023)

Sample ID: **2.5ug gro lcs** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **GS95830** RunNo: **95830**
Prep Date: Analysis Date: **4/6/2023** SeqNo: **3468990** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	84.4	70	130			
Surr: BFB	2200		1000		220	37.7	212			S

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **GS95830** RunNo: **95830**
Prep Date: Analysis Date: **4/6/2023** SeqNo: **3468991** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		104	37.7	212			

Sample ID: **2304253-001ams** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **FP-13** Batch ID: **GS95830** RunNo: **95830**
Prep Date: Analysis Date: **4/6/2023** SeqNo: **3469591** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	12	3.1	15.27	0	80.3	70	130			
Surr: BFB	1200		610.9		194	37.7	212			

Sample ID: **2304253-001amsd** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **FP-13** Batch ID: **GS95830** RunNo: **95830**
Prep Date: Analysis Date: **4/6/2023** SeqNo: **3469592** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	12	3.1	15.27	0	78.8	70	130	1.91	20	
Surr: BFB	1200		610.9		195	37.7	212	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#: **2304253**
07-Apr-23

Client: ENSOLUM
Project: Trunk 11S (Feb 2023)

Sample ID: **2304253-002ams** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **FP-14** Batch ID: **BS95830** RunNo: **95830**
Prep Date: Analysis Date: **4/6/2023** SeqNo: **3470689** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.68	0.019	0.7536	0	89.8	68.8	120			
Toluene	0.69	0.038	0.7536	0.01161	90.2	73.6	124			
Ethylbenzene	0.67	0.038	0.7536	0	88.8	72.7	129			
Xylenes, Total	2.0	0.075	2.261	0	87.8	75.7	126			
Surr: 4-Bromofluorobenzene	0.65		0.7536		86.3	70	130			

Sample ID: **2304253-002amsd** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **FP-14** Batch ID: **BS95830** RunNo: **95830**
Prep Date: Analysis Date: **4/6/2023** SeqNo: **3470690** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.65	0.019	0.7536	0	86.6	68.8	120	3.58	20	
Toluene	0.66	0.038	0.7536	0.01161	86.2	73.6	124	4.53	20	
Ethylbenzene	0.65	0.038	0.7536	0	85.8	72.7	129	3.44	20	
Xylenes, Total	1.9	0.075	2.261	0	84.8	75.7	126	3.52	20	
Surr: 4-Bromofluorobenzene	0.64		0.7536		84.9	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: 2304253 RcptNo: 1

Received By: Tracy Casarrubias 4/6/2023 6:15:00 AM

Completed By: Tracy Casarrubias 4/6/2023 6:32:47 AM

Reviewed By: JR 4/6/23

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 4/6/23

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: Missing phone number on COC- TMC 4/6/23

16. Additional remarks:

17. **Cooler Information**

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

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande Suite A
Aztec, NM 87410

Phone #:

email or Fax#: ksummers@ensolum.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time: SAME DAY
☐ Standard ☒ Rush 10 BD

Project Name: Trunk 11S (Feb 2023)

Project #: See notes

Project Manager: Ksummers

Sampler: RDeechilly

On Ice: ☒ Yes ☐ No morty

# of Coolers: 1

Cooler Temp (Including CF): 2.0 - 0.1 = 1.9 (°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. 2304253	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)	Chloride
4/5/23	1250	S	FP-13	(1) 4oz Jar	cool	001	X	X									X
4/5/23	1255	S	FP-14	(1) 4oz Jar	cool	002	X	X									X
4/5/23	1300	S	FP-15	(1) 4oz Jar	cool	003	X	X									X
4/5/23	1305	S	FP-16	(1) 4oz Jar	cool	004	X	X									X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
4/5/23	1625				4/5/23	1625
Date:	Time:	Relinquished by:	Received by:	Via: courier	Date	Time
4/5/23	1806				4/6/23	6:15

Remarks: PM - Tom Long (EPROD)
Pay Key - RB21200
NonAFE - N64995

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

April 11, 2023

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

RE: Trunk 11S Feb 2023 OrderNo.: 2304336

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 3 sample(s) on 4/7/2023 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 **2304336**
Date Reported: **4/11/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** FP-17
Project: Trunk 11S Feb 2023 **Collection Date:** 4/6/2023 10:30:00 AM
Lab ID: 2304336-001 **Matrix:** MEOH (SOIL) **Received Date:** 4/7/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/7/2023 10:27:04 AM	74188
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	10	9.9		mg/Kg	1	4/7/2023 10:30:07 AM	74190
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/7/2023 10:30:07 AM	74190
Surr: DNOP	95.3	69-147		%Rec	1	4/7/2023 10:30:07 AM	74190
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	18		mg/Kg	5	4/7/2023 1:19:00 PM	GS95861
Surr: BFB	99.6	37.7-212		%Rec	5	4/7/2023 1:19:00 PM	GS95861
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.091		mg/Kg	5	4/7/2023 1:19:00 PM	BS95861
Toluene	ND	0.18		mg/Kg	5	4/7/2023 1:19:00 PM	BS95861
Ethylbenzene	ND	0.18		mg/Kg	5	4/7/2023 1:19:00 PM	BS95861
Xylenes, Total	ND	0.36		mg/Kg	5	4/7/2023 1:19:00 PM	BS95861
Surr: 4-Bromofluorobenzene	96.3	70-130		%Rec	5	4/7/2023 1:19:00 PM	BS95861

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 **2304336**
Date Reported: **4/11/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** FP-18
Project: Trunk 11S Feb 2023 **Collection Date:** 4/6/2023 10:35:00 AM
Lab ID: 2304336-002 **Matrix:** MEOH (SOIL) **Received Date:** 4/7/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/7/2023 10:39:29 AM	74188
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	11	10		mg/Kg	1	4/7/2023 10:40:30 AM	74190
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/7/2023 10:40:30 AM	74190
Surr: DNOP	94.0	69-147		%Rec	1	4/7/2023 10:40:30 AM	74190
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	4/7/2023 1:40:00 PM	GS95861
Surr: BFB	93.5	37.7-212		%Rec	1	4/7/2023 1:40:00 PM	GS95861
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.017		mg/Kg	1	4/7/2023 1:40:00 PM	BS95861
Toluene	0.048	0.033		mg/Kg	1	4/7/2023 1:40:00 PM	BS95861
Ethylbenzene	ND	0.033		mg/Kg	1	4/7/2023 1:40:00 PM	BS95861
Xylenes, Total	ND	0.066		mg/Kg	1	4/7/2023 1:40:00 PM	BS95861
Surr: 4-Bromofluorobenzene	90.9	70-130		%Rec	1	4/7/2023 1:40:00 PM	BS95861

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 **2304336**
Date Reported: **4/11/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** FP-19
Project: Trunk 11S Feb 2023 **Collection Date:** 4/6/2023 10:40:00 AM
Lab ID: 2304336-003 **Matrix:** MEOH (SOIL) **Received Date:** 4/7/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	61		mg/Kg	20	4/7/2023 10:51:53 AM	74188
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/7/2023 11:08:35 AM	74190
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/7/2023 11:08:35 AM	74190
Surr: DNOP	93.8	69-147		%Rec	1	4/7/2023 11:08:35 AM	74190
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	4/7/2023 2:02:00 PM	GS95861
Surr: BFB	88.8	37.7-212		%Rec	1	4/7/2023 2:02:00 PM	GS95861
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.017		mg/Kg	1	4/7/2023 2:02:00 PM	BS95861
Toluene	ND	0.034		mg/Kg	1	4/7/2023 2:02:00 PM	BS95861
Ethylbenzene	ND	0.034		mg/Kg	1	4/7/2023 2:02:00 PM	BS95861
Xylenes, Total	ND	0.067		mg/Kg	1	4/7/2023 2:02:00 PM	BS95861
Surr: 4-Bromofluorobenzene	90.4	70-130		%Rec	1	4/7/2023 2:02:00 PM	BS95861

