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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: **Enterprise Field Services, LLC**	OGRID: **241602**
Contact Name: **Thomas Long**	Contact Telephone: **505-599-2286**
Contact email:**tjlong@eprod.com**	Incident # *(assigned by OCD)* **nAPP2222735338**
Contact mailing address: **614 Reilly Ave, Farmington, NM 87401**	

Location of Release Source

Latitude **36.664887** Longitude **-107.674524** *(NAD 83 in decimal degrees to 5 decimal places)*

Site Name **Jones A LS #7**	Site Type **Natural Gas Gathering Pipeline**
Date Release Discovered: **08/15/2022**	Serial Number *(if applicable)*: **N/A**

Unit Letter	Section	Township	Range	County
E	**15**	**28N**	**8W**	**San Juan**

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☒ Condensate	Volume Released (bbls): **Estimated 10-15 BBLs**	Volume Recovered (bbls): **None**
☒ Natural Gas	Volume Released (Mcf): **1.8 MCF**	Volume Recovered (Mcf): **None**
☐ Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

Cause of Release On June 28, 2022, Enterprise had a release of natural gas from the Jones A LS #7 pipeline. The pipeline was isolated, depressurized, locked and tagged out. No liquids were released to the ground surface. No washes were affected. No fire nor injuries occurred. Due to the road conditions, Enterprise began repairs and remediation on August 12, 2022 and determined that this release was reportable per NMOCD regulation on August 15, 2022, due to the volume of impacted subsurface soil. Remediation and repairs were completed on September 14, 2022. The final excavation dimensions measured approximately 58 feet long by 23 feet wide by 11 feet deep. A total of 672 cubic yards of hydrocarbon impacted soil was excavated and transported to a New Mexico Oil Conservation Division (NMOCD) approved land farm. A third party closure report is included with this "Final" C-141.

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Thomas Long Title: Senior Environmental Scientist

Signature: Thomas Long Date: 11-29-2022

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

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: Nelson Velez Date: 12/09/2022

Printed Name: Nelson Velez Title: Environmental Specialist – Adv

ENSOLUM

CLOSURE REPORT

Property:

Jones A LS#7 (08/15/22)
Unit Letter E, S15 T28N R8W
San Juan County, New Mexico

New Mexico EMNRD OCD Incident ID No. NAPP2222735338

November 3, 2022

Ensolum Project No. 05A1226196

Prepared for:

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

Prepared by:

Landon Daniell
Staff Geologist

Kyle Summers
Senior Managing Geologist

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LIST OF APPENDICES

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Jones A LS#7 (08/15/22) (Site)
NM EMNRD OCD Incident ID No.	NAPP2222735338
Location:	36.664887° North, 107.674524° West Unit Letter E, Section 15, Township 28 North, Range 8 West San Juan County, New Mexico
Property:	United States Bureau of Land Management (BLM)
Regulatory:	New Mexico (NM) Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On June 28, 2022, Enterprise was notified by a third party of a possible release on the Jones A LS#7 pipeline. Enterprise personnel confirmed a leak and subsequently isolated and locked the pipeline out of service. On August 10, 2022, Enterprise initiated activities to repair the pipeline and remediate potential petroleum hydrocarbon impact. On August 15, 2022, Enterprise determined the release was "reportable" due to the estimated volume of impacted soil. The NM EMNRD OCD was subsequently notified.

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

1.2 Project Objective

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

2.0 CLOSURE CRITERIA

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

- The NM Office of the State Engineer (OSE) tracks the usage and assignment of water rights and water well installations and records this information in the Water Rights Reporting System (WRRS) database. Water wells and other points of diversion (PODs) are each assigned POD numbers in the database (which is searchable and includes an interactive map). No PODs were identified in the same Public Land Survey System (PLSS) section as the Site. Five PODs (SJ-02283, SJ-04131-POD1, SJ-04131-POD2, SJ-04131-POD3, SJ-04131-POD4) were identified in an adjacent PLSS section. However, only SJ-02283 had a recorded depth to water. POD SJ-02283 is located approximately 1.7 miles east of the Site with a listed depth

to water of 480 feet and is approximately 33 feet lower in elevation than the Site (**Figure A**, **Appendix B**).

- Nine cathodic protection wells (CPWs) were identified in the NM EMNRD OCD imaging database in the adjacent PLSS sections. The four closest CPWs are depicted on **Figure B** (**Appendix B**). Documentation for the cathodic protection well located near the Hardie E #1 well location indicate a depth to water of approximately 340 feet bgs. This cathodic protection well is located approximately 0.48 miles west of the Site and is approximately 68 feet higher in elevation than the Site. Documentation for the cathodic protection well located near the Hardie E #2A well location indicates a depth to water of approximately 60 feet bgs. This cathodic protection well is located approximately 0.56 miles northwest of the Site and is approximately 51 feet lower in elevation than the Site. Documentation for the cathodic protection well located near the Hardie E #1 and #7 well locations indicates a depth to water of approximately 60 feet bgs. This cathodic protection well is located approximately 0.59 miles southwest of the Site and is approximately 528 feet lower in elevation than the Site. Documentation for the cathodic protection well located near the Hardie E #2 and #8 well locations indicates a depth to water of approximately 280 feet bgs. This cathodic protection well is located approximately 0.91 miles northwest of the Site and is approximately 54 feet lower in elevation than the Site.

- The Site is not located within 300 feet of a NM EMNRD OCD-defined continuously flowing watercourse or significant watercourse (**Figure C**, **Appendix B**).

- The Site is not located within 200 feet of a lakebed, sinkhole, or playa lake.

- The Site is not located within 300 feet of a permanent residence, school, hospital, institution, or church (**Figure D**, **Appendix B**).

- No springs, or private domestic freshwater wells used by less than five households for domestic or stock watering purposes were identified within 500 feet of the Site (**Figure E**, **Appendix B**).

- No freshwater wells or springs were identified within 1,000 feet of the Site (**Figure E**, **Appendix B**).

- The Site is not located within incorporated municipal boundaries or within a defined municipal freshwater 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 the identified siting criteria, Enterprise estimates the depth to water at the Site to be greater than 50 feet bgs, resulting in a Tier II ranking. However, the soil requirements of NMAC 19.15.29.13(D)(1) indicate that a minimum of the upper four feet must contain "uncontaminated" soil and that the soils meet Tier I closure criteria listed in Table 1 of NMAC 19.15.29.12. Applicable closure criteria for Tier I soils and Tier II soils (below four feet) remaining in place at the Site include:

Tier II Closure Criteria for Soils Impacted by a Release		
Constituent[1]	**Method**	**Limit**
Chloride	EPA 300.0 or SM4500 Cl B	10,000 mg/kg
TPH (GRO+DRO+MRO)[2]	EPA SW-846 Method 8015	2,500 mg/kg
TPH (GRO+DRO)	EPA SW-846 Method 8015	1,000 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).

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

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

3.0 SOIL REMEDIATION ACTIVITIES

On August 15, 2022, Enterprise initiated activities to remediate petroleum hydrocarbon impact resulting from the release. During the remediation and corrective action activities, Industrial Mechanical Inc (IMI), provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final excavation measured approximately 58 feet long and 23 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 11 feet bgs. The lithology encountered during the completion of remediation activities consisted primarily of sandstone and shale.

Approximately 672 cubic yards (yd^3) of petroleum hydrocarbon-affected soils and 12 barrels (bbls) of hydro-excavation soil cuttings and water were transported to the Envirotech, Inc., (Envirotech) landfarm near Hilltop, NM for disposal/remediation. The executed C-138 solid waste acceptance form is provided in **Appendix C**. The excavation was backfilled with imported fill and then contoured to the surrounding topography.

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

4.0 SOIL SAMPLING PROGRAM

Ensolum field screened the soil samples from the excavation utilizing a calibrated Dexsil PetroFLAG® 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 37 composite soil samples (S-1 through S-37) from the excavation for laboratory analysis. In addition, four composite soil samples (SP-1 through SP-4) were collected from a segregated portion of the stockpiled soils to determine if the material was suitable to use as backfill. 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 and the excavator bucket were utilized to obtain fresh aliquots from each area of the excavation. Regulatory correspondence is provided in **Appendix E**.

First Sampling Event
On August 11, 2022, the first sampling event was performed at the Site. Composite soil samples S-1 (4'), S-2 (4'), and S-3 (4') were collected from the floor of the excavation. Composite soil samples S-4 (0'-4'), S-5 (0'-4'), S-6 (0'-4'), S-7 (0'-4'), S-8 (0'-4'), and S-9 (0'-4') were collected from the walls of the excavation. Composite soil samples SP-1, SP-2, SP-3, and SP-4 were collected from a segregated portion of the stockpiled soils to determine if the soils were suitable for use as backfill.

Subsequent soil analytical results identified TPH concentrations that exceeded the NM EMNRD OCD closure criteria for composite soil samples S-1, S-2, S-3, S-4, S-5, S-7, S-8, S-9, SP-3, and SP-4. In response to the exceedances the excavation was enlarged. The soils associated with the impacted samples were removed by excavation and transported to the landfarm for disposal/remediation.

Second Sampling Event
On August 16, 2022, the second sampling event was performed at the Site. The NM EMNRD OCD and BLM were notified of the sampling event although no representatives were present during sampling activities. Composite samples S-10 (5.5') and S-11 (5.5') were collected from the floor of the excavation. Composite soil samples S-12 (0'-5.5') and S-13 (0'-5.5') were collected from walls of the excavation.

Third Sampling Event
On August 18, 2022, the third sampling event was performed at the Site. The NM EMNRD OCD and BLM were notified of the sampling event although no representatives were present during sampling activities. Composite sample S-14 (0'-5.5') was collected from a wall of the excavation. Composite soil sample S-15 (5.5') was collected from the floor of the excavation.

Fourth Sampling Event
On August 22, 2022, the fourth sampling event was performed at the Site. The NM EMNRD OCD and BLM were notified of the sampling event although no representatives were present during sampling activities. Composite soil sample S-16 (5.5') was collected from the floor of the excavation. Composite soil sample S-17 (0'-5.5') was collected from a wall of the excavation.

Fifth Sampling Event
On September 2, 2022, the fifth sampling event was performed at the Site. The NM EMNRD OCD and BLM were notified of the sampling event although no representatives were present during sampling activities. Composite soil sample S-18 (11') was collected from the floor of the excavation.

Sixth Sampling Event
On September 8, 2022, the sixth sampling event was performed at the Site. The NM EMNRD OCD and BLM were notified of the sampling event although no representatives were present during sampling activities. Composite soil samples S-19 (11') and S-20 (11') were collected from the floor of the excavation. Composite soil samples S-21 (5.5'-11'), S-22 (0'-4'), S-23 (4'-11'), S-24 (0'-4'), and S-25 (4'-11') were collected from walls of the excavation.

Seventh Sampling Event
On September 12, 2022, the seventh sampling event was performed at the Site. The NM EMNRD OCD and BLM were notified of the sampling event although no representatives were present during sampling activities. Composite soil samples S-26 (11') and S-27 (11') were collected from the floor of the excavation. Composite soil samples S-28 (0'-4'), S-29 (4'-11'), S-30 (0'-4'), S-31 (4'-11'), S-32 (0'-4'), and S-33 (4'-10') were collected from walls of the excavation. Subsequent soil analytical results identified TPH concentrations that exceeded the NM EMNRD OCD closure criteria for composite soil sample S-28. In response to the exceedances the excavation was enlarged. The impacted soil associated with composite sample S-28 was removed by excavation and transported to the landfarm for disposal/remediation.

Eighth Sampling Event
On September 14, 2022, the eighth sampling event was performed at the Site. The NM EMNRD OCD and BLM were notified of the sampling event although no representatives were present during sampling activities. Composite soil sample S-34 (4') was collected from the floor of the excavation. Composite soil samples S-35 (0'-4'), S-36 (0'-4'), and S-37 (0'-4') were collected from walls of the excavation.

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

5.0 SOIL LABORATORY ANALYTICAL METHODS

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

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

6.0 SOIL DATA EVALUATION

Ensolum compared the benzene, BTEX, TPH, and chloride laboratory analytical results or laboratory practical quantitation limits (PQLs) / reporting limits (RLs) associated with the composite soil samples S-6, S-10 through S-27, S-29 through S-37, SP-1, and SP-2 to the applicable NM EMNRD OCD closure criteria. The soils associated with composite soil samples S-1 through S-5, S-7 through S-9, S-28, SP-3, and SP-4 were removed (due to COC exceedances) from the Site, and therefore, are not included in the following discussion.

- The laboratory analytical results for all composite soil samples associated with soils remaining at the Site 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 composite soil samples S-16, S-23, S-26, S-27, S-29, S-31, S-32, and S-34 indicate total BTEX concentrations ranging from 0.084 mg/kg (S-27) to 6.2 mg/kg (S-31), which are less than the applicable NM EMNRD OCD closure criteria of 50 mg/kg. The laboratory analytical results for all other composite soil samples associated with soils remaining at the Site 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 composite soil samples S-11, S-16, S-19, S-23, S-26, S-29, and S-31 through S-34 indicate combined TPH GRO/DRO concentrations ranging from 6.4 mg/kg (S-16) to 260 mg/kg (S-33), which are less than the applicable NM EMNRD OCD closure criteria of 100 mg/kg or 1,000 mg/kg (depending on the depth of the represented soil). The laboratory analytical results for all other composite soil samples associated with soils remaining at the Site indicate combined TPH GRO/DRO is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable NM EMNRD OCD closure criteria of 100 mg/kg or 1,000 mg/kg (depending on the depth of the represented soil).

- The laboratory analytical results for composite soil samples S-11, S-16, S-19, S-23, S-26, S-29, and S-31 through S-34 indicate combined TPH GRO/DRO concentrations ranging from 6.4 mg/kg (S-16) to 420 mg/kg (S-33), which are less than the applicable NM EMNRD OCD closure criteria of 100 mg/kg or 2,500 mg/kg (depending on the depth of the represented soil.) The laboratory analytical results for all other composite soil samples associated with soils remaining at the Site indicate combined TPH GRO/DRO/MRO is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable NM EMNRD OCD closure criteria of 100 mg/kg or 2,500 mg/kg (depending on the depth of the represented soil).

- The laboratory analytical results for all composite soil samples indicate chloride is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable NM EMNRD OCD closure criteria of 600 mg/kg or 10,000 mg/kg (depending on the depth of the represented soil).

7.0 RECLAMATION AND REVEGETATION

The excavation was backfilled with imported fill and then contoured to the surrounding topography. Enterprise will re-seed the Site with an approved seeding mixture.

8.0 FINDINGS AND RECOMMENDATION

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

- Approximately 672 yd^3 of petroleum hydrocarbon-affected soils and 12 bbls of hydro-excavation soil cuttings and water were transported to the Envirotech landfarm for disposal/remediation. The excavation was backfilled with imported fill and then contoured to the surrounding topography.

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

9.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

9.1 Standard of Care

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

9.2 Limitations

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

9.3 Reliance

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

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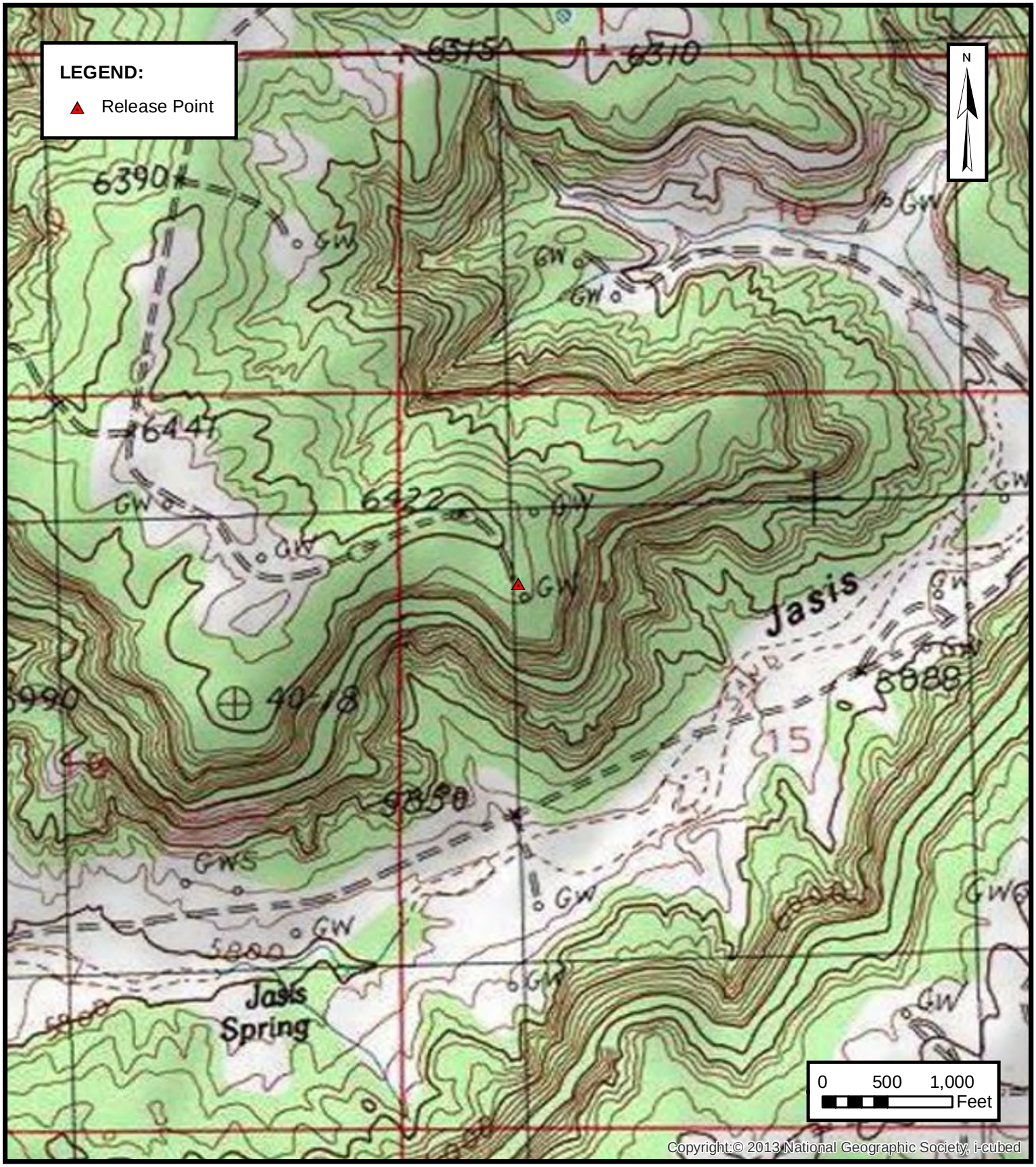
APPENDIX A