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#: **2304336**
11-Apr-23

Client: ENSOLUM
Project: Trunk 11S Feb 2023

Sample ID: **MB-74188**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **74188**	RunNo: **95862**							
Prep Date: **4/7/2023**	Analysis Date: **4/7/2023**	SeqNo: **3471486**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-74188**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **74188**	RunNo: **95862**							
Prep Date: **4/7/2023**	Analysis Date: **4/7/2023**	SeqNo: **3471487**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.1	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#: **2304336**
11-Apr-23

Client: ENSOLUM
Project: Trunk 11S Feb 2023

Sample ID: **2304336-003AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **FP-19** Batch ID: **74190** RunNo: **95870**
Prep Date: **4/7/2023** Analysis Date: **4/7/2023** SeqNo: **3470919** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	9.1	45.54	9.443	82.8	54.2	135			
Surr: DNOP	4.7		4.554		104	69	147			

Sample ID: **2304336-003AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **FP-19** Batch ID: **74190** RunNo: **95870**
Prep Date: **4/7/2023** Analysis Date: **4/7/2023** SeqNo: **3470920** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.5	47.53	9.443	84.6	54.2	135	5.16	29.2	
Surr: DNOP	5.1		4.753		106	69	147	0	0	

Sample ID: **LCS-74190** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **74190** RunNo: **95870**
Prep Date: **4/7/2023** Analysis Date: **4/7/2023** SeqNo: **3470921** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.2	61.9	130			
Surr: DNOP	4.9		5.000		98.1	69	147			

Sample ID: **MB-74190** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **74190** RunNo: **95870**
Prep Date: **4/7/2023** Analysis Date: **4/7/2023** SeqNo: **3470922** 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	9.2		10.00		92.0	69	147			

Sample ID: **LCS-74176** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **74176** RunNo: **95870**
Prep Date: **4/6/2023** Analysis Date: **4/7/2023** SeqNo: **3471354** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.7		5.000		113	69	147			

Sample ID: **MB-74176** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **74176** RunNo: **95870**
Prep Date: **4/6/2023** Analysis Date: **4/7/2023** SeqNo: **3471361** Units: **%Rec**

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

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#: **2304336**
11-Apr-23

Client: ENSOLUM
Project: Trunk 11S Feb 2023

Sample ID: **MB-74176** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **74176** RunNo: **95870**
Prep Date: ***4/6/2023*** Analysis Date: ***4/7/2023*** SeqNo: **3471361** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.3		10.00		92.6	69	147			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical 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#: **2304336**

11-Apr-23

Client: ENSOLUM

Project: Trunk 11S Feb 2023

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **GS95861**	RunNo: **95861**
Prep Date:	Analysis Date: **4/7/2023**	SeqNo: **3470767** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	84.5	70	130			
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: **GS95861**	RunNo: **95861**
Prep Date:	Analysis Date: **4/7/2023**	SeqNo: **3470769** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		101	37.7	212			

Sample ID: **lcs-74186**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **74186**	RunNo: **95861**
Prep Date: **4/6/2023**	Analysis Date: **4/7/2023**	SeqNo: **3471592** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	2000		1000		200	37.7	212			

Sample ID: **mb-74186**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **74186**	RunNo: **95861**
Prep Date: **4/6/2023**	Analysis Date: **4/8/2023**	SeqNo: **3471593** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	890		1000		88.8	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#: **2304336**

11-Apr-23

Client: ENSOLUM

Project: Trunk 11S Feb 2023

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **BS95861**	RunNo: **95861**
Prep Date:	Analysis Date: **4/7/2023**	SeqNo: **3470768** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.2	80	120			
Toluene	0.96	0.050	1.000	0	95.9	80	120			
Ethylbenzene	0.96	0.050	1.000	0	95.5	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.3	80	120			
Surr: 4-Bromofluorobenzene	0.98		1.000		98.3	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **BS95861**	RunNo: **95861**
Prep Date:	Analysis Date: **4/7/2023**	SeqNo: **3470771** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.97		1.000		96.7	70	130			

Sample ID: **lcs-74186**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **74186**	RunNo: **95861**
Prep Date: **4/6/2023**	Analysis Date: **4/8/2023**	SeqNo: **3471696** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.91		1.000		91.0	70	130			

Sample ID: **mb-74186**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **74186**	RunNo: **95861**
Prep Date: **4/6/2023**	Analysis Date: **4/8/2023**	SeqNo: **3471699** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.88		1.000		88.1	70	130			

Sample ID: **2304336-002ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **FP-18**	Batch ID: **BS95861**	RunNo: **95861**
Prep Date:	Analysis Date: **4/7/2023**	SeqNo: **3471964** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.0	68.8	120			
Toluene	1.0	0.050	1.000	0.04815	98.1	73.6	124			
Ethylbenzene	0.94	0.050	1.000	0	93.7	72.7	129			
Xylenes, Total	2.8	0.10	3.000	0.01215	92.8	75.7	126			

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#: **2304336**

11-Apr-23

Client: ENSOLUM

Project: Trunk 11S Feb 2023

Sample ID: **2304336-002ams** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **FP-18** Batch ID: **BS95861** RunNo: **95861**

Prep Date: Analysis Date: **4/7/2023** SeqNo: **3471964** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.85		1.000		85.2	70	130			

Sample ID: **2304336-002amsd** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **FP-18** Batch ID: **BS95861** RunNo: **95861**

Prep Date: Analysis Date: **4/7/2023** SeqNo: **3471965** 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	93.0	68.8	120	3.20	20	
Toluene	1.0	0.050	1.000	0.04815	94.8	73.6	124	3.24	20	
Ethylbenzene	0.91	0.050	1.000	0	91.5	72.7	129	2.35	20	
Xylenes, Total	2.7	0.10	3.000	0.01215	90.6	75.7	126	2.38	20	
Surr: 4-Bromofluorobenzene	0.83		1.000		83.0	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: 2304336 RcptNo: 1

Received By: Tracy Casarrubias 4/7/2023 6:45:00 AM

Completed By: Tracy Casarrubias 4/7/2023 7:03:31 AM

Reviewed By: CMC 4/7/23

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 4/7/23

JR 4/7/23

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: Missing phone number on COC- TMC 4/7/23

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.4	Good	Yes	Yogi		

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande Suite A
Aztec, NM 87410

Phone #:

email or Fax#: ksummers@ensolum.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: SAME DAY
☐ Standard ☒ Rush 100%

Project Name: Trunk 11S (Feb 2023)

Project #: see notes

Project Manager: ksummers

Sampler: RDeechilly

On Ice: ☒ Yes ☐ No yogi

# of Coolers: 1

Cooler Temp(Including CF): 2.4 - 0 = 2.4 (°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. 2304336	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)	Chloride
4/6/23	1030	S	FP-17	(1) 4oz Jar	cool	001	X	X									X
4/6/23	1035	S	FP-18	(1) 4oz Jar	cool	002	X	X									X
4/6/23	1040	S	FP-19	(1) 4oz Jar	cool	003	X	X									X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
4/6/23	1554				4/6/23	1554
4/6/23	1820			Courier	4/7/23	6:45

Remarks: PM - Tom Long (EPROD)
Pay Key - RB21200
Non AFE - N64995

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

May 23, 2023

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

RE: Trunk 11S Feb 2023 OrderNo.: 2305683

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 13 sample(s) on 5/12/2023 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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2305683**
Date Reported: **5/23/2023**

CLIENT: ENSOLUM
Client Sample ID: FP-2a
Project: Trunk 11S Feb 2023
Collection Date: 5/11/2023 9:00:00 AM
Lab ID: 2305683-001 **Matrix:** SOIL
Received Date: 5/12/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	59		mg/Kg	20	5/16/2023 7:28:13 PM	74993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	920	46		mg/Kg	5	5/17/2023 3:35:24 PM	74978
Motor Oil Range Organics (MRO)	340	230		mg/Kg	5	5/17/2023 3:35:24 PM	74978
Surr: DNOP	110	69-147		%Rec	5	5/17/2023 3:35:24 PM	74978
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/15/2023 3:18:30 PM	74925
Surr: BFB	103	15-244		%Rec	1	5/15/2023 3:18:30 PM	74925
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	ND	0.025		mg/Kg	1	5/15/2023 3:18:30 PM	74925
Toluene	ND	0.049		mg/Kg	1	5/15/2023 3:18:30 PM	74925
Ethylbenzene	ND	0.049		mg/Kg	1	5/15/2023 3:18:30 PM	74925
Xylenes, Total	ND	0.099		mg/Kg	1	5/15/2023 3:18:30 PM	74925
Surr: 4-Bromofluorobenzene	85.4	39.1-146		%Rec	1	5/15/2023 3:18:30 PM	74925

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 **2305683**
Date Reported: **5/23/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-3a
Project: Trunk 11S Feb 2023
Collection Date: 5/11/2023 9:05:00 AM
Lab ID: 2305683-002 **Matrix:** SOIL **Received Date:** 5/12/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	60		mg/Kg	20	5/16/2023 7:40:37 PM	74993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	2100	87		mg/Kg	10	5/17/2023 12:41:56 PM	74978
Motor Oil Range Organics (MRO)	1900	430		mg/Kg	10	5/17/2023 12:41:56 PM	74978
Surr: DNOP	0	69-147	S	%Rec	10	5/17/2023 12:41:56 PM	74978
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/15/2023 3:41:52 PM	74925
Surr: BFB	68.4	15-244		%Rec	1	5/15/2023 3:41:52 PM	74925
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	ND	0.025		mg/Kg	1	5/15/2023 3:41:52 PM	74925
Toluene	ND	0.050		mg/Kg	1	5/15/2023 3:41:52 PM	74925
Ethylbenzene	ND	0.050		mg/Kg	1	5/15/2023 3:41:52 PM	74925
Xylenes, Total	ND	0.10		mg/Kg	1	5/15/2023 3:41:52 PM	74925
Surr: 4-Bromofluorobenzene	80.9	39.1-146		%Rec	1	5/15/2023 3:41:52 PM	74925

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 **2305683**
Date Reported: **5/23/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-4a
Project: Trunk 11S Feb 2023
Collection Date: 5/11/2023 9:10:00 AM
Lab ID: 2305683-003 **Matrix:** SOIL **Received Date:** 5/12/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	60		mg/Kg	20	5/16/2023 7:53:01 PM	74993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	2900	88		mg/Kg	10	5/17/2023 1:03:18 PM	74978
Motor Oil Range Organics (MRO)	1500	440		mg/Kg	10	5/17/2023 1:03:18 PM	74978
Surr: DNOP	0	69-147	S	%Rec	10	5/17/2023 1:03:18 PM	74978
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**	
Gasoline Range Organics (GRO)	8.4	4.6		mg/Kg	1	5/15/2023 4:28:41 PM	74925
Surr: BFB	213	15-244		%Rec	1	5/15/2023 4:28:41 PM	74925
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	ND	0.023		mg/Kg	1	5/15/2023 4:28:41 PM	74925
Toluene	ND	0.046		mg/Kg	1	5/15/2023 4:28:41 PM	74925
Ethylbenzene	ND	0.046		mg/Kg	1	5/15/2023 4:28:41 PM	74925
Xylenes, Total	0.24	0.092		mg/Kg	1	5/15/2023 4:28:41 PM	74925
Surr: 4-Bromofluorobenzene	87.8	39.1-146		%Rec	1	5/15/2023 4:28:41 PM	74925

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 **2305683**
Date Reported: **5/23/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-5a
Project: Trunk 11S Feb 2023
Collection Date: 5/11/2023 9:15:00 AM
Lab ID: 2305683-004 **Matrix:** SOIL **Received Date:** 5/12/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	60		mg/Kg	20	5/16/2023 8:05:26 PM	74993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	270	9.6		mg/Kg	1	5/17/2023 11:55:55 AM	74978
Motor Oil Range Organics (MRO)	130	48		mg/Kg	1	5/17/2023 11:55:55 AM	74978
Surr: DNOP	109	69-147		%Rec	1	5/17/2023 11:55:55 AM	74978
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/15/2023 4:52:05 PM	74925
Surr: BFB	94.3	15-244		%Rec	1	5/15/2023 4:52:05 PM	74925
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	ND	0.024		mg/Kg	1	5/15/2023 4:52:05 PM	74925
Toluene	ND	0.048		mg/Kg	1	5/15/2023 4:52:05 PM	74925
Ethylbenzene	ND	0.048		mg/Kg	1	5/15/2023 4:52:05 PM	74925
Xylenes, Total	ND	0.096		mg/Kg	1	5/15/2023 4:52:05 PM	74925
Surr: 4-Bromofluorobenzene	86.2	39.1-146		%Rec	1	5/15/2023 4:52:05 PM	74925

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 **2305683**
Date Reported: **5/23/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-6a
Project: Trunk 11S Feb 2023
Collection Date: 5/11/2023 9:20:00 AM
Lab ID: 2305683-005 **Matrix:** SOIL **Received Date:** 5/12/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	60		mg/Kg	20	5/16/2023 8:17:51 PM	74993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	85	9.4		mg/Kg	1	5/17/2023 3:59:01 PM	74978
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/17/2023 3:59:01 PM	74978
Surr: DNOP	102	69-147		%Rec	1	5/17/2023 3:59:01 PM	74978
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/15/2023 5:15:30 PM	74925
Surr: BFB	80.4	15-244		%Rec	1	5/15/2023 5:15:30 PM	74925
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	ND	0.024		mg/Kg	1	5/15/2023 5:15:30 PM	74925
Toluene	ND	0.049		mg/Kg	1	5/15/2023 5:15:30 PM	74925
Ethylbenzene	ND	0.049		mg/Kg	1	5/15/2023 5:15:30 PM	74925
Xylenes, Total	ND	0.098		mg/Kg	1	5/15/2023 5:15:30 PM	74925
Surr: 4-Bromofluorobenzene	83.3	39.1-146		%Rec	1	5/15/2023 5:15:30 PM	74925

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 **2305683**
Date Reported: **5/23/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-7a
Project: Trunk 11S Feb 2023
Collection Date: 5/11/2023 9:25:00 AM
Lab ID: 2305683-006 **Matrix:** SOIL **Received Date:** 5/12/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	60		mg/Kg	20	5/16/2023 8:30:15 PM	74993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	13	9.6		mg/Kg	1	5/17/2023 11:08:44 AM	74978
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/17/2023 11:08:44 AM	74978
Surr: DNOP	92.9	69-147		%Rec	1	5/17/2023 11:08:44 AM	74978
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/15/2023 5:38:57 PM	74925
Surr: BFB	78.5	15-244		%Rec	1	5/15/2023 5:38:57 PM	74925
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	ND	0.024		mg/Kg	1	5/15/2023 5:38:57 PM	74925
Toluene	ND	0.048		mg/Kg	1	5/15/2023 5:38:57 PM	74925
Ethylbenzene	ND	0.048		mg/Kg	1	5/15/2023 5:38:57 PM	74925
Xylenes, Total	ND	0.096		mg/Kg	1	5/15/2023 5:38:57 PM	74925
Surr: 4-Bromofluorobenzene	83.0	39.1-146		%Rec	1	5/15/2023 5:38:57 PM	74925