Figures



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Environmental, Engineering and Hydrogeologic Consultants

TOPOGRAPHIC MAP

ENTERPRISE FIELD SERVICES, LLC
JONES A LS#7 (08/15/22)
Unit Letter E, S15 T28N R8W, San Juan County, New Mexico
36.664887° N, 107.674524° W

PROJECT NUMBER: 05A1226196

FIGURE
1

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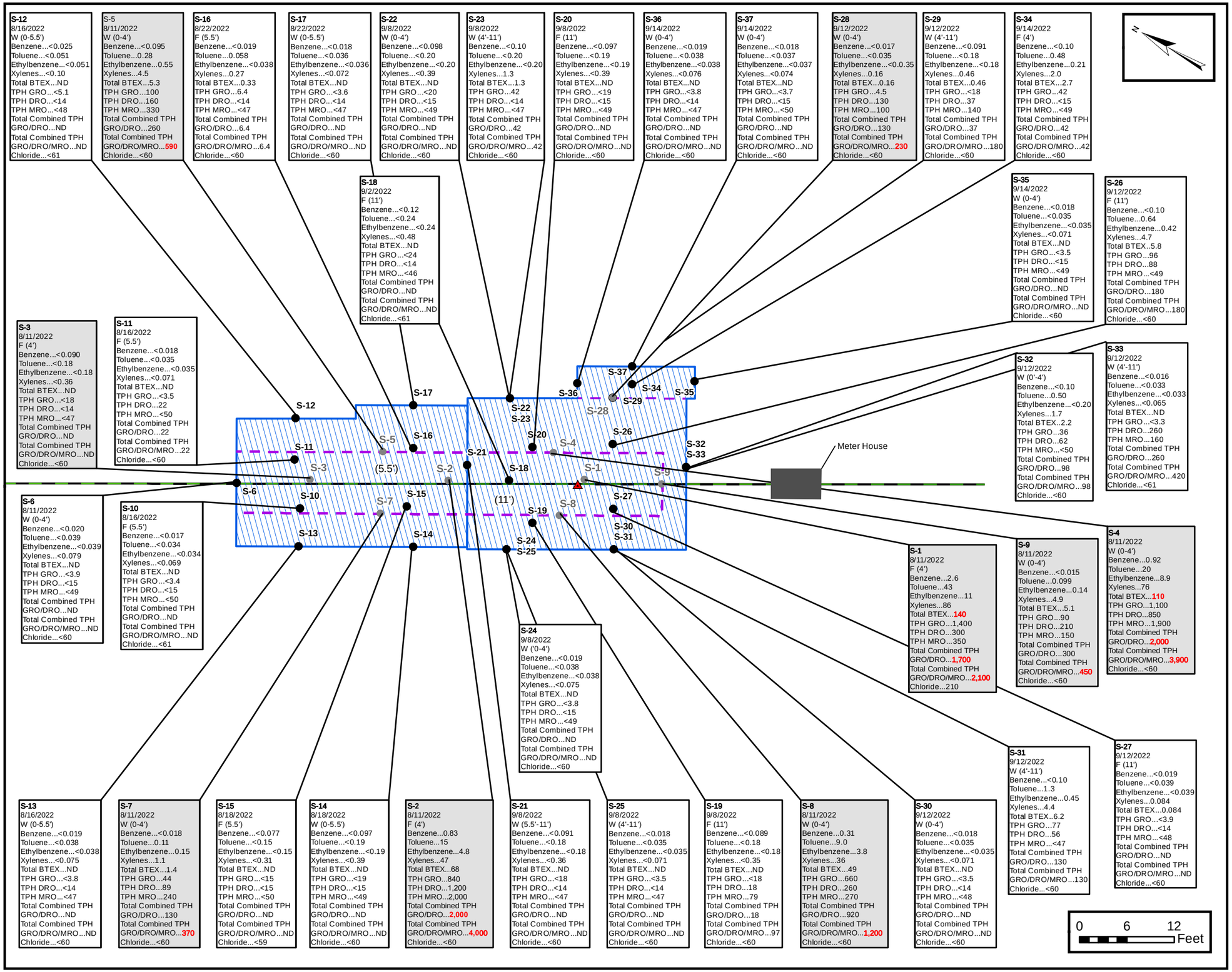
SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC
JONES A LS#7 (08/15/22)
Unit Letter E, S15 T28N R8W, San Juan County, New Mexico
36.664887° N, 107.674524° W

PROJECT NUMBER: 05A1226196

FIGURE

2



LEGEND:

- Release Point
- Composite Soil Sample Location
- Composite Soil Sample Removed by Excavation
- Former Wall
- Approximate Pipeline Location
- Extent of Excavation

NOTES:
F - Floor Sample
W - Wall Sample

All concentrations are in mg/Kg.

Concentrations in **red** exceed the applicable NM EMNRD OCD Closure Criteria.

All depths are listed in feet bgs.

Analytical callouts in gray denote sampling location removed by excavation.

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

SITE MAP WITH SOIL SAMPLE LOCATIONS

ENTERPRISE FIELD SERVICES, LLC
JONES A LS#7 (08/15/22)

Unit Letter E, S15 T28N R8W, San Juan County, New Mexico
36.664887° N, 107.674524° W

FIGURE
3

PROJECT NUMBER: 05A1226196

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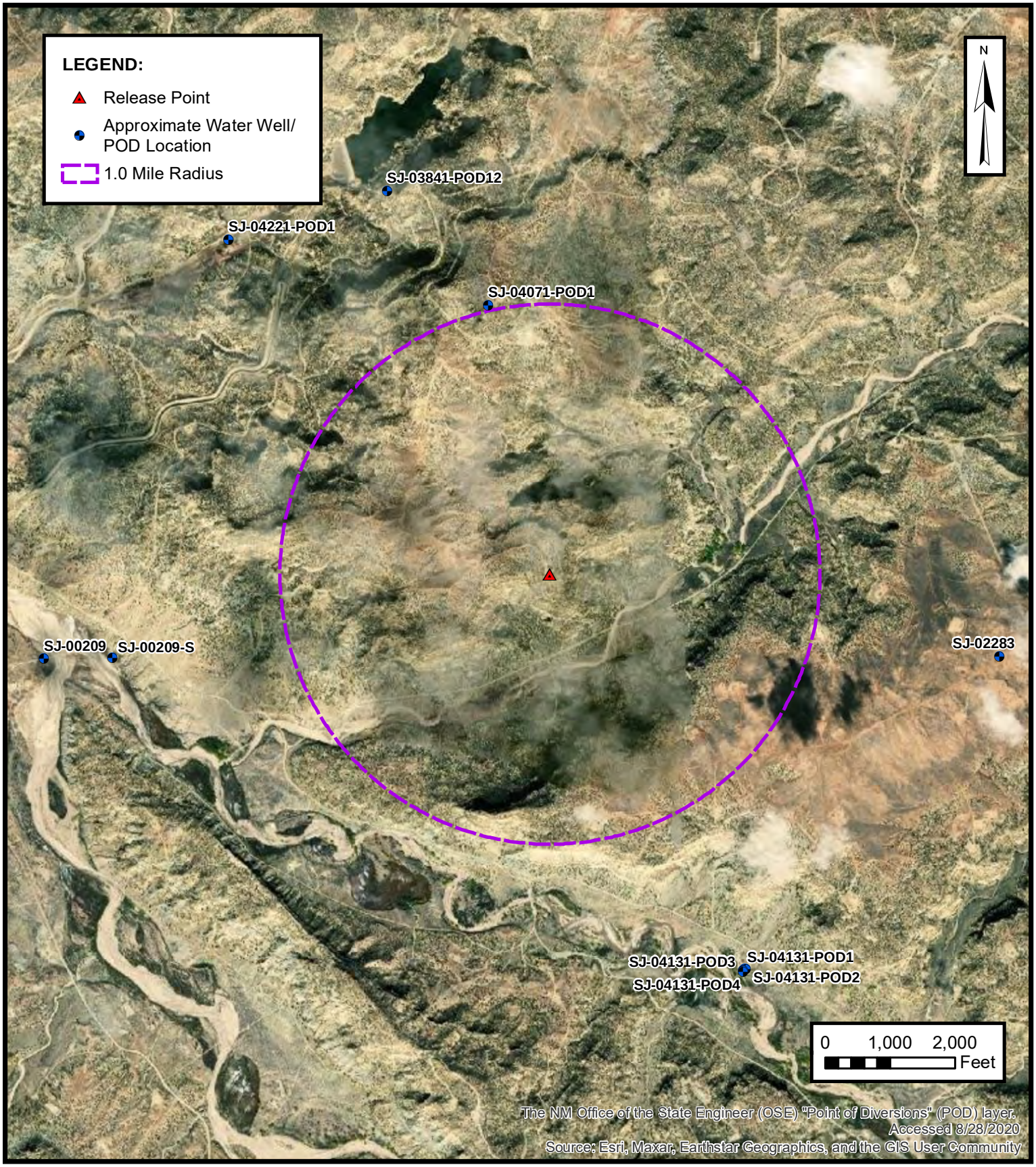
APPENDIX B

Siting Figures and Documentation



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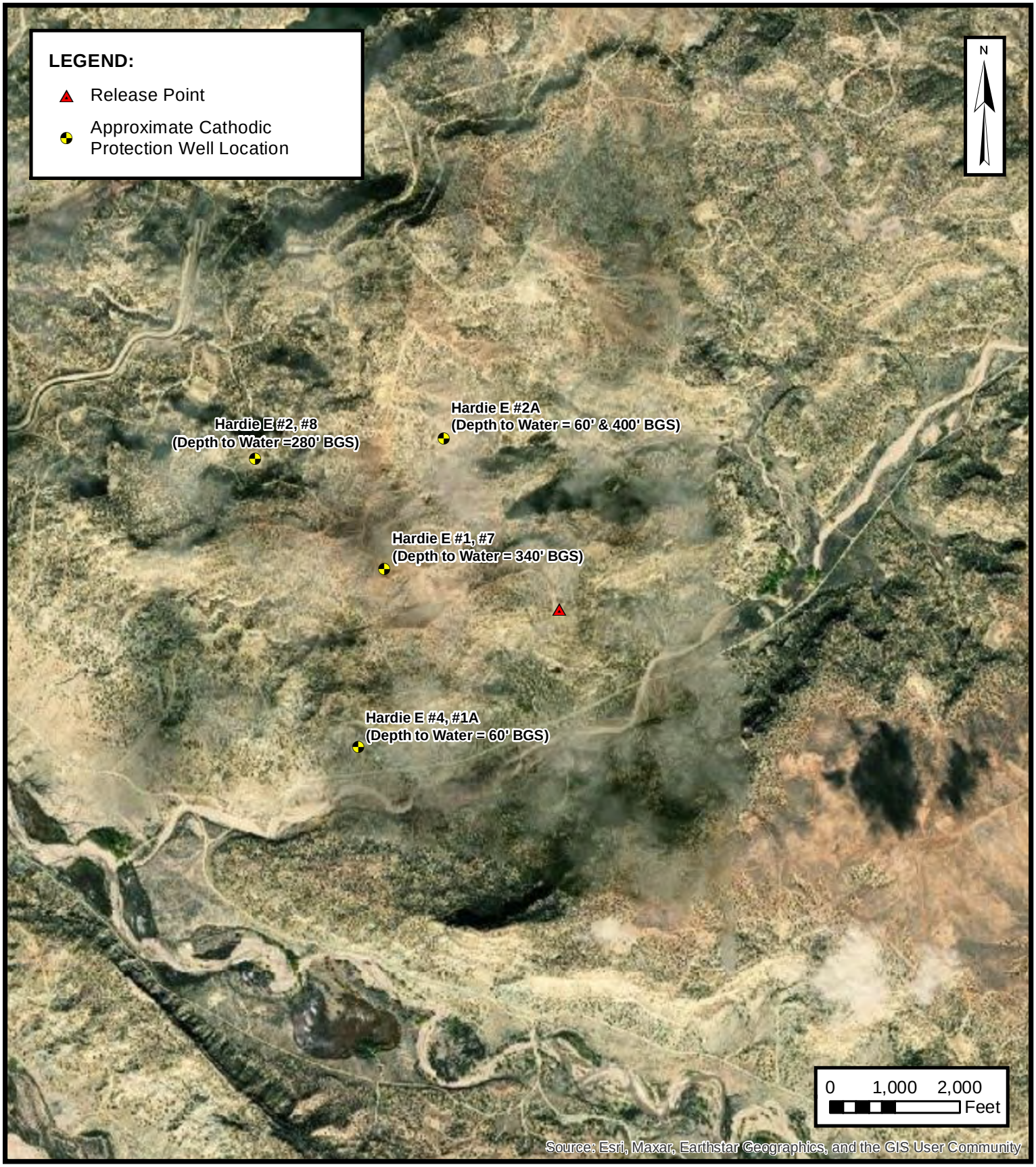
1.0 MILE RADIUS WATER WELL/ POD LOCATION MAP

ENTERPRISE FIELD SERVICES, LLC
JONES A LS#7 (08/15/22)
Unit Letter E, S15 T28N R8W, San Juan County, New Mexico
36.664887° N, 107.674524° W

PROJECT NUMBER: 05A1226196

FIGURE

A



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

CATHODIC PROTECTION WELL RECORDED DEPTH TO WATER

ENTERPRISE FIELD SERVICES, LLC
JONES A LS#7 (08/15/22)
Unit Letter E, S15 T28N R8W, San Juan County, New Mexico
36.664887° N, 107.674524° W

PROJECT NUMBER: 05A1226196

FIGURE

B

ENSOLUM
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300 FOOT RADIUS
WATERCOURSE AND DRAINAGE IDENTIFICATION

ENTERPRISE FIELD SERVICES, LLC
JONES A LS#7 (08/15/22)
Unit Letter E, S15 T28N R8W, San Juan County, New Mexico
36.664887° N, 107.674524° W

PROJECT NUMBER: 05A1226196

FIGURE
C

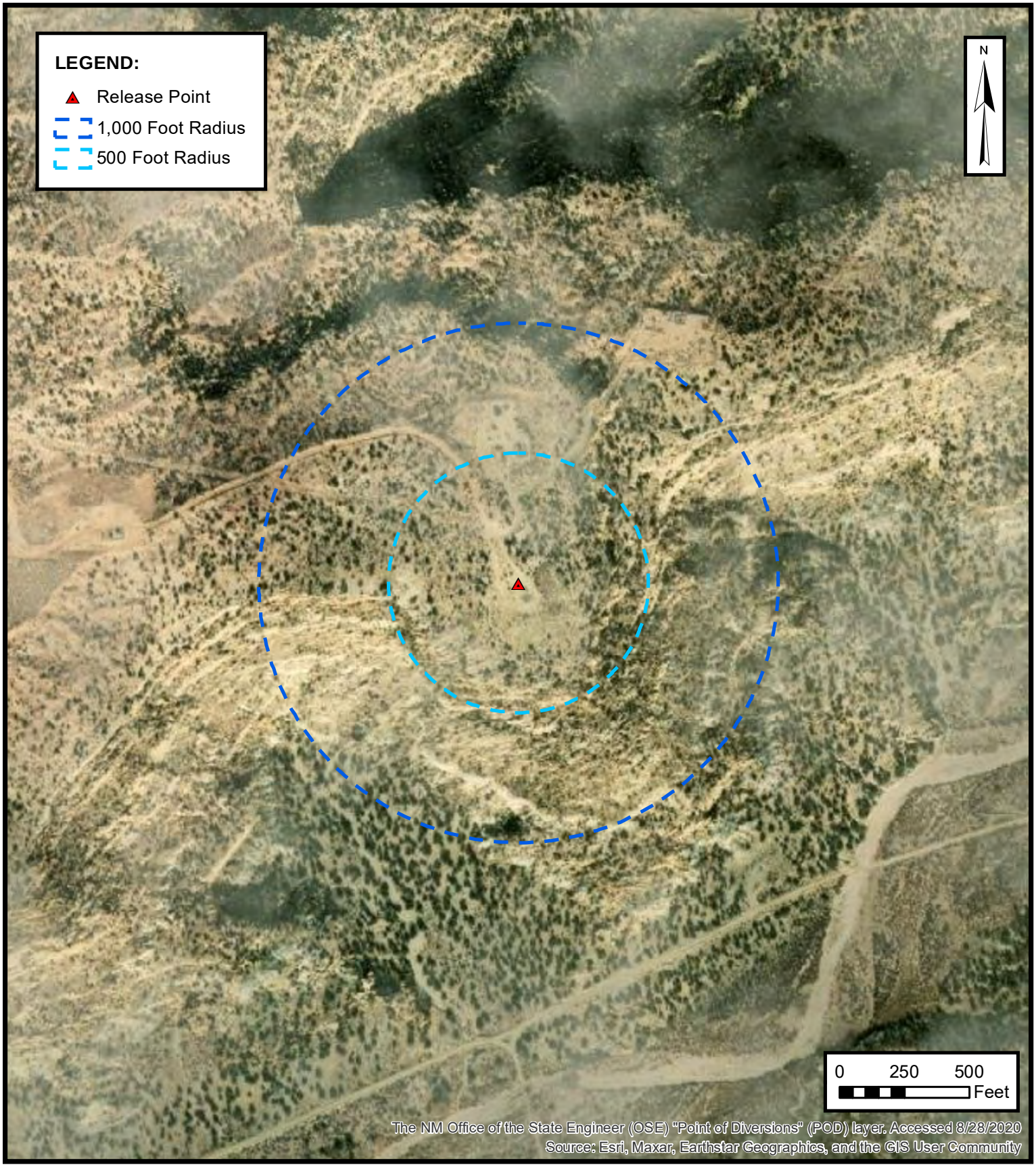
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

300 FOOT RADIUS
OCCUPIED STRUCTURE IDENTIFICATION

ENTERPRISE FIELD SERVICES, LLC
JONES A LS#7 (08/15/22)
Unit Letter E, S15 T28N R8W, San Juan County, New Mexico
36.664887° N, 107.674524° W

PROJECT NUMBER: 05A1226196

FIGURE
D



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

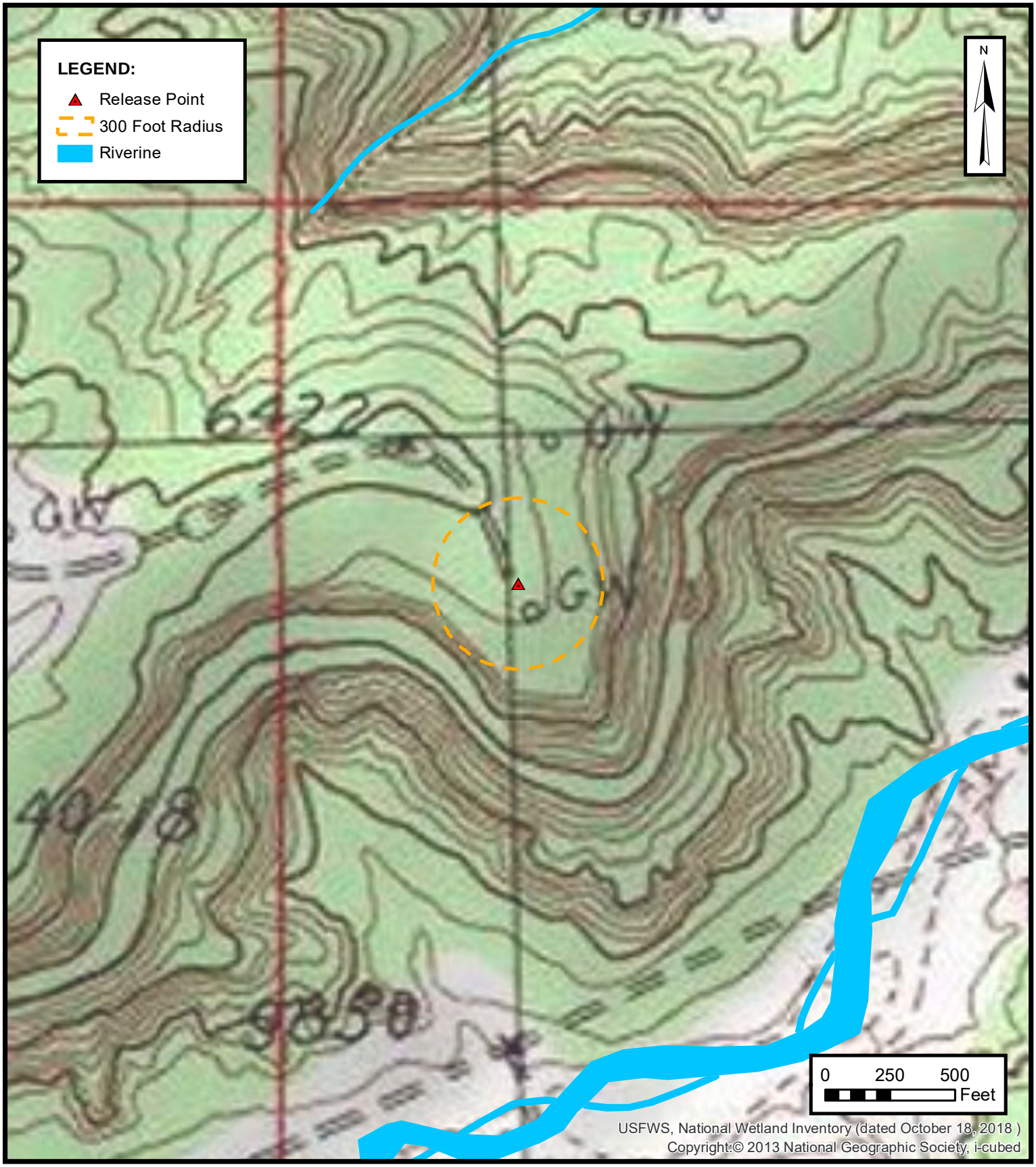
WATER WELL AND NATURAL SPRING LOCATION

ENTERPRISE FIELD SERVICES, LLC
JONES A LS#7 (08/15/22)
Unit Letter E, S15 T28N R8W, San Juan County, New Mexico
36.664887° N, 107.674524° W

PROJECT NUMBER: 05A1226196

FIGURE

E



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

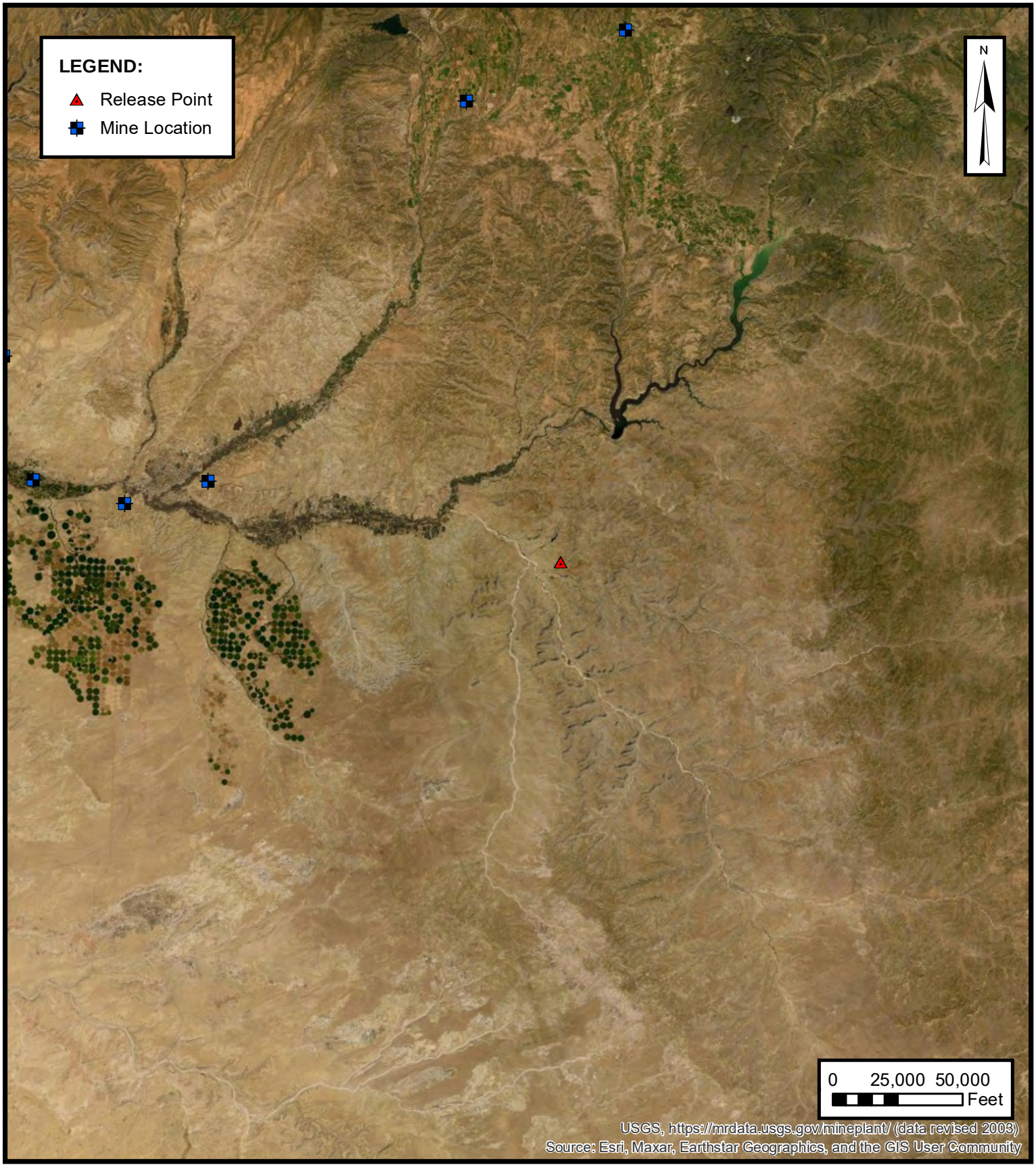
WETLANDS

ENTERPRISE FIELD SERVICES, LLC
JONES A LS#7 (08/15/22)
Unit Letter E, S15 T28N R8W, San Juan County, New Mexico
36.664887° N, 107.674524° W

PROJECT NUMBER: 05A1226196

FIGURE

F



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

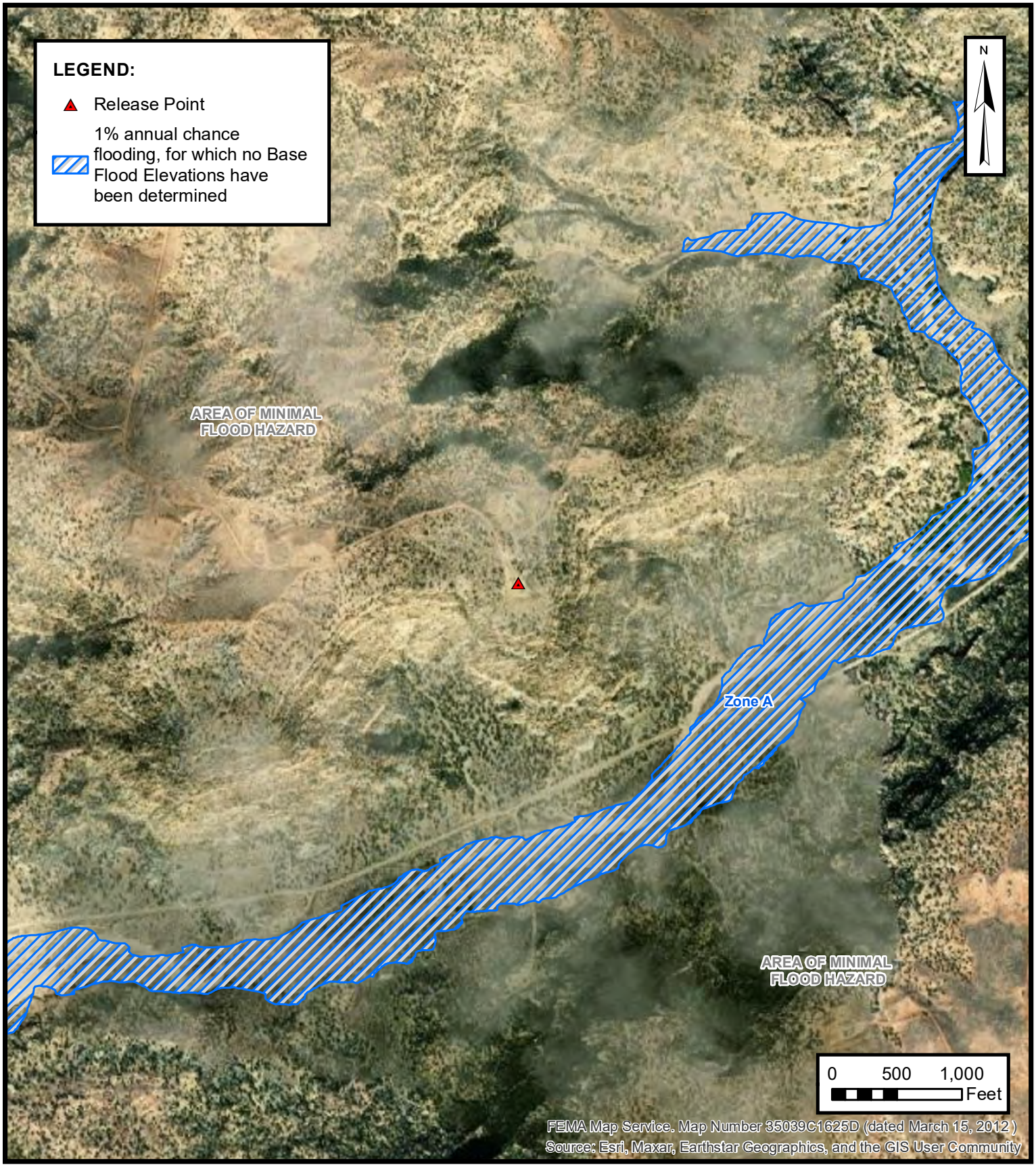
MINES, MILLS AND QUARRIES

ENTERPRISE FIELD SERVICES, LLC
JONES A LS#7 (08/15/22)
Unit Letter E, S15 T28N R8W, San Juan County, New Mexico
36.664887° N, 107.674524° W

PROJECT NUMBER: 05A1226196

FIGURE

G



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

100-YEAR FLOOD PLAIN MAP

ENTERPRISE FIELD SERVICES, LLC
JONES A LS#7 (08/15/22)
Unit Letter E, S15 T28N R8W, San Juan County, New Mexico
36.664887° N, 107.674524° W

PROJECT NUMBER: 05A1226196

FIGURE

H

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

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

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

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

POD Number	POD Sub-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 02283	SJ	SJ	1	2	4	14	28N	08W	263604	4060474*	540	480	60
SJ 04131 POD1	SJ	SJ		2	4	22	28N	08W	262050	4058670	36		
SJ 04131 POD2	SJ	SJ		2	4	22	28N	08W	262058	4058673	32		
SJ 04131 POD3	SJ	SJ		2	4	22	28N	08W	262041	4058664	32		
SJ 04131 POD4	SJ	SJ		2	4	22	28N	08W	262041	4058654	28		

Average Depth to Water: **480 feet**

Minimum Depth: **480 feet**

Maximum Depth: **480 feet**

Record Count: 5

PLSS Search:

Section(s): 15, 9, 10, 11, 14, 16, 21, 22, 23 **Township:** 28N **Range:** 08W

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

#2 = 30-045-07538

#8 = 30-045-21146

4781

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

Operator MERIDIAN OIL Location: Unit SW Sec. 9 Twp 28 Rng 8

Name of Well/Wells or Pipeline Serviced HARDIE E #2, #8

cps 649w

Elevation 6227' Completion Date 8/5/87 Total Depth 500' Land Type* N/A

Casing, Sizes, Types & Depths N/A

If Casing is cemented, show amounts & types used N/A

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

N/A

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

Fresh, Clear, Salty, Sulphur, Etc. 280' SAMPLE TAKEN

Depths gas encountered: N/A

Type & amount of coke breeze used: N/A

Depths anodes placed: 465', 455', 430', 420', 405', 395', 340', 330', 320', 310'

Depths vent pipes placed: N/A

Vent pipe perforations: 150'

Remarks: gb #2

RECEIVED
MAY 31 1991
OIL CON. DIV
DIST. 3

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

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

FM-07-0238 (Rev. 10-82) Redrill

WELL CASING
CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOG

already in computer

Drilling Log (Attach Hereto) ☐ m.m.

Completion Date 8-5-87

CPS #	Well Name, Line or Plant:	Work Order #	Static:	Ins. Union Check
649W	Hardie E #2	M 09-28-08	.82 E	☑ Good ☐ Bad
	Hardie E #8	M 09-28-08	.82 E	

Location:	Anode Size:	Anode Type:	Size Bit:
SW 9-28-8	2" x 60"	Duriron	6 3/4"

Depth Drilled	Depth Logged	Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used
500	480'	8 hrs			Elev. 6227

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Anode Depth	465	455	430	420	405	395	340	330	320	31X
Anode Output (Amps)	2.6	2.3	1.7	1.6	2.6	3.1	2.8	3.9	3.5	3.2
Anode Depth	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20
Anode Output (Amps)	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20

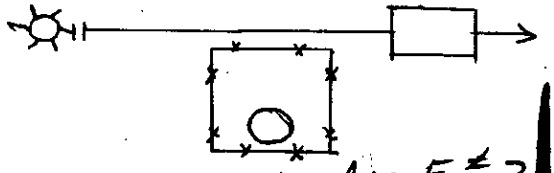
Total Circuit Resistance			No. 8 C.P. Cable Used	No. 2 C.P. Cable Used
Volts 12.85	Amps 12.1	Ohms 1.06		

Remarks: Driller said water was at 280'. Vent pipe is perforated up to 150, from slight trace of water at 150'. Water sample was taken at an earlier date

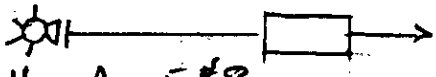
Rectifier Size: _____ V _____ A 4300 ✓
Addn'l Depth _____ 90 ✓
Depth Credit: 20 ✓
Extra Cable: 10' ✓ 2.50 ✓
Ditch & 1 Cable: 30' 11.70 ✓
Ditch & 2 Cable: _____ 40.00 ✓
25' Meter Pole: _____ 4274.20
20' Meter Pole: _____ 213.71 ✓
10' Stub Pole: _____
Junction Box: 40 ea $4487.91 ✓

All Construction Completed

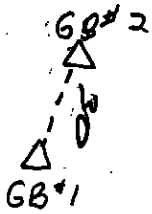
Randy Smith
(Signature)



Hardie E #2



Hardie E #8



N

O
649W

BURGE CORROSION SYSTEMS, INC.

P.O. BOX 1359 - PHONE 334-6141
AZTEC, NEW MEXICO 87410

CPS 649 W

COMPANY Meridian DAILY DRILLING REPORT 8-3 19 87

WELL NAME:	WELL NUMBER:	SECTION:	TOWNSHIP:	RANGE:
Hardie "E"	2	9	28N	8W

WATER AT:	FEET:	HOLE MADE:	
approx	200 ft	6 3/4	500 ft

DESCRIPTION OF FORMATION

FROM	TO	FORMATION IS	COLOR
0	100	Sandstone	tan
100	140	Sandstone	Grey
140	180	Sandy Shale	Grey
180	200	Sandstone	Grey
200	~~240~~ 220	Sandy Shale	Grey
240	~~290~~ 290	Sandstone	Grey
~~290~~ 290	~~310~~ 310	Shale	Grey
310	320	Sandstone	Grey
320	420	Shale	Grey
420	440	Sandy Shale	Grey
440	460	Sandstone	Grey
460	500	Shale	Grey

REMARKS:

Grant Bunn — Driller — Tool Dresser

BURGE CORROSION SYSTEMS, INC.