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 **2305683**
Date Reported: **5/23/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-9a
Project: Trunk 11S Feb 2023
Collection Date: 5/11/2023 9:30:00 AM
Lab ID: 2305683-007 **Matrix:** SOIL **Received Date:** 5/12/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	59		mg/Kg	20	5/16/2023 9:07:28 PM	74993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	640	19		mg/Kg	2	5/17/2023 1:33:28 PM	74978
Motor Oil Range Organics (MRO)	360	97		mg/Kg	2	5/17/2023 1:33:28 PM	74978
Surr: DNOP	120	69-147		%Rec	2	5/17/2023 1:33:28 PM	74978
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	5/15/2023 6:02:19 PM	74925
Surr: BFB	72.6	15-244		%Rec	1	5/15/2023 6:02:19 PM	74925
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	ND	0.023		mg/Kg	1	5/15/2023 6:02:19 PM	74925
Toluene	ND	0.046		mg/Kg	1	5/15/2023 6:02:19 PM	74925
Ethylbenzene	ND	0.046		mg/Kg	1	5/15/2023 6:02:19 PM	74925
Xylenes, Total	ND	0.093		mg/Kg	1	5/15/2023 6:02:19 PM	74925
Surr: 4-Bromofluorobenzene	82.3	39.1-146		%Rec	1	5/15/2023 6:02:19 PM	74925

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 **2305683**
Date Reported: **5/23/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-10a
Project: Trunk 11S Feb 2023
Collection Date: 5/11/2023 9:35:00 AM
Lab ID: 2305683-008 **Matrix:** SOIL **Received Date:** 5/12/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	60		mg/Kg	20	5/16/2023 9:19:53 PM	74993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	2700	96		mg/Kg	10	5/17/2023 1:24:29 PM	74978
Motor Oil Range Organics (MRO)	1500	480		mg/Kg	10	5/17/2023 1:24:29 PM	74978
Surr: DNOP	0	69-147	S	%Rec	10	5/17/2023 1:24:29 PM	74978
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/15/2023 6:25:41 PM	74925
Surr: BFB	77.0	15-244		%Rec	1	5/15/2023 6:25:41 PM	74925
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	ND	0.023		mg/Kg	1	5/15/2023 6:25:41 PM	74925
Toluene	ND	0.047		mg/Kg	1	5/15/2023 6:25:41 PM	74925
Ethylbenzene	ND	0.047		mg/Kg	1	5/15/2023 6:25:41 PM	74925
Xylenes, Total	ND	0.093		mg/Kg	1	5/15/2023 6:25:41 PM	74925
Surr: 4-Bromofluorobenzene	82.0	39.1-146		%Rec	1	5/15/2023 6:25:41 PM	74925

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 **2305683**
Date Reported: **5/23/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-11a
Project: Trunk 11S Feb 2023
Collection Date: 5/11/2023 9:40:00 AM
Lab ID: 2305683-009 **Matrix:** SOIL **Received Date:** 5/12/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	60		mg/Kg	20	5/16/2023 9:32:17 PM	74993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	2700	86		mg/Kg	10	5/17/2023 1:45:42 PM	74978
Motor Oil Range Organics (MRO)	1300	430		mg/Kg	10	5/17/2023 1:45:42 PM	74978
Surr: DNOP	0	69-147	S	%Rec	10	5/17/2023 1:45:42 PM	74978
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	5/16/2023 3:32:30 PM	74925
Surr: BFB	142	15-244		%Rec	1	5/16/2023 3:32:30 PM	74925
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	ND	0.023		mg/Kg	1	5/16/2023 3:32:30 PM	74925
Toluene	ND	0.046		mg/Kg	1	5/16/2023 3:32:30 PM	74925
Ethylbenzene	ND	0.046		mg/Kg	1	5/16/2023 3:32:30 PM	74925
Xylenes, Total	ND	0.093		mg/Kg	1	5/16/2023 3:32:30 PM	74925
Surr: 4-Bromofluorobenzene	83.0	39.1-146		%Rec	1	5/16/2023 3:32:30 PM	74925

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 **2305683**
Date Reported: **5/23/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** FP-12a
Project: Trunk 11S Feb 2023 **Collection Date:** 5/11/2023 9:45:00 AM
Lab ID: 2305683-010 **Matrix:** SOIL **Received Date:** 5/12/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	60		mg/Kg	20	5/16/2023 9:44:41 PM	74993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	2400	99		mg/Kg	10	5/17/2023 2:06:57 PM	74978
Motor Oil Range Organics (MRO)	1200	490		mg/Kg	10	5/17/2023 2:06:57 PM	74978
Surr: DNOP	0	69-147	S	%Rec	10	5/17/2023 2:06:57 PM	74978
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/15/2023 7:12:19 PM	74925
Surr: BFB	93.0	15-244		%Rec	1	5/15/2023 7:12:19 PM	74925
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	ND	0.025		mg/Kg	1	5/15/2023 7:12:19 PM	74925
Toluene	ND	0.050		mg/Kg	1	5/15/2023 7:12:19 PM	74925
Ethylbenzene	ND	0.050		mg/Kg	1	5/15/2023 7:12:19 PM	74925
Xylenes, Total	ND	0.10		mg/Kg	1	5/15/2023 7:12:19 PM	74925
Surr: 4-Bromofluorobenzene	85.6	39.1-146		%Rec	1	5/15/2023 7:12:19 PM	74925

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 **2305683**
Date Reported: **5/23/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-20
Project: Trunk 11S Feb 2023
Collection Date: 5/11/2023 10:00:00 AM
Lab ID: 2305683-011 **Matrix:** SOIL **Received Date:** 5/12/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	60		mg/Kg	20	5/16/2023 9:57:06 PM	74993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	20000	490		mg/Kg	50	5/18/2023 10:39:23 AM	74978
Motor Oil Range Organics (MRO)	6600	2500		mg/Kg	50	5/18/2023 10:39:23 AM	74978
Surr: DNOP	0	69-147	S	%Rec	50	5/18/2023 10:39:23 AM	74978
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**	
Gasoline Range Organics (GRO)	650	49		mg/Kg	10	5/16/2023 3:56:05 PM	74925
Surr: BFB	763	15-244	S	%Rec	10	5/16/2023 3:56:05 PM	74925
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	ND	0.25		mg/Kg	10	5/16/2023 3:56:05 PM	74925
Toluene	2.0	0.49		mg/Kg	10	5/16/2023 3:56:05 PM	74925
Ethylbenzene	1.4	0.49		mg/Kg	10	5/16/2023 3:56:05 PM	74925
Xylenes, Total	15	0.99		mg/Kg	10	5/16/2023 3:56:05 PM	74925
Surr: 4-Bromofluorobenzene	93.4	39.1-146		%Rec	10	5/16/2023 3:56:05 PM	74925