P.O. BOX 1359 - PHONE 334-6141
AZTEC, NEW MEXICO 87410

DEEP WELL GROUNDBED LOG

Date 8-5-87

Company Meridian Oil

Well No. ______ Location Nordic E27 E8 Volts Applied 12.85 Amperes 12.1

Depth	Reading	Depth	Reading	Depth	Reading	Depth	Reading
0							
5		230		455	1.3 – (2)	680	1 465 – 2.1
10		235		460	2.2	685	2 455 – 1.5
15		240		465	2.0 – (1)	690	3 430 – .9
20		245		470	2.2	695	4 420 – .9
25		250		475	2.2 –	700	5 405 – 1.5
30		255		480	T.D.	705	6 395 – 1.7
35		260	[illegible]	485		710	7 340 – 1.5
40		265	[illegible]	490		715	8 330 – 1.8
45		270	[illegible]	495		720	9 320 – 1.6
50		275	[illegible]	500		725	10 310 – 1.8
55		280	[illegible]	505		730	
60		285	.5	510		735	(1) 2.1 2.6
65		290	.3	515		740	(2) 1.5 2.3
70		295	.3	520		745	(3) .9 1.7
75		300	.3	525		750	(4) .9 1.6
80		305	.7	530		755	(5) 2.6
85		310	1.3 – (10)	535		760	(6) 3.1
90		315	2.1	540		765	(7) 2.8
95		320	1.2 – (9)	545		770	(8) 3.9
100		325	1.3	550		775	(9) 3.5
105		330	1.3 – (8)	555		780	(10) 3.2
110		335	1.3	560		785	
115		340	1.3 – (7)	565		790	
120		345	1.0	570		795	
125		350	.6	575		800	
130		355	.6	580		805	
135		360	.5	585		810	
140		365	.3	590		815	
145		370	1.0 –	595		820	
150		375	.8	600		825	
155		380	.7	605		830	
160		385	.8	610		835	
165		390	1.0	615		840	
170		395	1.7 – (6)	620		845	
175		400	1.5	625		850	
180		405	1.5 – (5)	630		855	
185		410	1.0	635		860	
190		415	.7	640		865	
195		420	.9 – (4)	645		870	
200		425	.9	650		875	
205		430	.9 – (3)	655		880	
210		435	.9	660		885	
215		440	.8	665		890	
220		445	.8	670		895	
225		450	.9	675		900	

CPS 649W

API WATER ANALYSIS REPORT FORM

Company	Sample No.	Date Sampled
MERIDIAN OIL COMPANY	3	08-03-87

Field	Legal Description	County or Parish	State
Blanco		San Juan	NM

Lease or Unit	Well	Depth	Formation	Water, B/D
M9-28-8	Hardie E2	200'	Mesa Verde	

Type of Water (Produced, Supply, etc.)	Sampling Point	Sampled By
Ground bed	200'	M.R.W.

DISSOLVED SOLIDS

CATIONS	mg/l	me/l
Sodium, Na (calc.)	147	6.4
Calcium, Ca	178	8.9
Magnesium, Mg	29	2.4
Barium, Ba		

ANIONS	mg/l	me/l
Chloride, Cl	28	0.8
Sulfate, SO_4	691	14.4
Carbonate, CO_3	0	0
Bicarbonate, HCO_3	155	2.5
Hydroxide	0	0

OTHER PROPERTIES

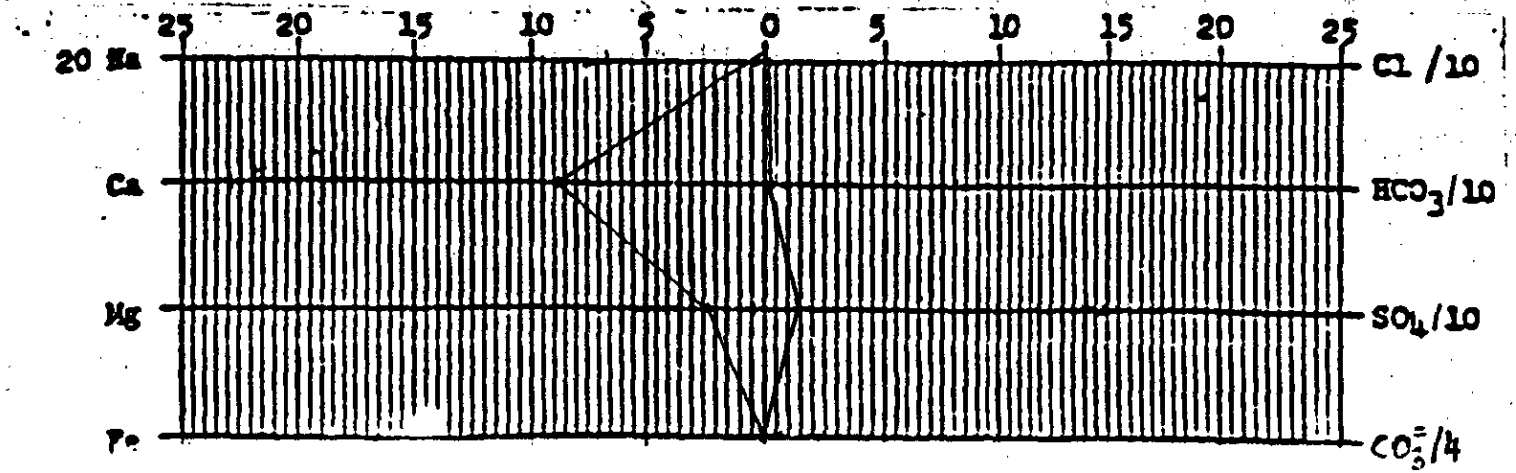
pH	7.52
Specific Gravity, 60/60 F.	1.0038
Resistivity (ohm-meters) 71.6°F.	8.20
Conductivity	1.2×10^2 µmho

Total Dissolved Solids (calc.) 1230 mg/l

Iron, Fe (total)

Sulfide, as H_2S

REMARKS & RECOMMENDATIONS:



1502

30-045-22079

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

Operator MERIDIAN OIL Location: Unit SE Sec. 9 Twp 28 Rng 8

Name of Well/Wells or Pipeline Serviced HARDIE E #2A

cps 1091w

Elevation 6326' Completion Date 6/20/77 Total Depth 650' Land Type* N/A

Casing, Sizes, Types & Depths N/A

If Casing is cemented, show amounts & types used N/A

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

N/A

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

Fresh, Clear, Salty, Sulphur, Etc. WET AT 60' & 400'

Depths gas encountered: N/A

Type & amount of coke breeze used: 84 SACKS

Depths anodes placed: 610', 600', 590', 580', 570', 560', 550', 520', 510', 500'

Depths vent pipes placed: 610' OF 1" PVC VENT PIPE

Vent pipe perforations: 220'

Remarks: gb #1

RECEIVED
MAY 31 1991
OIL CON. DIV.
DIST. 3

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

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

4= 30-045-07433
1A= 30-045-23720

4921

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

Operator MERIDIAN OIL Location: Unit SE Sec. 16 Twp 28 Rng 8

Name of Well/Wells or Pipeline Serviced HARDIE E #4, #1A

cps 406w

Elevation 5851' Completion Date 8/24/81 Total Depth 360' Land Type* N/A

Casing, Sizes, Types & Depths N/A

If Casing is cemented, show amounts & types used N/A

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

N/A

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

Fresh, Clear, Salty, Sulphur, Etc. 60' SAMPLE TAKEN

Depths gas encountered: N/A

Type & amount of coke breeze used: N/A

Depths anodes placed: 320', 300', 280', 260', 230', 210', 180', 145', 125', 105'

Depths vent pipes placed: 320'

Vent pipe perforations: 280'

Remarks: gb #2

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

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

El Paso Natural Gas Company
Form 7-238 (Rev. 11-71)

WELL CASING
CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOG

Drilling Log (Attach Hereto). ☐ Completion Date 8-24-81

Well Name: HARDIE E 1A	Location: SE 16 28-8			CPS No.: 406W
Type & Size Bit Used: ✓ E 4				Work Order No.: 576 51-21-50-20
Anode Hole Depth: DRILL 360 LOG 359'	Total Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Matl Used	No. Sacks Mud Used: 54 215-19-50-20

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Anode Depth	320	300	280	260	230	210	180	145	125	105
Anode Output (Amps)	3.25	2.75	2.60	2.73	2.70	2.62	3.04	3.05	4.63	3.00
Anode Depth	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20
Anode Output (Amps)	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20

Total Circuit Resistance				No. 8 C.P. Cable Used	No. 2 C.P. Cable Used
Volts 11.92	Amps 16.4	Ohms .72			

Remarks: REDRILL STATIC ON # E4: .83NW STATION E1A: .87E WATER AT 60' (SAMPLE) 40' PLAIN 1" VENT BALANCE PERFORATED.
NEGATIVE TO E1A TO BE PLOWED W/ DOZIER WHEN CLEAR W/ BLM.

All Construction Completed

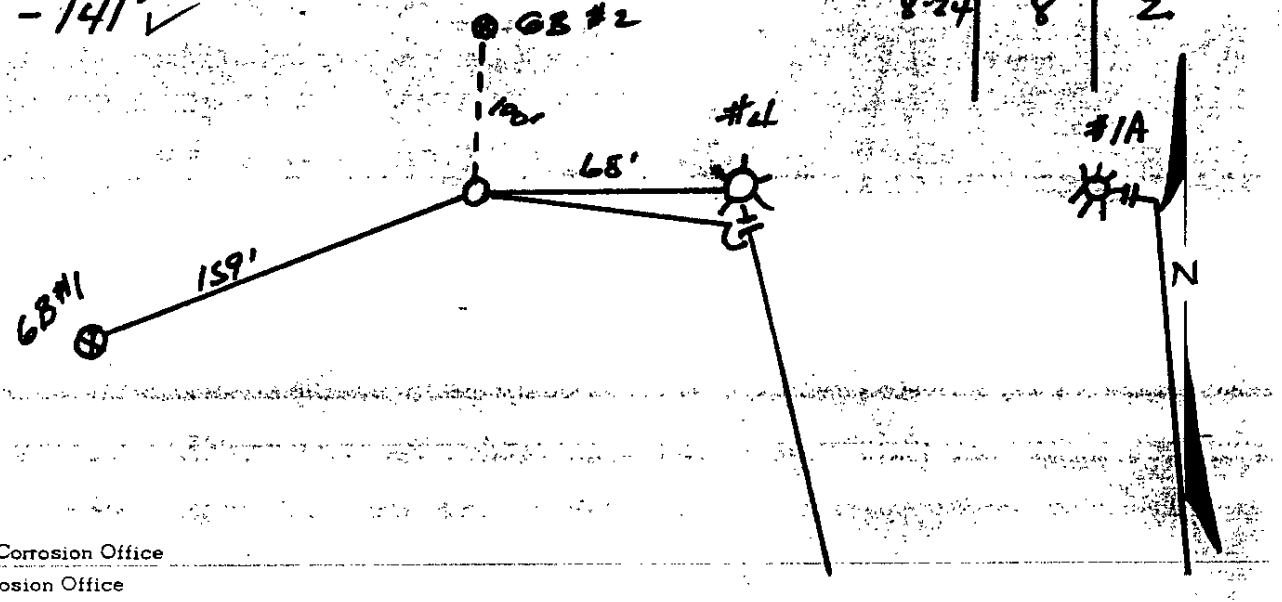
(Signature)

TIME	REG	OT
8-24	8	2

DITCH #1 CABLE = 100' ✓

HOLE = -141' ✓

GROUND BED LAYOUT SKETCH



DISTRIBUTION:
WHITE — Division Corrosion Office
YELLOW — Area Corrosion Office
PINK — Originator File

Form 22-2 (Rev. 5-79)

EL PASO NATURAL GAS COMPANY
DRILLING DEPARTMENT

DAILY DRILLING REPORT

Hardie E1A | Hardie E1 | GAS WELL | 4 Well

LEASE | WELL NO. | CONTRACTOR Story Drilling | RIG NO. | REPORT NO. | DATE Aug 23 19[illegible]

	MORNING	DAYLIGHT	EVENING
Driller			
Total Men In Crew			

FROM	TO	FORMATION	WT-BIT	R.P.M.	FROM	TO	FORMATION	WT-BIT	R.P.M.	FROM	TO	FORMATION	WT-BIT	R.P.M.

	MORNING	DAYLIGHT	EVENING
BIT NO.			
SERIAL NO.			
SIZE			
TYPE			
MAKE			
NO. DC ___ SIZE ___ LENG. ___			
NO. DC ___ SIZE ___ LENG. ___			
STANDS			
SINGLES			
DOWN ON KELLY			
TOTAL DEPTH			

MUD RECORD / MUD, ADDITIVES USED AND RECEIVED

Time	Wt.	Vis.	Mud, Additives Used and Received	Time	Wt.	Vis.	Mud, Additives Used and Received	Time	Wt.	Vis.	Mud, Additives Used and Received

TIME BREAKDOWN

FROM	TO	TIME BREAKDOWN	FROM	TO	TIME BREAKDOWN	FROM	TO	TIME BREAKDOWN
0	60	Sand	240	300	Sand Shale			
60	80	Shale	300	340	Shale			
80	90	Sand	340	360	Sand			
90	120	Sand Shale						
120	180	Shale						
180	240	Sand						

REMARKS –
Water 60 5 Gallon Min
Drilled 360 TD 359

REMARKS –

REMARKS –

SIGNED: Toolpusher Steve Story Company Supervisor ____________

EL PASO NATURAL GAS COMPANY
SAN JUAN DIVISION
FARMINGTON, NEW MEXICO
PRODUCTION DEPARTMENT WATER ANALYSIS

Analysis No. 1-10308 Date 9-11-81

Operator El Paso Natural Gas Well Name Hardie E-1A CPS ~~406~~ W

Location SE 16-28-8 County San Juan State New Mexico

Field Blanco Formation

Sampled From 60'

Date Sampled *8-24-81 By B.T.

Tbg. Press. Csg. Surface Csg. Press.

	ppm	epm		ppm	epm
Sodium	1403	61.0	Chloride	18	0.5
Calcium	342	17.1	Bicarbonate	81	1.3
Magnesium	21	1.7	Sulfate	3750	78.0
Iron			Carbonate	0	0
H_2S			Hydroxide	0	0

Total Solids Dissolved 5,520

pH 7.8

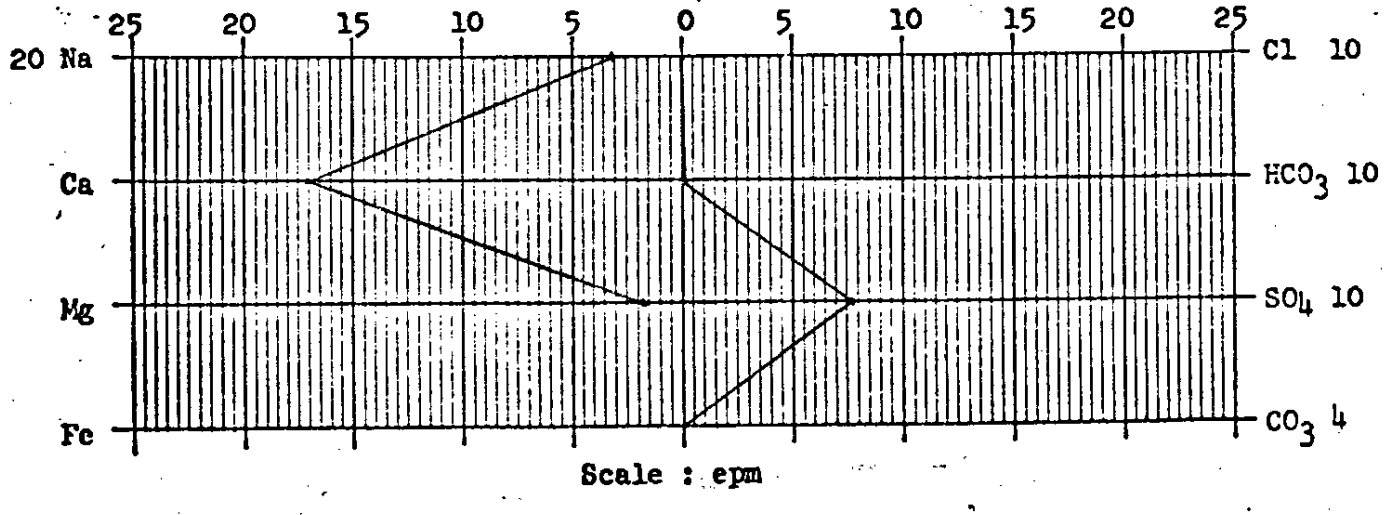
Sp. Gr. .9993 At 60°F

Resistivity 152 ohm-cm at 73°F

Dennis P. Bird
Chemist

cc: R. A. Ullrich
E. R. Paulek
J. W. McCarthy
J. D. Evans
W. B. Shropshire
D. C. Adams
File

HCO_3 taken to 4.0



El Paso Natural Gas Company
ENGINEERING CALCULATION

Sheet: 8 / of:
Date:
By: RT
File:

406 W   SE 16-8

HARDIE E 1 A 57651-21-50-2
HARDIE E 4 54215-19-50

WATER AT 60' GOOD WATER SAND AT 200'

40' PLAIN VENT PIPE BALANCE PERFORATED

DRILLED TO 360'   LOGGED TO 359' TD

MW		gals/mol
16.04	C_1	6.4
30.07	C_2	10.12
44.10	C_3	10.42
58.12	iC_4	12.38
58.12	nC_4	11.93
72.15	iC_5	13.85
72.15	nC_5	13.71
86.18	iC_6	15.50
86.18	C_6	15.57
100.21	iC_7	17.2
100.21	C_7	17.46
114.23	C_8	19.39
28.05	$C_2^=$	9.64
42.08	$C_3^=$	9.67

60	146		60	129		60	152		4
65	119		65	146		65	160		
70	111		70	142		70	163		
75	103		75	141		75	155		
80	143		80	181	-7	80	141	-3	
85	158		85	181		85	139		
90	130		90	165		90	138		
95	107		95	132		95	129		
100	107		200	130		300	102	-2	
5	109	-10	5	141		5	186		
10	267		10	150	-6	10	140		
15	288		15	135		15	158		
20	289		20	136		20	213	-1	
25	276	-9	25	140		25	191		
30	269		30	142	-5	30	180		
35	188		35	157		35	163		
40	133		40	133		40	145		
45	162	-8	45	120		45	186		
50	175		50	150		50	.60		
						359'		TD	

MW	MISC.	gals/mol
32.00	O_2	3.37
28.01	CO	4.19
44.01	CO_2	6.38
64.06	SO_2	5.50
34.08	H_2S	5.17
28.01	N_2	4.16
2.02	H_2	3.38

1:	320'	2.21	3.25
2:	300'	1.76	2.75
3:	280'	1.45	2.60
4:	260'	1.63	2.73
5:	230'	1.50	2.70
6:	210'	1.58	2.62
7:	180'	1.75	3.04
8:	145'	1.71	3.05
9:	125'	2.96	4.63
10:	105'	1.76	3.00
TOTAL			

VOLTS = 11.92
AMPS = 16.4
Ω = .72

#1 = 30-045-07490

#7 = 30-045-20918 4785

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

Operator MERIDIAN OIL Location: Unit NE Sec. 16 Twp 28 Rng 8

Name of Well/Wells or Pipeline Serviced HARDIE E #1, #7

cps 652w

Elevation 6441' Completion Date 8/10/73 Total Depth 560' Land Type* N/A

Casing, Sizes, Types & Depths N/A

If Casing is cemented, show amounts & types used N/A

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

N/A

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

Fresh, Clear, Salty, Sulphur, Etc. 340'

Depths gas encountered: N/A

Type & amount of coke breeze used: 8600 lbs.

Depths anodes placed: 537', 529', 521', 513', 505', 497', 489', 481', 473', 390', 37
3

Depths vent pipes placed: N/A

Vent pipe perforations: 200'

Remarks: cgb #2

RECEIVED
MAY 31 1991
OIL CON. DIV.
DIST. 3

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

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

El Paso Natural Gas Company
Form 7-238 (Rev. 1-69)

WELL CASING
CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOG

Drilling Log (Attach Hereto). ☐

Completion Date 8-10-73

Well Name	Location	CPS No.
Hardie E #1 & E #7	NE16-28-8	652W
Type & Size Bit Used: 6 3/4		Work Order No. 53169 & 55166

Anode Hole Depth	Total Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used
560 560		8,600		

	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10
Anode Depth	537	529	521	513	505	497	489	481	473	390
Anode Output (Amps)	2.5	1.6	1.4	1.1	1.5	1.6	1.5	1.2	1.1	1.1

	# 11	# 12	# 13	# 14	# 15	# 16	# 17	# 18	# 19	# 20
Anode Depth	370	360								
Anode Output (Amps)	1.5	1.5								

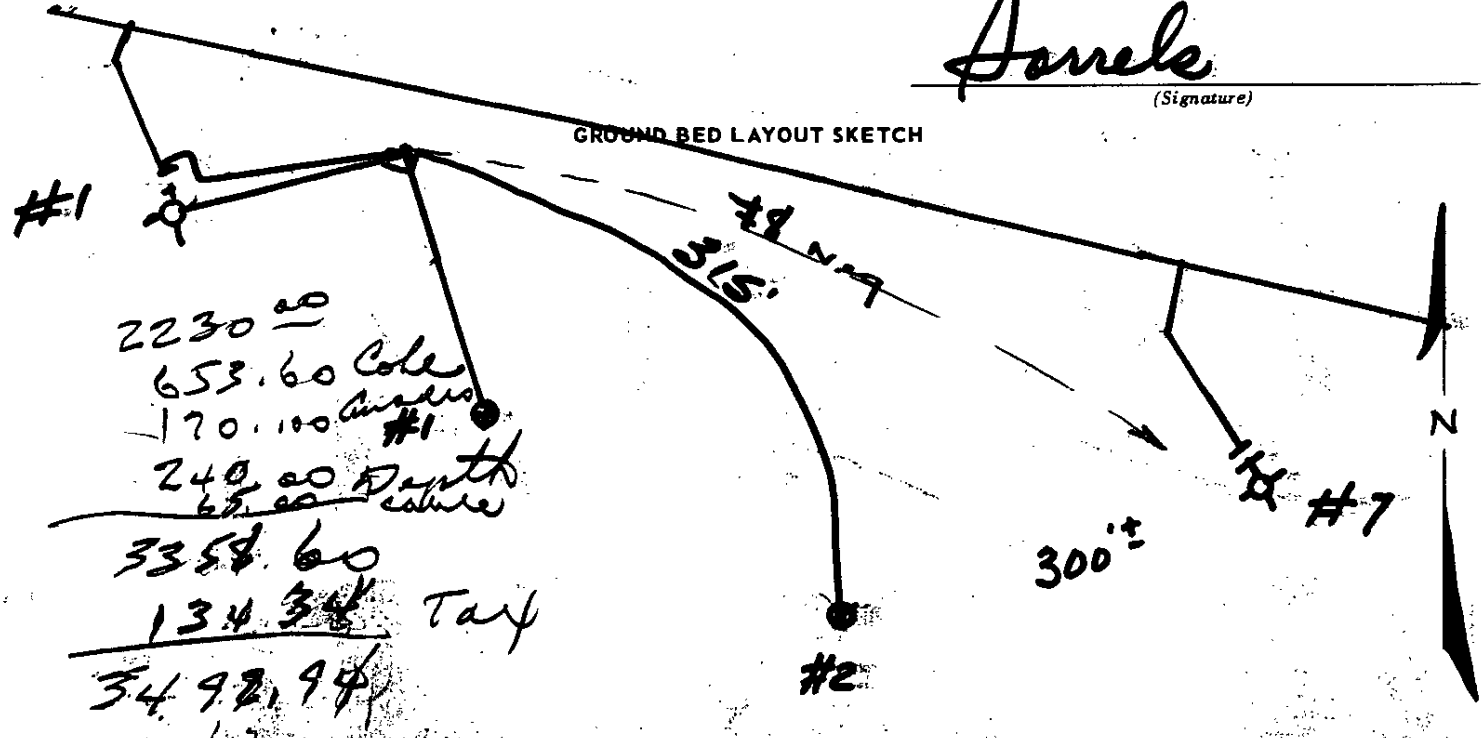
Total Circuit Resistance			No. 8 C.P. Cable Used	No. 2 C.P. Cable Used
Volts 11.4	Amps 6.5	Ohms 1.75		

Remarks: Vent Perf. 200; Pump 63 Slurry 23 Total 86 Driller Said wet at 340-360, Drill to 440. Return Stopped Pull up & Remove Boot at 340, Blew water out at 440 on way Back to Bottom, Driller Said Coming From 340 wtr. injection to 550, Change to Mud, Drill to 560 Lost Circ.

All Construction Completed

Jarele
(Signature)

GROUND BED LAYOUT SKETCH



Original & 1 Copy All Reports

DRILLING DEPARTMENT

C.P.S. # 652-W

DAILY DRILLING REPORT

LEASE Hardin WELL NO. E#1 E#7 CONTRACTOR Mesa RIG NO. REPORT NO. DATE 8-10 1973

MORNING

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.
0	340	Dry Sand		
240	360	Wet Sand (Weak Water)		
360	500	Sand		
500	530	Shale		

BIT NO. NO. OC ____ SIZE ____ LENG. ____
NO. DC ____ SIZE ____ LENG. ____
SERIAL NO. STANDS
SIZE SINGLES
TYPE DOWN ON KELLY
MAKE TOTAL DEPTH

MUD RECORD

Time	Wt.	Vis.

MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS –

DAYLIGHT

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.
530	560	Sand		

BIT NO. NO. OC ____ SIZE ____ LENG. ____
NO. DC ____ SIZE ____ LENG. ____
SERIAL NO. STANDS
SIZE SINGLES
TYPE DOWN ON KELLY
MAKE TOTAL DEPTH

MUD RECORD

Time	Wt.	Vis.

MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS –

EVENING

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.

BIT NO. NO. OC ____ SIZE ____ LENG. ____
NO. DC ____ SIZE ____ LENG. ____
SERIAL NO. STANDS
SIZE SINGLES
TYPE DOWN ON KELLY
MAKE TOTAL DEPTH

MUD RECORD

Time	Wt.	Vis.

MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS –

SIGNED: Toolpusher _____ Company Supervisor _____

Form 7-1 (Rev. 5-57)

EL PASO NATURAL GAS COMPANY
ENGINEERING DEPARTMENT

Sheet ____ of ____
Date: ____
By: ____

652W - 8-10-73

3	50	5	530	1.7			Drill 550 with air - No Return
		8		2.2			Chng to wtr & Mud to 550 To 560
	60	1.0	40	2.1			Couldn't Keep Circ. -
		1.1	43	1.8			Stop Drill 12:30 A.M.
	70	9	+8	T.D.			Log - 9:30 A.M.
		7					Driller said Damp at 390
	80	.6	Waive Guarantee				Drill to 440, Pull up to Remove
		.8					Boot around pipe at 340
	90	.8					Blew Wtr. out at 400 going
		.7					Back to Bottom - Driller thinks
400		.7					w/ Commingling From 340
		.7					Vent Perf. 200
	10	.7					Pump 63 Slurry 23 Total 86
		.7					
	20	.7					
		.6					
	30	.6					
		.6					
	40	.6					
		.6					
	50	.6					
		.6					
	60	.7					
		.8					
	70	.8					
		.9					
	80	1.0					
		1.1					
	90	1.2					
		1.4					
500		1.0					
		.8					
	10	.8					
		.8					
	20	1.0					
		1.1					

12	360	1.0	1.0	1.5
11	370	9	1.0	1.5
10	390	8	8	1.1
9	473	8	8	1.1
8	481	1.0	.9	1.2
7	489	1.1	1.0	1.5
6	497	1.2	1.1	1.6
5	505	.8	1.0	1.5
4	513	.8	.7	1.1
3	521	1.0	.9	1.4
2	529	1.6	1.0	1.6
1	537	2.1	1.9	2.5

11.4 V 6.5 A = 1.75 Ω

1.75
3
6.5 / 11.4
65
496
455
350

ENSOLUM

APPENDIX C

Executed C-138 Solid Waste Acceptance Form

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

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

Form C-138
Revised 08/01/11

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

97057-1125

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

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

PayKey: EM20767
PM: ME Eddleman
AFE: A60143

2. Originating Site:
Jones ALS #7

3. Location of Material (Street Address, City, State or ULSTR):
UL E Section 15 T28N R8W; 36.664887, -107.674524

Aug / Sep 2022

4. Source and Description of Waste:
Source: Remediation activities associated with a natural gas pipeline leak.
Description: Hydrocarbon/Condensate impacted soil associated natural gas pipeline release.
Estimated Volume 50 (yd³) / bbls Known Volume (to be entered by the operator at the end of the haul) 672/12 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) 8-9-2022, representative for Enterprise Products Operating authorizes Envirotech, Inc. to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

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

5. Transporter: TBD IME, Rolling P, Sierra, CF&M

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: **Envirotech Inc. Soil Remediation Facility * Permit #: NM 01-0011**
Address of Facility: **Hilltop, NM**
Method of Treatment and/or Disposal:
☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Greg Crabtree TITLE: Enviro Manager DATE: 8/10/22
SIGNATURE: _____ TELEPHONE NO.: 505-632-0615
Surface Waste Management Facility Authorized Agent

ENSOLUM

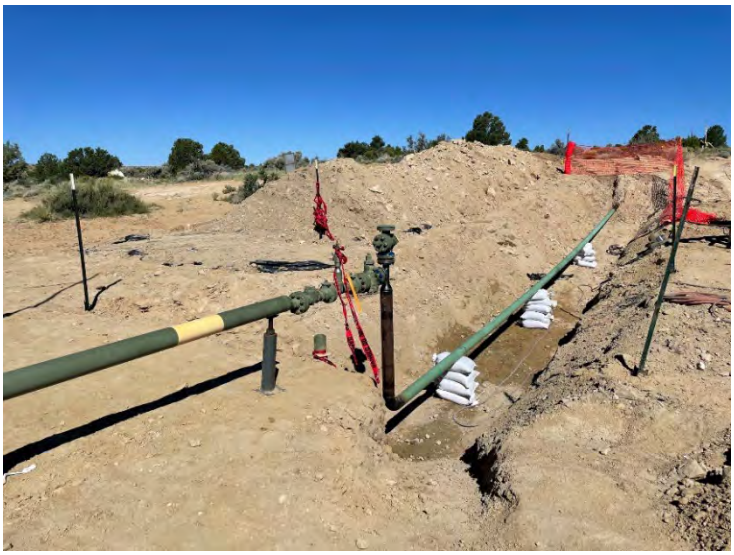
APPENDIX D

Photographic Documentation

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Jones A LS #7 (08/15/22)
Ensolum Project No. 05A1226196

ENSOLUM

Photograph 1 Photograph Description: View of the excavation (first sampling event).	
Photograph 2 Photograph Description: View of the excavation (second sampling event).	
Photograph 3 Photograph Description: View of the excavation (fourth sampling event).	

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Jones A LS #7 (08/15/22)
Ensolum Project No. 05A1226196

ENSOLUM

Photograph 4 Photograph Description: View of the excavation (fifth and sixth sampling event).	
Photograph 5 Photograph Description: View of the excavation (seventh sampling event).	
Photograph 6 Photograph Description: View of the excavation (eighth sampling event).	

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Jones A LS #7 (08/15/22)
Ensolum Project No. 05A1226196

ENSOLUM

Photograph 7 Photograph Description: View of the site after initial restoration.	

ENSOLUM

APPENDIX E

Regulatory Correspondence

From: Kyle Summers
To: Landon Daniell
Cc: Ranee Deechilly
Subject: FW: [EXTERNAL] Jones A LS#7 - UL E Section 15 T28N R8W; 36.664887, -107.674524; Incident # nAPP2222735338
Date: Wednesday, September 14, 2022 8:45:37 AM

Kyle Summers
Principal
903-821-5603
Ensolum, LLC

-----Original Message-----
From: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Sent: Wednesday, September 14, 2022 8:45 AM
To: Long, Thomas <tjlong@eprod.com>
Cc: Ryan Joyner <rjoyner@blm.gov>; Kyle Summers <ksummers@ensolum.com>; Stone, Brian <bmstone@eprod.com>
Subject: RE: [EXTERNAL] Jones A LS#7 - UL E Section 15 T28N R8W; 36.664887, -107.674524; Incident # nAPP2222735338

[**EXTERNAL EMAIL**]

Tom,

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

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

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

Regards

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

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

-----Original Message-----
From: Long, Thomas <tjlong@eprod.com>
Sent: Tuesday, September 13, 2022 4:00 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Ryan Joyner <rjoyner@blm.gov>; Kyle Summers <ksummers@ensolum.com>; Stone, Brian

<bmstone@eprod.com>
Subject: RE: [EXTERNAL] Jones A LS#7 - UL E Section 15 T28N R8W; 36.664887, -107.674524; Incident # nAPP2222735338

Nelson/Ryan,

This email is a notification and a variance request. Enterprise is requesting a variance for required 48 hour notification per 19.15.29.12D (1a) NMAC. Enterprise would like to collect partial closure samples tomorrow September 14, 2022 at 10:00 a.m. at the Jones A LS#7 excavation. Please acknowledge acceptance of this variance request. If you have any questions, please call or email.

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

-----Original Message-----
From: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Sent: Friday, September 9, 2022 1:21 PM
To: Long, Thomas <tjlong@eprod.com>
Cc: Ryan Joyner <rjoyner@blm.gov>; Kyle Summers <ksummers@ensolum.com>; Stone, Brian <bmstone@eprod.com>
Subject: RE: [EXTERNAL] Jones A LS#7 - UL E Section 15 T28N R8W; 36.664887, -107.674524; Incident # nAPP2222735338

[Use caution with links/attachments]

Tom,

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

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

Regards

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

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

-----Original Message-----
From: Long, Thomas <tjlong@eprod.com>

Sent: Friday, September 9, 2022 12:14 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Ryan Joyner <rjoyner@blm.gov>; Kyle Summers <ksummers@ensolum.com>; Stone, Brian <bmstone@eprod.com>
Subject: Re: [EXTERNAL] Jones A LS#7 - UL E Section 15 T28N R8W; 36.664887, -107.674524; Incident # nAPP2222735338

Nelson/Ryan,

This email is a notification that Enterprise will be collecting closure samples on September 12, 2022 at 1:00 p.m. at the Jones A LS#7 excavation. If you have any questions, please call or email.

Tom Long

> On Sep 7, 2022, at 11:06 AM, Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us> wrote:
>
> [Use caution with links/attachments]
>
> Tom,
>
> Thank you for the notice. Your variance request is approved.
>
> If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.
>
> Please keep a copy of this communication for inclusion within the appropriate report submittal.
>
> Regards
>
>
>
> Nelson Velez ● Environmental Specialist - Adv Environmental Bureau |
> EMNRD - Oil Conservation Division
> 1000 Rio Brazos Road | Aztec, NM 87410
> (505) 469-6146 | nelson.velez@state.nm.us
>
> Office Hrs.:
> 7:00am – 12:00pm & 1:00 – 3:30 pm Mon.–Thur.
> 7:00am – 12:00pm & 1:00 – 4:00 pm Fri.
>
> -----Original Message-----
> From: Long, Thomas <tjlong@eprod.com>
> Sent: Wednesday, September 7, 2022 10:31 AM
> To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>; Ryan Joyner
> <rjoyner@blm.gov>
> Cc: Kyle Summers <ksummers@ensolum.com>; Stone, Brian
> <bmstone@eprod.com>
> Subject: RE: [EXTERNAL] Jones A LS#7 - UL E Section 15 T28N R8W;
> 36.664887, -107.674524; Incident # nAPP2222735338
>
> Nelson/Ryan,
>
> This email is a notification and a variance request. Enterprise is requesting a variance for required 48 hour notification per 19.15.29.12D (1a) NMAC. Enterprise would like to collect partial closure samples tomorrow September 8, 2022 at 9:00 a.m. at the Jones A LS#7 excavation. Please acknowledge acceptance of this variance

request. If you have any questions, please call or email.
>
> Thomas J. Long
> Senior Environmental Scientist
> Enterprise Products Company
> 614 Reilly Ave.
> Farmington, New Mexico 87401
> 505-599-2286 (office)
> 505-215-4727 (Cell)
> tjlong@eprod.com
>
>
>
>
> -----Original Message-----
> From: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
> Sent: Thursday, September 1, 2022 12:08 PM
> To: Long, Thomas <tjlong@eprod.com>; Ryan Joyner <rjoyner@blm.gov>
> Cc: Kyle Summers <ksummers@ensolum.com>; Stone, Brian
> <bmstone@eprod.com>
> Subject: RE: [EXTERNAL] Jones A LS#7 - UL E Section 15 T28N R8W;
> 36.664887, -107.674524; Incident # nAPP2222735338
>
> [Use caution with links/attachments]
>
> Tom,
>
> Thank you for the notice. Your variance request is approved.
>
> If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.
>
> Please keep a copy of this communication for inclusion within the appropriate report submittal.
>
> Regards
>
>
> Nelson Velez ● Environmental Specialist - Adv Environmental Bureau |
> EMNRD - Oil Conservation Division
> 1000 Rio Brazos Road | Aztec, NM 87410
> (505) 469-6146 | nelson.velez@state.nm.us
>
> Office Hrs.:
> 7:00am – 12:00pm & 1:00 – 3:30 pm Mon.–Thur.
> 7:00am – 12:00pm & 1:00 – 4:00 pm Fri.
>
> -----Original Message-----
> From: Long, Thomas <tjlong@eprod.com>
> Sent: Thursday, September 1, 2022 12:04 PM
> To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>; Ryan Joyner
> <rjoyner@blm.gov>
> Cc: Kyle Summers <ksummers@ensolum.com>; Stone, Brian
> <bmstone@eprod.com>
> Subject: Fwd: [EXTERNAL] Jones A LS#7 - UL E Section 15 T28N R8W;
> 36.664887, -107.674524; Incident # nAPP2222735338
>