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 **2305683**
Date Reported: **5/23/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-21
Project: Trunk 11S Feb 2023
Collection Date: 5/11/2023 10:05:00 AM
Lab ID: 2305683-012 **Matrix:** SOIL **Received Date:** 5/12/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	60		mg/Kg	20	5/16/2023 10:09:30 PM	74993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	150	9.1		mg/Kg	1	5/17/2023 11:32:18 AM	74978
Motor Oil Range Organics (MRO)	59	46		mg/Kg	1	5/17/2023 11:32:18 AM	74978
Surr: DNOP	79.6	69-147		%Rec	1	5/17/2023 11:32:18 AM	74978
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/15/2023 7:59:00 PM	74925
Surr: BFB	102	15-244		%Rec	1	5/15/2023 7:59:00 PM	74925
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	ND	0.023		mg/Kg	1	5/15/2023 7:59:00 PM	74925
Toluene	ND	0.047		mg/Kg	1	5/15/2023 7:59:00 PM	74925
Ethylbenzene	ND	0.047		mg/Kg	1	5/15/2023 7:59:00 PM	74925
Xylenes, Total	ND	0.093		mg/Kg	1	5/15/2023 7:59:00 PM	74925
Surr: 4-Bromofluorobenzene	83.5	39.1-146		%Rec	1	5/15/2023 7:59:00 PM	74925

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 **2305683**
Date Reported: **5/23/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: FP-22
Project: Trunk 11S Feb 2023
Collection Date: 5/11/2023 10:10:00 AM
Lab ID: 2305683-013 **Matrix:** SOIL **Received Date:** 5/12/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	60		mg/Kg	20	5/16/2023 10:21:55 PM	74993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	12	10		mg/Kg	1	5/17/2023 12:33:46 AM	74977
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/17/2023 12:33:46 AM	74977
Surr: DNOP	81.8	69-147		%Rec	1	5/17/2023 12:33:46 AM	74977
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/16/2023 12:15:51 AM	74930
Surr: BFB	70.0	15-244		%Rec	1	5/16/2023 12:15:51 AM	74930
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	ND	0.024		mg/Kg	1	5/16/2023 12:15:51 AM	74930
Toluene	ND	0.049		mg/Kg	1	5/16/2023 12:15:51 AM	74930
Ethylbenzene	ND	0.049		mg/Kg	1	5/16/2023 12:15:51 AM	74930
Xylenes, Total	ND	0.098		mg/Kg	1	5/16/2023 12:15:51 AM	74930
Surr: 4-Bromofluorobenzene	81.3	39.1-146		%Rec	1	5/16/2023 12:15:51 AM	74930

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#: **2305683**

23-May-23

Client: ENSOLUM

Project: Trunk 11S Feb 2023

Sample ID: **MB-74993**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **74993**	RunNo: **96806**
Prep Date: **5/16/2023**	Analysis Date: **5/16/2023**	SeqNo: **3511194** Units: **mg/Kg**

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

Sample ID: **LCS-74993**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **74993**	RunNo: **96806**
Prep Date: **5/16/2023**	Analysis Date: **5/16/2023**	SeqNo: **3511195** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.2	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of 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#: **2305683**

23-May-23

Client: ENSOLUM

Project: Trunk 11S Feb 2023

Sample ID: **MB-74969**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **PBS**	Batch ID: **74969**	RunNo: **96783**							
Prep Date: **5/15/2023**	Analysis Date: **5/16/2023**	SeqNo: **3510134**	Units: **%Rec**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.5		10.00		94.9	69	147			

Sample ID: **LCS-74977**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **LCSS**	Batch ID: **74977**	RunNo: **96783**							
Prep Date: **5/16/2023**	Analysis Date: **5/16/2023**	SeqNo: **3510137**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.2	61.9	130			
Surr: DNOP	4.6		5.000		91.8	69	147			

Sample ID: **MB-74977**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **PBS**	Batch ID: **74977**	RunNo: **96783**							
Prep Date: **5/16/2023**	Analysis Date: **5/16/2023**	SeqNo: **3510138**	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	9.4		10.00		93.9	69	147			

Sample ID: **2305683-013AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **FP-22**	Batch ID: **74977**	RunNo: **96783**							
Prep Date: **5/16/2023**	Analysis Date: **5/17/2023**	SeqNo: **3510903**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.9	49.60	12.37	76.8	54.2	135			
Surr: DNOP	4.9		4.960		98.3	69	147			

Sample ID: **2305683-013AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **FP-22**	Batch ID: **74977**	RunNo: **96783**							
Prep Date: **5/16/2023**	Analysis Date: **5/17/2023**	SeqNo: **3510904**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	9.7	48.54	12.37	79.9	54.2	135	1.32	29.2	
Surr: DNOP	4.7		4.854		96.6	69	147	0	0	

Sample ID: **LCS-74969**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **LCSS**	Batch ID: **74969**	RunNo: **96783**							
Prep Date: **5/15/2023**	Analysis Date: **5/16/2023**	SeqNo: **3510973**	Units: **%Rec**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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#: **2305683**

23-May-23

Client: ENSOLUM

Project: Trunk 11S Feb 2023

Sample ID: **LCS-74969**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **74969**	RunNo: **96783**
Prep Date: **5/15/2023**	Analysis Date: **5/16/2023**	SeqNo: **3510973** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		94.3	69	147			

Sample ID: **LCS-74978**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **74978**	RunNo: **96825**
Prep Date: **5/16/2023**	Analysis Date: **5/17/2023**	SeqNo: **3511918** 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	87.2	61.9	130			
Surr: DNOP	5.0		5.000		101	69	147			

Sample ID: **MB-74978**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **74978**	RunNo: **96825**
Prep Date: **5/16/2023**	Analysis Date: **5/17/2023**	SeqNo: **3511921** 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	12		10.00		120	69	147			

Sample ID: **LCS-75011**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **75011**	RunNo: **96864**
Prep Date: **5/17/2023**	Analysis Date: **5/18/2023**	SeqNo: **3513540** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		92.6	69	147			

Sample ID: **LCS-75017**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **75017**	RunNo: **96864**
Prep Date: **5/17/2023**	Analysis Date: **5/18/2023**	SeqNo: **3513541** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.2		5.000		84.3	69	147			

Sample ID: **MB-75011**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **75011**	RunNo: **96864**
Prep Date: **5/17/2023**	Analysis Date: **5/18/2023**	SeqNo: **3513544** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.3		10.00		92.9	69	147			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical 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#: **2305683**
23-May-23

Client: ENSOLUM
Project: Trunk 11S Feb 2023

Sample ID: **MB-75017** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **75017** RunNo: **96864**
Prep Date: **5/17/2023** Analysis Date: **5/18/2023** SeqNo: **3513545** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.3		10.00		93.3	69	147			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical 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#: **2305683**
23-May-23

Client: ENSOLUM
Project: Trunk 11S Feb 2023

Sample ID: **lcs-74925**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **74925**	RunNo: **96762**
Prep Date: **5/12/2023**	Analysis Date: **5/15/2023**	SeqNo: **3508640** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.7	70	130			
Surr: BFB	4900		1000		492	15	244			S

Sample ID: **mb-74925**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **74925**	RunNo: **96762**
Prep Date: **5/12/2023**	Analysis Date: **5/15/2023**	SeqNo: **3508641** 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	740		1000		74.4	15	244			

Sample ID: **lcs-74930**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **74930**	RunNo: **96762**
Prep Date: **5/12/2023**	Analysis Date: **5/15/2023**	SeqNo: **3509509** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	85.4	70	130			
Surr: BFB	4800		1000		483	15	244			S

Sample ID: **mb-74930**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **74930**	RunNo: **96762**
Prep Date: **5/12/2023**	Analysis Date: **5/15/2023**	SeqNo: **3509510** 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	810		1000		81.0	15	244			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical 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#: **2305683**

23-May-23

Client: ENSOLUM

Project: Trunk 11S Feb 2023

Sample ID: **LCS-74925** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **74925** RunNo: **96762**