>
> Nelson/Ryan,
>
> This email is a notification and a variance request. Enterprise is
> requesting a variance for required 48 hour notification per
> 19.15.29.12D (1a) NMAC. Enterprise would like to collect partial
> closure samples tomorrow September 2, 2022 at 9:00 a.m. at the Jones A
> LS#7 excavation. Please acknowledge acceptance of this variance
> request. If you have any questions, please call or email
>
> Tom Long
>
>
> Begin forwarded message:
>
> From: "Long, Thomas" <tjlong@eprod.com>
> Date: August 25, 2022 at 11:05:00 AM MDT
> To: "Velez, Nelson, EMNRD" <Nelson.Velez@state.nm.us>
> Cc: Ryan Joyner <rjoyner@blm.gov>, "Stone, Brian" <bmstone@eprod.com>,
> Kyle Summers <ksummers@ensolum.com>
> Subject: RE: [EXTERNAL] Jones A LS#7 - UL E Section 15 T28N R8W;
> 36.664887, -107.674524; Incident # nAPP2222735338
>
> Nelson/Ryan,
>
> This email is a notification and a variance request. Enterprise is requesting a variance for required 48 hour notification per 19.15.29.12D (1a) NMAC. Enterprise would like to collect partial closure samples tomorrow August 26, 2022 at 10:00 a.m. at the Jones A LS#7 excavation. Please acknowledge acceptance of this variance request. If you have any questions, please call or email.
>
> Thomas J. Long
> Senior Environmental Scientist
> Enterprise Products Company
> 614 Reilly Ave.
> Farmington, New Mexico 87401
> 505-599-2286 (office)
> 505-215-4727 (Cell)
> tjlong@eprod.com
>
>
>
>
> -----Original Message-----
> From: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
> Sent: Friday, August 19, 2022 3:08 PM
> To: Long, Thomas <tjlong@eprod.com>
> Cc: Ryan Joyner <rjoyner@blm.gov>; Stone, Brian <bmstone@eprod.com>;
> Kyle Summers <ksummers@ensolum.com>
> Subject: RE: [EXTERNAL] Jones A LS#7 - UL E Section 15 T28N R8W;
> 36.664887, -107.674524; Incident # nAPP2222735338
>
> [Use caution with links/attachments]
>
> Tom,
>
> Thank you for the notice. If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as

possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.
>
> Please keep a copy of this communication for inclusion within the appropriate report submittal.
>
> Regards
>
>
>
> Nelson Velez ● Environmental Specialist - Adv Environmental Bureau |
> EMNRD - Oil Conservation Division
> 1000 Rio Brazos Road | Aztec, NM 87410
> (505) 469-6146 | nelson.velez@state.nm.us
>
> Office Hrs.:
> 7:00am – 12:00pm & 1:00 – 3:30 pm Mon.–Thur.
> 7:00am – 12:00pm & 1:00 – 4:00 pm Fri.
>
> -----Original Message-----
> From: Long, Thomas <tjlong@eprod.com>
> Sent: Friday, August 19, 2022 12:51 PM
> To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
> Cc: Ryan Joyner <rjoyner@blm.gov>; Stone, Brian <bmstone@eprod.com>;
> Kyle Summers <ksummers@ensolum.com>
> Subject: Re: [EXTERNAL] Jones A LS#7 - UL E Section 15 T28N R8W;
> 36.664887, -107.674524; Incident # nAPP2222735338
>
> Nelson/Ryan,
>
> The email is a notification that Enterprise will be collecting soil samples at the Jone A LS #7 excavation on Monday August 22, 2022 at 10:00 a.m. If you have any questions, please call or email.
>
> Tom Long
>
>
> On Aug 17, 2022, at 1:45 PM, Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us> wrote:
>
> [Use caution with links/attachments]
>
> Tom,
>
> Thank you for the notice. Your variance request is approved.
>
> If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.
>
> Please keep a copy of this communication for inclusion within the appropriate report submittal.
>
> The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.
>
> Regards
>
>
>

> Nelson Velez ● Environmental Specialist - Adv Environmental Bureau |
> EMNRD - Oil Conservation Division
> 1000 Rio Brazos Road | Aztec, NM 87410
> (505) 469-6146 | nelson.velez@state.nm.us
>
> Office Hrs.:
> 7:00am – 12:00pm & 1:00 – 3:30 pm Mon.–Thur.
> 7:00am – 12:00pm & 1:00 – 4:00 pm Fri.
>
> -----Original Message-----
> From: Long, Thomas <tjlong@eprod.com>
> Sent: Wednesday, August 17, 2022 12:41 PM
> To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>; Ryan Joyner
> <rjoyner@blm.gov>; Stone, Brian <bmstone@eprod.com>; Kyle Summers
> <ksummers@ensolum.com>
> Subject: Fwd: [EXTERNAL] Jones A LS#7 - UL E Section 15 T28N R8W;
> 36.664887, -107.674524; Incident # nAPP2222735338
>
> Nelson/Ryan
>
> This email is a notification and a variance request. Enterprise is requesting a variance for required 48 hour notification per 19.15.29.12D (1a) NMAC. Enterprise would like to collect partial closure samples tomorrow August 18, 2022 at 11:00 a.m. at the Jones A LS#7 excavation. Please acknowledge acceptance of this variance request. If you have any questions, please call or email.
>
> Tom Long
>
>
> Begin forwarded message:
>
> From: "Velez, Nelson, EMNRD" <Nelson.Velez@state.nm.us>
> Date: August 15, 2022 at 3:44:35 PM MDT
> To: "Long, Thomas" <tjlong@eprod.com>, rjoyner@blm.gov
> Cc: "Stone, Brian" <bmstone@eprod.com>, Kyle Summers
> <ksummers@ensolum.com>
> Subject: RE: [EXTERNAL] Jones A LS#7 - UL E Section 15 T28N R8W;
> 36.664887, -107.674524; Incident # nAPP2222735338
>
>
> [Use caution with links/attachments]
> Tom,
>
> Thank you for the notice. Your variance request is approved.
>
> If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.
>
> Please keep a copy of this communication for inclusion within the appropriate report submittal.
>
> Regards
>
>
>
> Nelson Velez ● Environmental Specialist - Adv Environmental Bureau |
> EMNRD - Oil Conservation Division
> 1000 Rio Brazos Road | Aztec, NM 87410

> (505) 469-6146 |
> nelson.velez@state.nm.us<mailto:nelson.velez@state.nm.us>
>
> Office Hrs.:
> 7:00am – 12:00pm & 1:00 – 3:30 pm Mon.–Thur.
> 7:00am – 12:00pm & 1:00 – 4:00 pm Fri.
>
> From: Long, Thomas <tjlong@eprod.com>
> Sent: Monday, August 15, 2022 2:52 PM
> To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>; rjoyner@blm.gov
> Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers
> <ksummers@ensolum.com>
> Subject: [EXTERNAL] Jones A LS#7 - UL E Section 15 T28N R8W;
> 36.664887, -107.674524; Incident # nAPP2222735338
>
> CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.
> Nelson/Ryan
>
> This email is a notification and a variance request. Enterprise is requesting a variance for required 48 hour notification per 19.15.29.12D (1a) NMAC. Enterprise would like to collect partial closure samples tomorrow August 16, 2022 at 2:00 p.m. at the Jones A LS#7 excavation. Please acknowledge acceptance of this variance request. If you have any questions, please call or email.
>
>
> Thomas J. Long
> Senior Environmental Scientist
> Enterprise Products Company
> 614 Reilly Ave.
> Farmington, New Mexico 87401
> 505-599-2286 (office)
> 505-215-4727 (Cell)
> tjlong@eprod.com<mailto:tjlong@eprod.com>
>
> [image001.jpg]
>
>
>
> _____
>
> This message (including any attachments) is confidential and intended for a specific individual and purpose. If you are not the intended recipient, please notify the sender immediately and delete this message.

ENSOLUM

APPENDIX F

Table 1 – Soil Analytical Summary

ENSOLUM

TABLE 1
Jones A LS#7 (08/15/22)
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX[1] (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO)[1] (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 and Tier II)				10	NE	NE	NE	50	NE	NE	NE	Tier II - 1,000	Tier I (<4 feet) - 100 Tier II - 2,500	Tier I (<4 feet) - 600 Tier II - 10,000
Composite Soil Samples Removed by Excavation and Transported to the Landfarm for Disposal/Remediation														
S-1	8.11.22	C	4	2.6	43	11	86	**140**	1,400	300	350	**1,700**	**2,100**	210
S-2	8.11.22	C	4	0.83	15	4.8	47	**68**	840	1,200	2,000	**2,000**	**4,000**	<60
S-3	8.11.22	C	4	<0.090	<0.18	<0.18	<0.36	ND	<18	<14	<47	ND	ND	<60
S-4	8.11.22	C	0 to 4	0.92	20	8.9	76	**110**	1,100	850	1,900	**2,000**	**3,900**	<60
S-5	8.11.22	C	0 to 4	<0.095	0.28	0.55	4.5	5.3	100	160	330	260	**590**	<60
S-7	8.11.22	C	0 to 4	<0.018	0.11	0.15	1.1	1.4	44	89	240	130	**370**	<60
S-8	8.11.22	C	0 to 4	0.31	9.0	3.8	36	49	660	260	270	920	**1,200**	<60
S-9	8.11.22	C	0 to 4	<0.015	0.099	0.14	4.9	5.1	90	210	150	300	**450**	<60
S-28	9.12.22	C	0 to 4	<0.017	<0.035	<0.035	0.16	0.16	4.5	130	100	130	**230**	<60
SP-3	8.11.22	C	Stockpile	<0.018	<0.036	0.043	0.47	0.51	9.8	43	220	53	**270**	<60
SP-4	8.11.22	C	Stockpile	<0.083	2.4	1.3	22	26	340	390	1,400	730	**2,100**	<60
Composite Soil Samples Collected from Stockpiled Soils														
SP-1	8.11.22	C	Stockpile	<0.018	<0.037	<0.037	<0.074	ND	<3.7	<14	<47	ND	ND	<60
SP-2	8.11.22	C	Stockpile	<0.016	<0.032	<0.032	<0.064	ND	<3.2	<15	<49	ND	ND	<60
Excavation Composite Soil Samples														
S-6	8.11.22	C	0 to 4	<0.020	<0.039	<0.039	<0.079	ND	<3.9	<15	<49	ND	ND	<60
S-10	8.16.22	C	5.5	<0.017	<0.034	<0.034	<0.069	ND	<3.4	<15	<50	ND	ND	<61
S-11	8.16.22	C	5.5	<0.018	<0.035	<0.035	<0.071	ND	<3.5	22	<50	22	22	<60
S-12	8.16.22	C	0 to 5.5	<0.025	<0.051	<0.051	<0.10	ND	<5.1	<14	<48	ND	ND	<61
S-13	8.16.22	C	0 to 5.5	<0.019	<0.038	<0.038	<0.075	ND	<3.8	<14	<47	ND	ND	<60
S-14	8.18.22	C	0 to 5.5	<0.097	<0.19	<0.19	<0.39	ND	<19	<15	<49	ND	ND	<60
S-15	8.18.22	C	5.5	<0.077	<0.15	<0.15	<0.31	ND	<15	<15	<50	ND	ND	<59
S-16	8.22.22	C	5.5	<0.019	0.058	<0.038	0.27	0.33	6.4	<14	<47	6.4	6.4	<60
S-17	8.22.22	C	0 to 5.5	<0.018	<0.036	<0.036	<0.072	ND	<3.6	<14	<47	ND	ND	<60
S-18	9.02.22	C	11	<0.12	<0.24	<0.24	<0.48	ND	<24	<14	<46	ND	ND	<61
S-19	9.08.22	C	11	<0.089	<0.18	<0.18	<0.35	ND	<18	18	79	18	97	<60
S-20	9.08.22	C	11	<0.097	<0.19	<0.19	<0.39	ND	<19	<15	<49	ND	ND	<60
S-21	9.08.22	C	5.5 to 11	<0.091	<0.18	<0.18	<0.36	ND	<18	<14	<47	ND	ND	<60

ENSOLUM

TABLE 1
Jones A LS#7 (08/15/22)
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX[1] (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO)[1] (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 and Tier II)				**10**	**NE**	**NE**	**NE**	**50**	**NE**	**NE**	**NE**	**Tier II - 1,000**	**Tier I (<4 feet) - 100 Tier II - 2,500**	**Tier I (<4 feet) - 600 Tier II - 10,000**
S-22	9.08.22	C	0 to 4	<0.098	<0.20	<0.20	<0.39	ND	<20	<15	<49	ND	ND	<60
S-23	9.08.22	C	4 to 11	<0.10	<0.20	<0.20	1.3	1.3	42	<14	<47	42	42	<60
S-24	9.08.22	C	0 to 4	<0.019	<0.038	<0.038	<0.075	ND	<3.8	<15	<49	ND	ND	<60
S-25	9.08.22	C	4 to 11	<0.018	<0.035	<0.035	<0.071	ND	<3.5	<14	<47	ND	ND	<60
S-26	9.12.22	C	11	<0.10	0.64	0.42	4.7	5.8	96	88	<49	180	180	<60
S-27	9.12.22	C	11	<0.019	<0.039	<0.039	0.084	0.084	<3.9	<14	<48	ND	ND	<60
S-29	9.12.22	C	4 to 11	<0.091	<0.18	<0.18	0.46	0.46	<18	37	140	37	180	<60
S-30	9.12.22	C	0 to 4	<0.018	<0.035	<0.035	<0.071	ND	<3.5	<14	<48	ND	ND	<60
S-31	9.12.22	C	4 to 11	<0.10	1.3	0.45	4.4	6.2	77	56	<47	130	130	<60
S-32	9.12.22	C	0 to 4	<0.10	0.50	<0.20	1.7	2.2	36	62	<50	98	98	<60
S-33	9.12.22	C	4 to 11	<0.016	<0.033	<0.033	<0.065	ND	<3.3	260	160	260	420	<61
S-34	9.14.22	C	4	<0.10	0.48	0.21	2.0	2.7	42	<15	<49	42	42	<60
S-35	9.14.22	C	0 to 4	<0.018	<0.035	<0.035	<0.071	ND	<3.5	<15	<49	ND	ND	<60
S-36	9.14.22	C	0 to 4	<0.019	<0.038	<0.038	<0.076	ND	<3.8	<14	<47	ND	ND	<60
S-37	9.14.22	C	0 to 4	<0.018	<0.037	<0.037	<0.074	ND	<3.7	<15	<50	ND	ND	<60

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

[1] = Total combined concentrations are rounded to two (2) significant figures to match the laboratory resolution of the individual constituents.
ND = Not Detected above the Practical Quantitation Limits (PQLs) or Reporting Limits (RLs)
NA = Not Analyzed
NE = Not established
mg/kg = milligram per kilogram
BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes
TPH = Total Petroleum Hydrocarbons
GRO = Gasoline Range Organics
DRO = Diesel Range Organics
MRO = Motor Oil/Lube Oil Range Organics

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

August 17, 2022

Kyle Summers

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

RE: Jones A LS 7 OrderNo.: 2208799

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 13 sample(s) on 8/12/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2208799**
Date Reported: **8/17/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-1
Project: Jones A LS 7
Collection Date: 8/11/2022 12:00:00 PM
Lab ID: 2208799-001 **Matrix:** SOIL **Received Date:** 8/12/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	210	60		mg/Kg	20	8/12/2022 11:27:26 AM	69461
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	300	15		mg/Kg	1	8/12/2022 1:19:31 PM	69457
Motor Oil Range Organics (MRO)	350	49		mg/Kg	1	8/12/2022 1:19:31 PM	69457
Surr: DNOP	113	21-129		%Rec	1	8/12/2022 1:19:31 PM	69457
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	1400	160		mg/Kg	50	8/13/2022 12:02:00 PM	A90227
Surr: BFB	198	37.7-212		%Rec	50	8/13/2022 12:02:00 PM	A90227
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	2.6	0.080		mg/Kg	5	8/12/2022 11:01:00 AM	B90227
Toluene	43	1.6		mg/Kg	50	8/13/2022 12:02:00 PM	B90227
Ethylbenzene	11	0.16		mg/Kg	5	8/12/2022 11:01:00 AM	B90227
Xylenes, Total	86	3.2		mg/Kg	50	8/13/2022 12:02:00 PM	B90227
Surr: 4-Bromofluorobenzene	173	70-130	S	%Rec	5	8/12/2022 11:01:00 AM	B90227

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

Qualifiers:

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

Analytical Report
Lab Order **2208799**
Date Reported: **8/17/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-2
Project: Jones A LS 7
Collection Date: 8/11/2022 12:05:00 PM
Lab ID: 2208799-002 **Matrix:** SOIL **Received Date:** 8/12/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/12/2022 11:39:47 AM	69461
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	1200	150		mg/Kg	10	8/13/2022 4:08:41 AM	69457
Motor Oil Range Organics (MRO)	2000	490		mg/Kg	10	8/13/2022 4:08:41 AM	69457
Surr: DNOP	0	21-129	S	%Rec	10	8/13/2022 4:08:41 AM	69457
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	840	16		mg/Kg	5	8/12/2022 11:21:00 AM	A90227
Surr: BFB	399	37.7-212	S	%Rec	5	8/12/2022 11:21:00 AM	A90227
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	0.83	0.078		mg/Kg	5	8/12/2022 11:21:00 AM	B90227
Toluene	15	0.16		mg/Kg	5	8/12/2022 11:21:00 AM	B90227
Ethylbenzene	4.8	0.16		mg/Kg	5	8/12/2022 11:21:00 AM	B90227
Xylenes, Total	47	3.1		mg/Kg	50	8/13/2022 12:22:00 PM	B90227
Surr: 4-Bromofluorobenzene	157	70-130	S	%Rec	5	8/12/2022 11:21:00 AM	B90227

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

Qualifiers:

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

Analytical Report
Lab Order **2208799**
Date Reported: **8/17/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-3
Project: Jones A LS 7
Collection Date: 8/11/2022 12:10:00 PM
Lab ID: 2208799-003 **Matrix:** SOIL **Received Date:** 8/12/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/12/2022 11:52:07 AM	69461
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/12/2022 5:54:39 PM	69457
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/12/2022 5:54:39 PM	69457
Surr: DNOP	116	21-129		%Rec	1	8/12/2022 5:54:39 PM	69457
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	18		mg/Kg	5	8/12/2022 11:40:00 AM	A90227
Surr: BFB	130	37.7-212		%Rec	5	8/12/2022 11:40:00 AM	A90227
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.090		mg/Kg	5	8/12/2022 11:40:00 AM	B90227
Toluene	ND	0.18		mg/Kg	5	8/12/2022 11:40:00 AM	B90227
Ethylbenzene	ND	0.18		mg/Kg	5	8/12/2022 11:40:00 AM	B90227
Xylenes, Total	ND	0.36		mg/Kg	5	8/12/2022 11:40:00 AM	B90227
Surr: 4-Bromofluorobenzene	93.5	70-130		%Rec	5	8/12/2022 11:40:00 AM	B90227

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

Qualifiers:

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

Analytical Report
Lab Order **2208799**
Date Reported: **8/17/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-4
Project: Jones A LS 7
Collection Date: 8/11/2022 12:15:00 PM
Lab ID: 2208799-004 **Matrix:** SOIL **Received Date:** 8/12/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/12/2022 12:04:28 PM	69461
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	850	150		mg/Kg	10	8/12/2022 6:43:47 PM	69457
Motor Oil Range Organics (MRO)	1900	490		mg/Kg	10	8/12/2022 6:43:47 PM	69457
Surr: DNOP	0	21-129	S	%Rec	10	8/12/2022 6:43:47 PM	69457
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	1100	160		mg/Kg	50	8/13/2022 12:42:00 PM	A90227
Surr: BFB	226	37.7-212	S	%Rec	50	8/13/2022 12:42:00 PM	A90227
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	0.92	0.081		mg/Kg	5	8/12/2022 12:00:00 PM	B90227
Toluene	20	1.6		mg/Kg	50	8/13/2022 12:42:00 PM	B90227
Ethylbenzene	8.9	0.16		mg/Kg	5	8/12/2022 12:00:00 PM	B90227
Xylenes, Total	76	3.2		mg/Kg	50	8/13/2022 12:42:00 PM	B90227
Surr: 4-Bromofluorobenzene	185	70-130	S	%Rec	5	8/12/2022 12:00:00 PM	B90227

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

Qualifiers:

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

Analytical Report
Lab Order **2208799**
Date Reported: **8/17/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-5
Project: Jones A LS 7
Collection Date: 8/11/2022 12:20:00 PM
Lab ID: 2208799-005 **Matrix:** SOIL **Received Date:** 8/12/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/12/2022 12:16:49 PM	69461
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	160	14		mg/Kg	1	8/12/2022 3:18:55 PM	69457
Motor Oil Range Organics (MRO)	330	48		mg/Kg	1	8/12/2022 3:18:55 PM	69457
Surr: DNOP	124	21-129		%Rec	1	8/12/2022 3:18:55 PM	69457
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	100	19		mg/Kg	5	8/12/2022 12:20:00 PM	A90227
Surr: BFB	164	37.7-212		%Rec	5	8/12/2022 12:20:00 PM	A90227
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.095		mg/Kg	5	8/12/2022 12:20:00 PM	B90227
Toluene	0.28	0.19		mg/Kg	5	8/12/2022 12:20:00 PM	B90227
Ethylbenzene	0.55	0.19		mg/Kg	5	8/12/2022 12:20:00 PM	B90227
Xylenes, Total	4.5	0.38		mg/Kg	5	8/12/2022 12:20:00 PM	B90227
Surr: 4-Bromofluorobenzene	117	70-130		%Rec	5	8/12/2022 12:20:00 PM	B90227

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

Qualifiers:

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

Analytical Report
Lab Order **2208799**
Date Reported: **8/17/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-6
Project: Jones A LS 7
Collection Date: 8/11/2022 12:25:00 PM
Lab ID: 2208799-006 **Matrix:** SOIL **Received Date:** 8/12/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/12/2022 12:29:09 PM	69461
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/12/2022 4:30:28 PM	69457
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/12/2022 4:30:28 PM	69457
Surr: DNOP	115	21-129		%Rec	1	8/12/2022 4:30:28 PM	69457
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	8/12/2022 12:39:00 PM	A90227
Surr: BFB	92.7	37.7-212		%Rec	1	8/12/2022 12:39:00 PM	A90227
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.020		mg/Kg	1	8/12/2022 12:39:00 PM	B90227
Toluene	ND	0.039		mg/Kg	1	8/12/2022 12:39:00 PM	B90227
Ethylbenzene	ND	0.039		mg/Kg	1	8/12/2022 12:39:00 PM	B90227
Xylenes, Total	ND	0.079		mg/Kg	1	8/12/2022 12:39:00 PM	B90227
Surr: 4-Bromofluorobenzene	76.2	70-130		%Rec	1	8/12/2022 12:39:00 PM	B90227

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

Qualifiers:

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

Analytical Report
Lab Order **2208799**
Date Reported: **8/17/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-7
Project: Jones A LS 7
Collection Date: 8/11/2022 12:30:00 PM
Lab ID: 2208799-007 **Matrix:** SOIL **Received Date:** 8/12/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/12/2022 12:41:29 PM	69461
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	89	14		mg/Kg	1	8/12/2022 5:03:16 PM	69457
Motor Oil Range Organics (MRO)	240	47		mg/Kg	1	8/12/2022 5:03:16 PM	69457
Surr: DNOP	117	21-129		%Rec	1	8/12/2022 5:03:16 PM	69457
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	44	3.6		mg/Kg	1	8/12/2022 12:59:00 PM	A90227
Surr: BFB	185	37.7-212		%Rec	1	8/12/2022 12:59:00 PM	A90227
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.018		mg/Kg	1	8/12/2022 12:59:00 PM	B90227
Toluene	0.11	0.036		mg/Kg	1	8/12/2022 12:59:00 PM	B90227
Ethylbenzene	0.15	0.036		mg/Kg	1	8/12/2022 12:59:00 PM	B90227
Xylenes, Total	1.1	0.071		mg/Kg	1	8/12/2022 12:59:00 PM	B90227
Surr: 4-Bromofluorobenzene	96.8	70-130		%Rec	1	8/12/2022 12:59:00 PM	B90227

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

Qualifiers:

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

Analytical Report
Lab Order **2208799**
Date Reported: **8/17/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-8
Project: Jones A LS 7
Collection Date: 8/11/2022 12:35:00 PM
Lab ID: 2208799-008 **Matrix:** SOIL **Received Date:** 8/12/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/12/2022 12:53:50 PM	69461
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	260	15		mg/Kg	1	8/12/2022 2:52:22 PM	69457
Motor Oil Range Organics (MRO)	270	48		mg/Kg	1	8/12/2022 2:52:22 PM	69457
Surr: DNOP	104	21-129		%Rec	1	8/12/2022 2:52:22 PM	69457
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	660	16		mg/Kg	5	8/12/2022 1:19:00 PM	A90227
Surr: BFB	309	37.7-212	S	%Rec	5	8/12/2022 1:19:00 PM	A90227
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	0.31	0.080		mg/Kg	5	8/12/2022 1:19:00 PM	B90227
Toluene	9.0	0.16		mg/Kg	5	8/12/2022 1:19:00 PM	B90227
Ethylbenzene	3.8	0.16		mg/Kg	5	8/12/2022 1:19:00 PM	B90227
Xylenes, Total	36	0.32		mg/Kg	5	8/12/2022 1:19:00 PM	B90227
Surr: 4-Bromofluorobenzene	129	70-130		%Rec	5	8/12/2022 1:19:00 PM	B90227

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

Qualifiers:

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

Analytical Report
Lab Order **2208799**
Date Reported: **8/17/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-9
Project: Jones A LS 7
Collection Date: 8/11/2022 12:40:00 PM
Lab ID: 2208799-009 **Matrix:** SOIL **Received Date:** 8/12/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/12/2022 1:30:52 PM	69461
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	210	14		mg/Kg	1	8/12/2022 3:41:01 PM	69457
Motor Oil Range Organics (MRO)	150	48		mg/Kg	1	8/12/2022 3:41:01 PM	69457
Surr: DNOP	115	21-129		%Rec	1	8/12/2022 3:41:01 PM	69457
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	90	3.1		mg/Kg	1	8/12/2022 1:39:00 PM	A90227
Surr: BFB	231	37.7-212	S	%Rec	1	8/12/2022 1:39:00 PM	A90227
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.015		mg/Kg	1	8/12/2022 1:39:00 PM	B90227
Toluene	0.099	0.031		mg/Kg	1	8/12/2022 1:39:00 PM	B90227
Ethylbenzene	0.14	0.031		mg/Kg	1	8/12/2022 1:39:00 PM	B90227
Xylenes, Total	4.9	0.061		mg/Kg	1	8/12/2022 1:39:00 PM	B90227
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	8/12/2022 1:39:00 PM	B90227

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

Qualifiers:

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

Analytical Report
Lab Order **2208799**
Date Reported: **8/17/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SP-1
Project: Jones A LS 7
Collection Date: 8/11/2022 12:45:00 PM
Lab ID: 2208799-010 **Matrix:** SOIL **Received Date:** 8/12/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/12/2022 1:43:13 PM	69461
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/12/2022 4:29:36 PM	69457
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/12/2022 4:29:36 PM	69457
Surr: DNOP	108	21-129		%Rec	1	8/12/2022 4:29:36 PM	69457
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	8/12/2022 1:59:00 PM	A90227
Surr: BFB	101	37.7-212		%Rec	1	8/12/2022 1:59:00 PM	A90227
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.018		mg/Kg	1	8/12/2022 1:59:00 PM	B90227
Toluene	ND	0.037		mg/Kg	1	8/12/2022 1:59:00 PM	B90227
Ethylbenzene	ND	0.037		mg/Kg	1	8/12/2022 1:59:00 PM	B90227
Xylenes, Total	ND	0.074		mg/Kg	1	8/12/2022 1:59:00 PM	B90227
Surr: 4-Bromofluorobenzene	79.5	70-130		%Rec	1	8/12/2022 1:59:00 PM	B90227

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

Qualifiers:

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

Analytical Report
Lab Order **2208799**
Date Reported: **8/17/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SP-2
Project: Jones A LS 7
Collection Date: 8/11/2022 12:50:00 PM
Lab ID: 2208799-011 **Matrix:** SOIL **Received Date:** 8/12/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/12/2022 1:55:33 PM	69461
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/12/2022 1:31:50 PM	69457
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/12/2022 1:31:50 PM	69457
Surr: DNOP	97.5	21-129		%Rec	1	8/12/2022 1:31:50 PM	69457
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	8/12/2022 12:10:35 PM	G90220
Surr: BFB	109	37.7-212		%Rec	1	8/12/2022 12:10:35 PM	G90220
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.016		mg/Kg	1	8/12/2022 12:10:35 PM	B90220
Toluene	ND	0.032		mg/Kg	1	8/12/2022 12:10:35 PM	B90220
Ethylbenzene	ND	0.032		mg/Kg	1	8/12/2022 12:10:35 PM	B90220
Xylenes, Total	ND	0.064		mg/Kg	1	8/12/2022 12:10:35 PM	B90220
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	8/12/2022 12:10:35 PM	B90220

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

Qualifiers:

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

Analytical Report
Lab Order **2208799**
Date Reported: **8/17/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SP-3
Project: Jones A LS 7
Collection Date: 8/11/2022 12:55:00 PM
Lab ID: 2208799-012 **Matrix:** SOIL **Received Date:** 8/12/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/12/2022 2:07:54 PM	69461
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	43	15		mg/Kg	1	8/12/2022 1:45:35 PM	69457
Motor Oil Range Organics (MRO)	220	49		mg/Kg	1	8/12/2022 1:45:35 PM	69457
Surr: DNOP	101	21-129		%Rec	1	8/12/2022 1:45:35 PM	69457
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	9.8	3.6		mg/Kg	1	8/12/2022 12:34:14 PM	G90220
Surr: BFB	187	37.7-212		%Rec	1	8/12/2022 12:34:14 PM	G90220
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	8/12/2022 12:34:14 PM	B90220
Toluene	ND	0.036		mg/Kg	1	8/12/2022 12:34:14 PM	B90220
Ethylbenzene	0.043	0.036		mg/Kg	1	8/12/2022 12:34:14 PM	B90220
Xylenes, Total	0.47	0.072		mg/Kg	1	8/12/2022 12:34:14 PM	B90220
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	8/12/2022 12:34:14 PM	B90220

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

Qualifiers:

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

Analytical Report
Lab Order **2208799**
Date Reported: **8/17/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SP-4
Project: Jones A LS 7
Collection Date: 8/11/2022 1:00:00 PM
Lab ID: 2208799-013 **Matrix:** SOIL **Received Date:** 8/12/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/12/2022 2:20:15 PM	69461
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	390	150		mg/Kg	10	8/13/2022 4:33:21 AM	69457
Motor Oil Range Organics (MRO)	1400	490		mg/Kg	10	8/13/2022 4:33:21 AM	69457
Surr: DNOP	0	21-129	S	%Rec	10	8/13/2022 4:33:21 AM	69457
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	340	17		mg/Kg	5	8/12/2022 12:58:00 PM	G90220
Surr: BFB	538	37.7-212	S	%Rec	5	8/12/2022 12:58:00 PM	G90220
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.083		mg/Kg	5	8/12/2022 12:58:00 PM	B90220
Toluene	2.4	0.17		mg/Kg	5	8/12/2022 12:58:00 PM	B90220
Ethylbenzene	1.3	0.17		mg/Kg	5	8/12/2022 12:58:00 PM	B90220
Xylenes, Total	22	0.33		mg/Kg	5	8/12/2022 12:58:00 PM	B90220
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	5	8/12/2022 12:58:00 PM	B90220

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208799**

17-Aug-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **MB-69461** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **69461** RunNo: **90236**

Prep Date: **8/12/2022** Analysis Date: **8/12/2022** SeqNo: **3219286** Units: **mg/Kg**

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

Sample ID: **LCS-69461** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **69461** RunNo: **90236**

Prep Date: **8/12/2022** Analysis Date: **8/12/2022** SeqNo: **3219287** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.3	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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208799**

17-Aug-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **MB-69457** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **69457** RunNo: **90218**
Prep Date: **8/12/2022** Analysis Date: **8/12/2022** SeqNo: **3218061** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		97.3	21	129			

Sample ID: **LCS-69457** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **69457** RunNo: **90218**
Prep Date: **8/12/2022** Analysis Date: **8/12/2022** SeqNo: **3218062** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	15	50.00	0	96.7	64.4	127			
Surr: DNOP	4.7		5.000		94.3	21	129			

Sample ID: **2208799-001AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-1** Batch ID: **69457** RunNo: **90218**
Prep Date: **8/12/2022** Analysis Date: **8/12/2022** SeqNo: **3218453** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	350	15	49.46	303.8	94.0	36.1	154			
Surr: DNOP	6.0		4.946		120	21	129			

Sample ID: **2208799-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-1** Batch ID: **69457** RunNo: **90218**
Prep Date: **8/12/2022** Analysis Date: **8/12/2022** SeqNo: **3218454** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	300	13	43.90	303.8	-12.9	36.1	154	16.1	33.9	S
Surr: DNOP	5.3		4.390		121	21	129	0	0	

Sample ID: **LCS-69454** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **69454** RunNo: **90247**
Prep Date: **8/11/2022** Analysis Date: **8/13/2022** SeqNo: **3218544** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.9		5.000		78.7	21	129			

Sample ID: **MB-69454** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **69454** RunNo: **90247**
Prep Date: **8/11/2022** Analysis Date: **8/13/2022** SeqNo: **3218546** 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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208799**

17-Aug-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **MB-69454**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **69454**	RunNo: **90247**
Prep Date: **8/11/2022**	Analysis Date: **8/13/2022**	SeqNo: **3218546** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.2		10.00		92.3	21	129			

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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208799**

17-Aug-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **2208799-003ams** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-3** Batch ID: **A90227** RunNo: **90227**
Prep Date: Analysis Date: **8/12/2022** SeqNo: **3218826** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	87	18	90.25	13.47	81.9	70	130			
Surr: BFB	7100		3610		196	37.7	212			

Sample ID: **2208799-003amsd** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-3** Batch ID: **A90227** RunNo: **90227**
Prep Date: Analysis Date: **8/12/2022** SeqNo: **3218827** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	84	18	90.25	13.47	77.7	70	130	4.44	20	
Surr: BFB	6800		3610		189	37.7	212	0	0	

Sample ID: **lcs-69398** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **69398** RunNo: **90227**
Prep Date: **8/10/2022** Analysis Date: **8/13/2022** SeqNo: **3218852** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	2000		1000		197	37.7	212			

Sample ID: **mb-69398** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **69398** RunNo: **90227**
Prep Date: **8/10/2022** Analysis Date: **8/13/2022** SeqNo: **3218853** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	890		1000		89.3	37.7	212			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **G90220** RunNo: **90220**
Prep Date: Analysis Date: **8/12/2022** SeqNo: **3218937** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		112	37.7	212			

Sample ID: **2.5ug gro lcs** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **G90220** RunNo: **90220**
Prep Date: Analysis Date: **8/12/2022** SeqNo: **3218938** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	102	72.3	137			
Surr: BFB	2200		1000		224	37.7	212			S

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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208799**

17-Aug-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **2.5ug gro lcs** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **A90227** RunNo: **90227**

Prep Date: Analysis Date: **8/12/2022** SeqNo: **3220278** 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	97.7	72.3	137			
Surr: BFB	2100		1000		207	37.7	212			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **A90227** RunNo: **90227**

Prep Date: Analysis Date: **8/12/2022** SeqNo: **3220279** 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	910		1000		91.3	37.7	212			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208799**

17-Aug-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **2208799-005ams** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **S-5** Batch ID: **B90227** RunNo: **90227**

Prep Date: Analysis Date: **8/12/2022** SeqNo: **3218879** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.1	0.095	3.794	0	82.2	68.8	120			
Toluene	3.4	0.19	3.794	0.2838	82.5	73.6	124			
Ethylbenzene	3.7	0.19	3.794	0.5508	83.5	72.7	129			
Xylenes, Total	14	0.38	11.38	4.461	81.9	75.7	126			
Surr: 4-Bromofluorobenzene	4.3		3.794		113	70	130			

Sample ID: **2208799-005amsd** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **S-5** Batch ID: **B90227** RunNo: **90227**

Prep Date: Analysis Date: **8/12/2022** SeqNo: **3218880** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	2.9	0.095	3.794	0	77.7	68.8	120	5.62	20	
Toluene	3.2	0.19	3.794	0.2838	77.5	73.6	124	5.71	20	
Ethylbenzene	3.5	0.19	3.794	0.5508	78.4	72.7	129	5.34	20	
Xylenes, Total	13	0.38	11.38	4.461	76.4	75.7	126	4.68	20	
Surr: 4-Bromofluorobenzene	4.1		3.794		109	70	130	0	0	

Sample ID: **mb-69398** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **69398** RunNo: **90227**

Prep Date: **8/10/2022** Analysis Date: **8/13/2022** SeqNo: **3218906** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.81		1.000		80.6	70	130			

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

Client ID: **PBS** Batch ID: **B90220** RunNo: **90220**

Prep Date: Analysis Date: **8/12/2022** SeqNo: **3218998** Units: **mg/Kg**

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

Sample ID: **100ng btex lcs** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **B90220** RunNo: **90220**

Prep Date: Analysis Date: **8/12/2022** SeqNo: **3218999** Units: **mg/Kg**

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208799**

17-Aug-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **100ng btex lcs** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **B90220** RunNo: **90220**

Prep Date: Analysis Date: **8/12/2022** SeqNo: **3218999** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	97.4	80	120			
Toluene	1.0	0.050	1.000	0	99.5	80	120			
Ethylbenzene	1.0	0.050	1.000	0	99.6	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.7	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	70	130			

Sample ID: **100ng btex lcs** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **B90227** RunNo: **90227**

Prep Date: Analysis Date: **8/12/2022** SeqNo: **3220280** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.025	1.000	0	82.3	80	120			
Toluene	0.84	0.050	1.000	0	84.0	80	120			
Ethylbenzene	0.85	0.050	1.000	0	84.8	80	120			
Xylenes, Total	2.5	0.10	3.000	0	84.8	80	120			
Surr: 4-Bromofluorobenzene	0.86		1.000		86.3	70	130			

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

Client ID: **PBS** Batch ID: **B90227** RunNo: **90227**

Prep Date: Analysis Date: **8/12/2022** SeqNo: **3220281** 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	0.85		1.000		84.6	70	130			

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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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: 2208799 RcptNo: 1

Received By: Juan Rojas 8/12/2022 6:25:00 AM

Completed By: Juan Rojas 8/12/2022 6:31:44 AM

Reviewed By: 8/12/22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° 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 8/12/22

Special Handling (if applicable)

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

Person Notified: Date
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.4	Good				

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 6006 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 10356

Project Name: Jones A LS #7

Project #: see notes

Project Manager: KSummers

Sampler: RDeechilly

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 0.4+0=0.4 (°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. 2208799	BTEX / ~~MTBE~~ / ~~TMBs~~ (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
8/11/22	1200	S	S-1	1x4oz Jar	cool	-001	X	X									X
8/11/22	1205	S	S-2	1x4oz Jar	cool	-002	X	X									X
8/11/22	1210	S	S-3	1x4oz Jar	cool	-003	X	X									X
8/11/22	1215	S	S-4	1x4oz Jar	cool	-004	X	X									X
8/11/22	1220	S	S-5	1x4oz Jar	cool	-005	X	X									X
8/11/22	1225	S	S-6	1x4oz Jar	cool	-006	X	X									X
8/11/22	1230	S	S-7	1x4oz Jar	cool	-007	X	X									X
8/11/22	1235	S	S-8	1x4oz Jar	cool	-008	X	X									X
8/11/22	1240	S	S-9	1x4oz Jar	cool	-009	X	X									X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8/11/22	1524				8/11/22	1524
8/11/22	1803			courier	8/12/22	6:25

Remarks: SAME DAY

PM - Tom Long (EPROD)
PayKey - 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.