Prep Date: **5/12/2023** Analysis Date: **5/15/2023** SeqNo: **3508649** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.025	1.000	0	83.0	70	130			
Toluene	0.85	0.050	1.000	0	84.6	70	130			
Ethylbenzene	0.85	0.050	1.000	0	84.9	70	130			
Xylenes, Total	2.6	0.10	3.000	0	85.3	70	130			
Surr: 4-Bromofluorobenzene	0.85		1.000		84.6	39.1	146			

Sample ID: **mb-74925** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **74925** RunNo: **96762**

Prep Date: **5/12/2023** Analysis Date: **5/15/2023** SeqNo: **3508650** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.83		1.000		82.6	39.1	146			

Sample ID: **LCS-74930** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **74930** RunNo: **96762**

Prep Date: **5/12/2023** Analysis Date: **5/15/2023** SeqNo: **3509516** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.80	0.025	1.000	0	80.2	70	130			
Toluene	0.82	0.050	1.000	0	82.4	70	130			
Ethylbenzene	0.82	0.050	1.000	0	82.2	70	130			
Xylenes, Total	2.5	0.10	3.000	0	82.7	70	130			
Surr: 4-Bromofluorobenzene	0.86		1.000		86.1	39.1	146			

Sample ID: **mb-74930** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **74930** RunNo: **96762**

Prep Date: **5/12/2023** Analysis Date: **5/15/2023** SeqNo: **3509517** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.84		1.000		83.9	39.1	146			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical 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: 2305683 RcptNo: 1

Received By: Juan Rojas 5/12/2023 7:30:00 AM

Completed By: Cheyenne Cason 5/12/2023 8:32:29 AM

Reviewed By: 5/12/23

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 5/12/23

JM 5/12/23

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:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.9	Good	Yes	Morty		

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 6060 S. Rio Grande, Suite A
Aztec, NM 87410

Phone #:

email or Fax#: ksummers@ensolum.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 3-DAY
☐ Standard ☐ Rush

Project Name: Trunk 11S (Feb 2023)

Project #: see notes

Project Manager: ksummers

Sampler: RDeechilly

On Ice: ☐ Yes ☑ No

# of Coolers: 1 (Mark)

Cooler Temp (Including CF): 0.8+0.1=0.9 (°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. 2305683	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)	Chloride
5/11/23	900	S	FP-2a	(1) 4oz Jar	cool	001	X	X									X
5/11/23	905	S	FP-3a	(1) 4oz Jar	cool	002	X	X									X
5/11/23	910	S	FP-4a	(1) 4oz Jar	cool	003	X	X									X
5/11/23	915	S	FP-5a	(1) 4oz Jar	cool	004	X	X									X
5/11/23	920	S	FP-6a	(1) 4oz Jar	cool	005	X	X									X
5/11/23	925	S	FP-7a	(1) 4oz Jar	cool	006	X	X									X
5/11/23	930	S	FP-9a	(1) 4oz Jar	cool	007	X	X									X
5/11/23	935	S	FP-10a	(1) 4oz Jar	cool	008	X	X									X
5/11/23	940	S	FP-11a	(1) 4oz Jar	cool	009	X	X									X
5/11/23	945	S	FP-12a	(1) 4oz Jar	cool	010	X	X									X
5/11/23	1000	S	FP-20	(1) 4oz Jar	cool	011	X	X									X
5/11/23	1005	S	FP-21	(1) 4oz Jar	cool	012	X	X									X

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
5/11/23	1438				5/11/23	1438
5/11/23	1804			courier	5/12/23	7:30

Remarks: PM-Tom Long (EPROD)
PayKey - EB21200
NonAFE - N64995

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S Rio Grande Suite A
Aztec, NM 87410

Phone #:

email or Fax#: KSummers@ensolum.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 3-DAY
☐ Standard ☐ Rush

Project Name: Trunk 11S (Feb 2023)

Project #: See notes

Project Manager: KSummers

Sampler: R Deechilly

On Ice: ☐ Yes ☑ No

# of Coolers: 1 Marty

Cooler Temp(including CF): 0.8 +0.1 = 0.9 (°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. 2305683	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)	Chloride
5/11/23	1010	S	~~FP~~-22	(1) 4oz Jar	Cool	~~00~~013	X	X									X

Analysis Request

Relinquished by:	Date	Time	Received by:	Via:	Date	Time
	5/11/23	1438			5/11/23	1438
	5/11/23	1804			5/12/23	7:30

Remarks: PM-Tom Long (EPROD)
Pay Key - RB21200
Non AFE - N64995

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

June 07, 2023

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

RE: Trunk 11S Feb 2023 OrderNo.: 2306116

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 6/3/2023 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 **2306116**
Date Reported: **6/7/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** LF-1
Project: Trunk 11S Feb 2023 **Collection Date:** 6/2/2023 8:45:00 AM
Lab ID: 2306116-001 **Matrix:** MEOH (SOIL) **Received Date:** 6/3/2023 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	59		mg/Kg	20	6/5/2023 10:38:32 AM	75342
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	14	9.2		mg/Kg	1	6/5/2023 9:25:38 AM	75331
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/5/2023 9:25:38 AM	75331
Surr: DNOP	96.8	69-147		%Rec	1	6/5/2023 9:25:38 AM	75331
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **KMN**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/5/2023 10:50:00 AM	R97206
Surr: BFB	85.5	15-244		%Rec	1	6/5/2023 10:50:00 AM	R97206
EPA METHOD 8021B: VOLATILES						Analyst: **KMN**	
Benzene	ND	0.025		mg/Kg	1	6/5/2023 10:50:00 AM	R97206
Toluene	ND	0.050		mg/Kg	1	6/5/2023 10:50:00 AM	R97206
Ethylbenzene	ND	0.050		mg/Kg	1	6/5/2023 10:50:00 AM	R97206
Xylenes, Total	ND	0.10		mg/Kg	1	6/5/2023 10:50:00 AM	R97206
Surr: 4-Bromofluorobenzene	83.7	39.1-146		%Rec	1	6/5/2023 10:50:00 AM	R97206

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 **2306116**
Date Reported: **6/7/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** LF-2
Project: Trunk 11S Feb 2023 **Collection Date:** 6/2/2023 8:50:00 AM
Lab ID: 2306116-002 **Matrix:** MEOH (SOIL) **Received Date:** 6/3/2023 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	6/5/2023 10:50:57 AM	75342
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/5/2023 9:36:14 AM	75331
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/5/2023 9:36:14 AM	75331
Surr: DNOP	92.4	69-147		%Rec	1	6/5/2023 9:36:14 AM	75331
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **KMN**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/5/2023 11:12:00 AM	R97206
Surr: BFB	92.5	15-244		%Rec	1	6/5/2023 11:12:00 AM	R97206
EPA METHOD 8021B: VOLATILES						Analyst: **KMN**	
Benzene	ND	0.025		mg/Kg	1	6/5/2023 11:12:00 AM	R97206
Toluene	ND	0.050		mg/Kg	1	6/5/2023 11:12:00 AM	R97206
Ethylbenzene	ND	0.050		mg/Kg	1	6/5/2023 11:12:00 AM	R97206
Xylenes, Total	ND	0.10		mg/Kg	1	6/5/2023 11:12:00 AM	R97206
Surr: 4-Bromofluorobenzene	83.6	39.1-146		%Rec	1	6/5/2023 11:12:00 AM	R97206

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 **2306116**
Date Reported: **6/7/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** LF-3
Project: Trunk 11S Feb 2023 **Collection Date:** 6/2/2023 8:55:00 AM
Lab ID: 2306116-003 **Matrix:** MEOH (SOIL) **Received Date:** 6/3/2023 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	6/5/2023 11:03:22 AM	75342
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	65	9.8		mg/Kg	1	6/5/2023 9:46:50 AM	75331
Motor Oil Range Organics (MRO)	49	49		mg/Kg	1	6/5/2023 9:46:50 AM	75331
Surr: DNOP	92.7	69-147		%Rec	1	6/5/2023 9:46:50 AM	75331
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **KMN**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/5/2023 11:34:00 AM	R97206
Surr: BFB	87.5	15-244		%Rec	1	6/5/2023 11:34:00 AM	R97206
EPA METHOD 8021B: VOLATILES						Analyst: **KMN**	
Benzene	ND	0.025		mg/Kg	1	6/5/2023 11:34:00 AM	R97206
Toluene	ND	0.050		mg/Kg	1	6/5/2023 11:34:00 AM	R97206
Ethylbenzene	ND	0.050		mg/Kg	1	6/5/2023 11:34:00 AM	R97206
Xylenes, Total	ND	0.10		mg/Kg	1	6/5/2023 11:34:00 AM	R97206
Surr: 4-Bromofluorobenzene	83.2	39.1-146		%Rec	1	6/5/2023 11:34:00 AM	R97206

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 **2306116**
Date Reported: **6/7/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** LF-4
Project: Trunk 11S Feb 2023 **Collection Date:** 6/2/2023 9:00:00 AM
Lab ID: 2306116-004 **Matrix:** MEOH (SOIL) **Received Date:** 6/3/2023 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	6/5/2023 11:15:47 AM	75342
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	20	9.5		mg/Kg	1	6/5/2023 9:57:31 AM	75331
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/5/2023 9:57:31 AM	75331
Surr: DNOP	98.3	69-147		%Rec	1	6/5/2023 9:57:31 AM	75331
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **KMN**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/5/2023 11:56:00 AM	R97206
Surr: BFB	87.0	15-244		%Rec	1	6/5/2023 11:56:00 AM	R97206
EPA METHOD 8021B: VOLATILES						Analyst: **KMN**	
Benzene	ND	0.025		mg/Kg	1	6/5/2023 11:56:00 AM	R97206
Toluene	ND	0.050		mg/Kg	1	6/5/2023 11:56:00 AM	R97206
Ethylbenzene	ND	0.050		mg/Kg	1	6/5/2023 11:56:00 AM	R97206
Xylenes, Total	ND	0.10		mg/Kg	1	6/5/2023 11:56:00 AM	R97206
Surr: 4-Bromofluorobenzene	83.4	39.1-146		%Rec	1	6/5/2023 11:56:00 AM	R97206

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#: **2306116**
07-Jun-23

Client: ENSOLUM
Project: Trunk 11S Feb 2023

Sample ID: **MB-75342**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **75342**	RunNo: **97209**							
Prep Date: **6/5/2023**	Analysis Date: **6/5/2023**	SeqNo: **3531126**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-75342**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **75342**	RunNo: **97209**							
Prep Date: **6/5/2023**	Analysis Date: **6/5/2023**	SeqNo: **3531127**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.9	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#: **2306116**
07-Jun-23

Client: ENSOLUM
Project: Trunk 11S Feb 2023

Sample ID: **LCS-75331** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **75331** RunNo: **97202**
Prep Date: **6/5/2023** Analysis Date: **6/5/2023** SeqNo: **3530096** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.8	61.9	130			
Surr: DNOP	4.5		5.000		90.3	69	147			

Sample ID: **MB-75331** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **75331** RunNo: **97202**
Prep Date: **6/5/2023** Analysis Date: **6/5/2023** SeqNo: **3530097** 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	9.3		10.00		93.2	69	147			

Sample ID: **2306116-004AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LF-4** Batch ID: **75331** RunNo: **97202**
Prep Date: **6/5/2023** Analysis Date: **6/5/2023** SeqNo: **3530839** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	9.9	49.41	19.60	67.8	54.2	135			
Surr: DNOP	5.1		4.941		104	69	147			

Sample ID: **2306116-004AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LF-4** Batch ID: **75331** RunNo: **97202**
Prep Date: **6/5/2023** Analysis Date: **6/5/2023** SeqNo: **3530840** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	9.5	47.53	19.60	61.8	54.2	135	8.10	29.2	
Surr: DNOP	4.8		4.753		101	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#: **2306116**

07-Jun-23

Client: ENSOLUM

Project: Trunk 11S Feb 2023

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R97206**	RunNo: **97206**
Prep Date:	Analysis Date: **6/5/2023**	SeqNo: **3530280** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.3	70	130			
Surr: BFB	2100		1000		209	15	244			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R97206**	RunNo: **97206**
Prep Date:	Analysis Date: **6/5/2023**	SeqNo: **3530281** 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	950		1000		95.2	15	244			

Sample ID: **2306116-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LF-1**	Batch ID: **R97206**	RunNo: **97206**
Prep Date:	Analysis Date: **6/5/2023**	SeqNo: **3530392** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	70	130			
Surr: BFB	2000		1000		202	15	244			

Sample ID: **2306116-001AMSD**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LF-1**	Batch ID: **R97206**	RunNo: **97206**
Prep Date:	Analysis Date: **6/5/2023**	SeqNo: **3530393** 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	94.0	70	130	6.86	0	
Surr: BFB	2000		1000		196	15	244	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#: **2306116**
07-Jun-23

Client: ENSOLUM
Project: Trunk 11S Feb 2023

Sample ID: **100ng btex lcs** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **R97206** RunNo: **97206**
Prep Date: Analysis Date: **6/5/2023** SeqNo: **3530284** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.025	1.000	0	87.0	70	130			
Toluene	0.88	0.050	1.000	0	88.2	70	130			
Ethylbenzene	0.89	0.050	1.000	0	88.6	70	130			
Xylenes, Total	2.7	0.10	3.000	0	88.6	70	130			
Surr: 4-Bromofluorobenzene	0.95		1.000		94.8	39.1	146			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **R97206** RunNo: **97206**
Prep Date: Analysis Date: **6/5/2023** SeqNo: **3530285** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.92		1.000		92.3	39.1	146			

Sample ID: **2306116-002AMS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LF-2** Batch ID: **R97206** RunNo: **97206**
Prep Date: Analysis Date: **6/5/2023** SeqNo: **3531052** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.025	1.000	0	86.8	70	130			
Toluene	0.87	0.050	1.000	0	87.1	70	130			
Ethylbenzene	0.85	0.050	1.000	0	85.4	70	130			
Xylenes, Total	2.5	0.10	3.000	0	84.5	70	130			
Surr: 4-Bromofluorobenzene	0.83		1.000		82.7	39.1	146			

Sample ID: **2306116-002AMSD** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LF-2** Batch ID: **R97206** RunNo: **97206**
Prep Date: Analysis Date: **6/5/2023** SeqNo: **3531053** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.81	0.025	1.000	0	81.4	70	130	6.34	0	
Toluene	0.82	0.050	1.000	0	82.2	70	130	5.82	0	
Ethylbenzene	0.81	0.050	1.000	0	81.3	70	130	4.94	0	
Xylenes, Total	2.4	0.10	3.000	0	80.7	70	130	4.51	0	
Surr: 4-Bromofluorobenzene	0.83		1.000		83.0	39.1	146	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: 2306116 | RcptNo: 1

Received By: **Cheyenne Cason** 6/3/2023 8:15:00 AM

Completed By: **Cheyenne Cason** 6/3/2023 8:26:23 AM

Reviewed By: JN 6/5/23

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 CMC 6/3/23

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:

No Client Phone number on COC - CMC 6/3/23

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.5	Good	Yes	Yogi		

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande Suite A
Aztec, NM 87410

Phone #:

email or Fax#: ksummers@ensolum.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time: SAME DAY
☐ Standard ☒ Rush 10&6

Project Name: Trunk 11S (Feb2023)

Project #: See notes

Project Manager: ksummers

Sampler: RDeechilly
On Ice: ☑ Yes ☐ No Yogi
# of Coolers: 1
Cooler Temp(Including CF): 5.6 - 0.1 = 5.5 (°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. 2306116	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)	Chloride
6/2/23	845	S	LF-1	(1) 4oz Jar	Cool	001	X	X									X
6/2/23	850	S	LF-2	(1) 4oz Jar	Cool	002	X	X									X
6/2/23	855	S	LF-3	(1) 4oz Jar	Cool	003	X	X									X
6/2/23	900	S	LF-4	(1) 4oz Jar	Cool	004	X	X									X

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
6/2/23	1424				6/2/23	1424
6/2/23	1804			Courier	6/3/23	0815

Remarks: SAME DAY
PM-Tom Long (EPROD)
PO# KY- RB21200
NON AFE- N64995

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

July 06, 2023

Kyle Summers

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

RE: Trunk 11 S Feb 2023 OrderNo.: 2306C30

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/23/2023 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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2306C30**
Date Reported: **7/6/2023**

CLIENT: ENSOLUM
Client Sample ID: FP-23
Project: Trunk 11 S Feb 2023
Collection Date: 6/22/2023 11:15:00 AM
Lab ID: 2306C30-001 **Matrix:** SOIL **Received Date:** 6/23/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	6/28/2023 1:47:39 PM	75886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	200	9.1		mg/Kg	1	6/27/2023 2:34:17 PM	75820
Motor Oil Range Organics (MRO)	54	46		mg/Kg	1	6/27/2023 2:34:17 PM	75820
Surr: DNOP	98.9	69-147		%Rec	1	6/27/2023 2:34:17 PM	75820
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **KMN**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/26/2023 9:40:00 PM	75813
Surr: BFB	95.3	15-244		%Rec	1	6/26/2023 9:40:00 PM	75813
EPA METHOD 8021B: VOLATILES						Analyst: **KMN**	
Benzene	ND	0.024		mg/Kg	1	6/26/2023 9:40:00 PM	75813
Toluene	ND	0.048		mg/Kg	1	6/26/2023 9:40:00 PM	75813
Ethylbenzene	ND	0.048		mg/Kg	1	6/26/2023 9:40:00 PM	75813
Xylenes, Total	ND	0.096		mg/Kg	1	6/26/2023 9:40:00 PM	75813
Surr: 4-Bromofluorobenzene	94.0	39.1-146		%Rec	1	6/26/2023 9:40:00 PM	75813

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#: **2306C30**

06-Jul-23

Client: ENSOLUM

Project: Trunk 11 S Feb 2023

Sample ID: **MB-75886**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **75886**	RunNo: **97784**
Prep Date: **6/28/2023**	Analysis Date: **6/28/2023**	SeqNo: **3557546** Units: **mg/Kg**

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

Sample ID: **LCS-75886**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **75886**	RunNo: **97784**
Prep Date: **6/28/2023**	Analysis Date: **6/28/2023**	SeqNo: **3557547** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.3	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#: **2306C30**

06-Jul-23

Client: ENSOLUM

Project: Trunk 11 S Feb 2023

Sample ID: **LCS-75820**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **75820**	RunNo: **97733**
Prep Date: **6/26/2023**	Analysis Date: **6/27/2023**	SeqNo: **3554371** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	89.2	61.9	130			
Surr: DNOP	6.1		5.000		123	69	147			

Sample ID: **MB-75820**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **75820**	RunNo: **97733**
Prep Date: **6/26/2023**	Analysis Date: **6/27/2023**	SeqNo: **3554372** 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	10		10.00		99.7	69	147			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical 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#: **2306C30**

06-Jul-23

Client: ENSOLUM

Project: Trunk 11 S Feb 2023

Sample ID: **lcs-75813**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **75813**	RunNo: **97706**
Prep Date: **6/23/2023**	Analysis Date: **6/26/2023**	SeqNo: **3554056** 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	86.3	70	130			
Surr: BFB	2100		1000		208	15	244			

Sample ID: **mb-75813**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **75813**	RunNo: **97706**
Prep Date: **6/23/2023**	Analysis Date: **6/26/2023**	SeqNo: **3554057** 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	930		1000		93.0	15	244			

Sample ID: **lcs-75811**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **75811**	RunNo: **97706**
Prep Date: **6/23/2023**	Analysis Date: **6/26/2023**	SeqNo: **3554080** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	2100		1000		207	15	244			

Sample ID: **mb-75811**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **75811**	RunNo: **97706**
Prep Date: **6/23/2023**	Analysis Date: **6/26/2023**	SeqNo: **3554081** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	960		1000		95.9	15	244			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical 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#: **2306C30**

06-Jul-23

Client: ENSOLUM

Project: Trunk 11 S Feb 2023

Sample ID: **lcs-75813**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **75813**	RunNo: **97706**
Prep Date: **6/23/2023**	Analysis Date: **6/26/2023**	SeqNo: **3554101** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.4	70	130			
Toluene	0.98	0.050	1.000	0	98.1	70	130			
Ethylbenzene	1.0	0.050	1.000	0	99.7	70	130			
Xylenes, Total	3.0	0.10	3.000	0	99.7	70	130			
Surr: 4-Bromofluorobenzene	0.96		1.000		96.5	39.1	146			

Sample ID: **mb-75813**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **75813**	RunNo: **97706**
Prep Date: **6/23/2023**	Analysis Date: **6/26/2023**	SeqNo: **3554102** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.93		1.000		93.3	39.1	146			

Sample ID: **lcs-75811**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **75811**	RunNo: **97706**
Prep Date: **6/23/2023**	Analysis Date: **6/26/2023**	SeqNo: **3554125** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.93		1.000		93.0	39.1	146			

Sample ID: **mb-75811**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **75811**	RunNo: **97706**
Prep Date: **6/23/2023**	Analysis Date: **6/26/2023**	SeqNo: **3554126** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.93		1.000		92.9	39.1	146			

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.		

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: 2306C30 RcptNo: 1

Received By: Tracy Casarrubias 6/23/2023 6:45:00 AM
Completed By: Tracy Casarrubias 6/23/2023 7:13:17 AM
Reviewed By: MP 6/23/23

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: TMC 6/23/23

Special Handling (if applicable)

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

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions: Phone number is missing on COC- TMC 6/23/23

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.9	Good	Yes	Yogi		

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande Suite A
Aztec, NM 87410

Phone #:

email or Fax#: KSummers@ensolum.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Trunk 11S (Feb 2023)

Project #: see notes

Project Manager: KSummers

Sampler: RDeechilly

On Ice: ☒ Yes ☐ No yogi

# of Coolers: 1

Cooler Temp(including CF): 5.0-0.1=4.9 (°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. 2306C30	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)	Chloride
6/22/23	1115	S	FP-23	(1) 4oz Jar	cool	001	X	X									X

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via: courier	Date	Time
6/22/23	1545				6/23/23	6:45
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks: PM - Tom Long (EPROD)
Pay Key - RB21200
Non AFE - N64995

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

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

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

CONDITIONS

Action 272822

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 272822
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
scwells	Incident occurred on tribal land. App ID 272822 accepted for record.	2/5/2024