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 1086

Project Name: Jones A LS #7

Project #: See notes

Project Manager: ksummers

Sampler: RDeechilly
On Ice: ☒ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): 0.4-0=0.4 (°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. 2208799	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
8/11/22	1245	S	SP-1	1x4oz Jar	Cool	-010	X	X									X
8/11/22	1250	S	SP-2	1x4oz Jar	Cool	-011	X	X									X
8/11/22	1255	S	SP-3	1x4oz Jar	Cool	-012	X	X									X
8/11/22	1300	S	SP-4	1x4oz Jar	Cool	-013	X	X									X

Date	Time	Relinquished by:	Received by:	Via	Date	Time
8/11/22	1524					1524
8/11/22	1803			Courier	8/12/22	6:25

Remarks: SAME DAY
PM - Tom Long (EPROD)
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

August 22, 2022

Kyle Summers

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

RE: Jones A LS 7 OrderNo.: 2208A03

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 8/17/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2208A03**
Date Reported: **8/22/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-10
Project: Jones A LS 7
Collection Date: 8/16/2022 12:00:00 PM
Lab ID: 2208A03-001 **Matrix:** SOIL **Received Date:** 8/17/2022 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	61		mg/Kg	20	8/17/2022 10:34:03 AM	69557
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/17/2022 11:15:12 AM	69549
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/17/2022 11:15:12 AM	69549
Surr: DNOP	105	21-129		%Rec	1	8/17/2022 11:15:12 AM	69549
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	8/17/2022 12:09:00 PM	A90339
Surr: BFB	103	37.7-212		%Rec	1	8/17/2022 12:09:00 PM	A90339
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.017		mg/Kg	1	8/17/2022 12:09:00 PM	B90339
Toluene	ND	0.034		mg/Kg	1	8/17/2022 12:09:00 PM	B90339
Ethylbenzene	ND	0.034		mg/Kg	1	8/17/2022 12:09:00 PM	B90339
Xylenes, Total	ND	0.069		mg/Kg	1	8/17/2022 12:09:00 PM	B90339
Surr: 4-Bromofluorobenzene	99.7	70-130		%Rec	1	8/17/2022 12:09:00 PM	B90339

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

Qualifiers:

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

Analytical Report
Lab Order **2208A03**
Date Reported: **8/22/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-11
Project: Jones A LS 7
Collection Date: 8/16/2022 12:05:00 PM
Lab ID: 2208A03-002 **Matrix:** SOIL **Received Date:** 8/17/2022 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	60		mg/Kg	20	8/17/2022 10:46:27 AM	69557
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	22	15		mg/Kg	1	8/17/2022 11:38:59 AM	69549
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/17/2022 11:38:59 AM	69549
Surr: DNOP	103	21-129		%Rec	1	8/17/2022 11:38:59 AM	69549
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	8/17/2022 12:28:00 PM	A90339
Surr: BFB	104	37.7-212		%Rec	1	8/17/2022 12:28:00 PM	A90339
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.018		mg/Kg	1	8/17/2022 12:28:00 PM	B90339
Toluene	ND	0.035		mg/Kg	1	8/17/2022 12:28:00 PM	B90339
Ethylbenzene	ND	0.035		mg/Kg	1	8/17/2022 12:28:00 PM	B90339
Xylenes, Total	ND	0.071		mg/Kg	1	8/17/2022 12:28:00 PM	B90339
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	8/17/2022 12:28:00 PM	B90339

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

Qualifiers:

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

Analytical Report
Lab Order **2208A03**
Date Reported: **8/22/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-12
Project: Jones A LS 7
Collection Date: 8/16/2022 12:10:00 PM
Lab ID: 2208A03-003 **Matrix:** SOIL **Received Date:** 8/17/2022 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	61		mg/Kg	20	8/17/2022 11:23:41 AM	69557
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/17/2022 12:02:51 PM	69549
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/17/2022 12:02:51 PM	69549
Surr: DNOP	99.6	21-129		%Rec	1	8/17/2022 12:02:51 PM	69549
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	5.1		mg/Kg	1	8/17/2022 12:48:00 PM	A90339
Surr: BFB	105	37.7-212		%Rec	1	8/17/2022 12:48:00 PM	A90339
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.025		mg/Kg	1	8/17/2022 12:48:00 PM	B90339
Toluene	ND	0.051		mg/Kg	1	8/17/2022 12:48:00 PM	B90339
Ethylbenzene	ND	0.051		mg/Kg	1	8/17/2022 12:48:00 PM	B90339
Xylenes, Total	ND	0.10		mg/Kg	1	8/17/2022 12:48:00 PM	B90339
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	8/17/2022 12:48:00 PM	B90339

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

Qualifiers:

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

Analytical Report
Lab Order **2208A03**
Date Reported: **8/22/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-13
Project: Jones A LS 7
Collection Date: 8/16/2022 12:15:00 PM
Lab ID: 2208A03-004 **Matrix:** SOIL **Received Date:** 8/17/2022 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	60		mg/Kg	20	8/17/2022 11:36:06 AM	69557
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/17/2022 12:26:36 PM	69549
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/17/2022 12:26:36 PM	69549
Surr: DNOP	97.6	21-129		%Rec	1	8/17/2022 12:26:36 PM	69549
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	8/17/2022 1:08:00 PM	A90339
Surr: BFB	106	37.7-212		%Rec	1	8/17/2022 1:08:00 PM	A90339
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.019		mg/Kg	1	8/17/2022 1:08:00 PM	B90339
Toluene	ND	0.038		mg/Kg	1	8/17/2022 1:08:00 PM	B90339
Ethylbenzene	ND	0.038		mg/Kg	1	8/17/2022 1:08:00 PM	B90339
Xylenes, Total	ND	0.075		mg/Kg	1	8/17/2022 1:08:00 PM	B90339
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	8/17/2022 1:08:00 PM	B90339

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208A03**

22-Aug-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **MB-69557** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **69557** RunNo: **90334**

Prep Date: **8/17/2022** Analysis Date: **8/17/2022** SeqNo: **3224202** Units: **mg/Kg**

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

Sample ID: **LCS-69557** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **69557** RunNo: **90334**

Prep Date: **8/17/2022** Analysis Date: **8/17/2022** SeqNo: **3224203** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.4	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208A03**

22-Aug-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **2.5ug gro lcs** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **A90339** RunNo: **90339**

Prep Date: Analysis Date: **8/17/2022** SeqNo: **3223655** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	72.3	137			
Surr: BFB	2100		1000		212	37.7	212			S

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **A90339** RunNo: **90339**

Prep Date: Analysis Date: **8/17/2022** SeqNo: **3223656** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		99.1	37.7	212			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208A03**

22-Aug-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **100ng btex lcs** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **B90339** RunNo: **90339**

Prep Date: Analysis Date: **8/17/2022** SeqNo: **3223685** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.025	1.000	0	85.8	80	120			
Toluene	0.88	0.050	1.000	0	87.6	80	120			
Ethylbenzene	0.88	0.050	1.000	0	88.5	80	120			
Xylenes, Total	2.6	0.10	3.000	0	88.0	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		99.8	70	130			

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

Client ID: **PBS** Batch ID: **B90339** RunNo: **90339**

Prep Date: Analysis Date: **8/17/2022** SeqNo: **3223686** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		99.7	70	130			

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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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: 2208A03 RcptNo: 1

Received By: Juan Rojas 8/17/2022 6:30:00 AM

Completed By: Juan Rojas 8/17/2022 6:50:22 AM

Reviewed By: IO 8/17/22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° 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: JNS 8/17/22

Special Handling (if applicable)

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

Person Notified: Date

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good				

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: Jones A LS #7

Project #: See notes

Project Manager: KSummers

Sampler: RDeechilly

On Ice: ☐ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 1.6+0=1.6 (°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. 2208703	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
8/16/22	1200	S	S-10	1x 4oz Jar	cool		X	X									X
8/16/22	1205	S	S-11	1x 4oz Jar	cool		X	X									X
8/16/22	1210	S	S-12	1x 4oz Jar	cool		X	X									X
8/16/22	1215	S	S-13	1x 4oz Jar	cool		X	X									X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8/16/22	1515		Chase Ware		8/16/22	1515
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8/17/22	1752	Chase Ware		Courier	8/17/22	6:30

Remarks: SAME DAY
PM - Tom Long (EPROD)
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

August 23, 2022

Kyle Summers

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

RE: Jones A LS 7 OrderNo.: 2208B90

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 2 sample(s) on 8/19/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2208B90**
Date Reported: **8/23/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-14
Project: Jones A LS 7
Collection Date: 8/18/2022 11:30:00 AM
Lab ID: 2208B90-001 **Matrix:** SOIL **Received Date:** 8/19/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	8/19/2022 11:22:12 AM	69629
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/19/2022 10:35:58 AM	69628
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/19/2022 10:35:58 AM	69628
Surr: DNOP	83.5	21-129		%Rec	1	8/19/2022 10:35:58 AM	69628
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	19		mg/Kg	5	8/19/2022 10:15:54 AM	B90417
Surr: BFB	106	37.7-212		%Rec	5	8/19/2022 10:15:54 AM	B90417
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.097		mg/Kg	5	8/19/2022 10:15:54 AM	D90417
Toluene	ND	0.19		mg/Kg	5	8/19/2022 10:15:54 AM	D90417
Ethylbenzene	ND	0.19		mg/Kg	5	8/19/2022 10:15:54 AM	D90417
Xylenes, Total	ND	0.39		mg/Kg	5	8/19/2022 10:15:54 AM	D90417
Surr: 4-Bromofluorobenzene	96.7	70-130		%Rec	5	8/19/2022 10:15:54 AM	D90417

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

Qualifiers:

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

Analytical Report
Lab Order **2208B90**
Date Reported: **8/23/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-15
Project: Jones A LS 7
Collection Date: 8/18/2022 11:35:00 AM
Lab ID: 2208B90-002 **Matrix:** SOIL **Received Date:** 8/19/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	ND	59		mg/Kg	20	8/19/2022 11:34:37 AM	69629
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/19/2022 10:50:10 AM	69628
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/19/2022 10:50:10 AM	69628
Surr: DNOP	87.2	21-129		%Rec	1	8/19/2022 10:50:10 AM	69628
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	15		mg/Kg	5	8/19/2022 10:39:26 AM	B90417
Surr: BFB	110	37.7-212		%Rec	5	8/19/2022 10:39:26 AM	B90417
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.077		mg/Kg	5	8/19/2022 10:39:26 AM	D90417
Toluene	ND	0.15		mg/Kg	5	8/19/2022 10:39:26 AM	D90417
Ethylbenzene	ND	0.15		mg/Kg	5	8/19/2022 10:39:26 AM	D90417
Xylenes, Total	ND	0.31		mg/Kg	5	8/19/2022 10:39:26 AM	D90417
Surr: 4-Bromofluorobenzene	95.1	70-130		%Rec	5	8/19/2022 10:39:26 AM	D90417

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208B90**

23-Aug-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **MB-69629**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **69629**	RunNo: **90418**
Prep Date: **8/19/2022**	Analysis Date: **8/19/2022**	SeqNo: **3228072** Units: **mg/Kg**

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

Sample ID: **LCS-69629**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **69629**	RunNo: **90418**
Prep Date: **8/19/2022**	Analysis Date: **8/19/2022**	SeqNo: **3228073** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.1	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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208B90**

23-Aug-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **MB-69628** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **69628** RunNo: **90423**

Prep Date: **8/19/2022** Analysis Date: **8/19/2022** SeqNo: **3226587** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.7		10.00		76.7	21	129			

Sample ID: **LCS-69628** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **69628** RunNo: **90423**

Prep Date: **8/19/2022** Analysis Date: **8/19/2022** SeqNo: **3226588** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	15	50.00	0	92.2	64.4	127			
Surr: DNOP	3.8		5.000		76.1	21	129			

Sample ID: **2208B90-001AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **S-14** Batch ID: **69628** RunNo: **90423**

Prep Date: **8/19/2022** Analysis Date: **8/19/2022** SeqNo: **3226594** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	15	49.55	0	95.3	36.1	154			
Surr: DNOP	3.8		4.955		76.1	21	129			

Sample ID: **2208B90-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **S-14** Batch ID: **69628** RunNo: **90423**

Prep Date: **8/19/2022** Analysis Date: **8/19/2022** SeqNo: **3226595** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	14	47.21	0	92.2	36.1	154	8.14	33.9	
Surr: DNOP	3.4		4.721		73.1	21	129	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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208B90**

23-Aug-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **B90417**	RunNo: **90417**
Prep Date:	Analysis Date: **8/19/2022**	SeqNo: **3227673** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		113	37.7	212			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **B90417**	RunNo: **90417**
Prep Date:	Analysis Date: **8/19/2022**	SeqNo: **3227674** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	72.3	137			
Surr: BFB	2100		1000		207	37.7	212			

Sample ID: **2208b90-001ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-14**	Batch ID: **B90417**	RunNo: **90417**
Prep Date:	Analysis Date: **8/19/2022**	SeqNo: **3227680** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	100	19	96.68	0	106	70	130			
Surr: BFB	8000		3867		207	37.7	212			

Sample ID: **2208b90-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-14**	Batch ID: **B90417**	RunNo: **90417**
Prep Date:	Analysis Date: **8/19/2022**	SeqNo: **3227681** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	100	19	96.68	0	107	70	130	0.677	20	
Surr: BFB	8300		3867		213	37.7	212	0	0	S

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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208B90**

23-Aug-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **D90417**	RunNo: **90417**
Prep Date:	Analysis Date: **8/19/2022**	SeqNo: **3227719** 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	0.95		1.000		94.8	70	130			

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **D90417**	RunNo: **90417**
Prep Date:	Analysis Date: **8/19/2022**	SeqNo: **3227720** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	96.8	80	120			
Toluene	1.0	0.050	1.000	0	99.6	80	120			
Ethylbenzene	1.0	0.050	1.000	0	99.5	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.7	80	120			
Surr: 4-Bromofluorobenzene	0.97		1.000		96.8	70	130			

Sample ID: **2208b90-002ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-15**	Batch ID: **D90417**	RunNo: **90417**
Prep Date:	Analysis Date: **8/19/2022**	SeqNo: **3227726** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	2.9	0.077	3.073	0.04210	93.7	68.8	120			
Toluene	3.0	0.15	3.073	0.06116	97.0	73.6	124			
Ethylbenzene	3.0	0.15	3.073	0.04057	96.6	72.7	129			
Xylenes, Total	9.1	0.31	9.219	0.1607	97.4	75.7	126			
Surr: 4-Bromofluorobenzene	3.1		3.073		99.9	70	130			

Sample ID: **2208b90-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-15**	Batch ID: **D90417**	RunNo: **90417**
Prep Date:	Analysis Date: **8/19/2022**	SeqNo: **3227727** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	2.9	0.077	3.073	0.04210	94.2	68.8	120	0.535	20	
Toluene	3.1	0.15	3.073	0.06116	97.7	73.6	124	0.685	20	
Ethylbenzene	3.0	0.15	3.073	0.04057	97.5	72.7	129	0.884	20	
Xylenes, Total	9.1	0.31	9.219	0.1607	97.1	75.7	126	0.279	20	
Surr: 4-Bromofluorobenzene	3.1		3.073		101	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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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: 2208B90 RcptNo: 1

Received By: Juan Rojas 8/19/2022 6:35:00 AM

Completed By: Juan Rojas 8/19/2022 6:48:34 AM

Reviewed By: NB 8/19/22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° 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 8/19/22

Special Handling (if applicable)

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

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.4	Good				

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: SAME DAY
☐ Standard ☒ Rush 10026

Project Name: Jones A LS #7

Project #: see notes

Project Manager: KSummers

Sampler: RDeechilly
On Ice: ☒ Yes ☐ No
# of Coolers: 1
Cooler Temp (including CF): 1.2+0.2=1.4 (°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. 2208B90	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
8/18/22	1130	S	S-14	(1) 4oz Jar	Cool	-001	X	X									X
8/18/22	1135	S	S-15	(1) 4oz Jar	Cool	-002	X	X									X

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8/18/22	1556				8/18/22	1556
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8/18/22	1819			courier	8/19/22	6:35

Remarks: SAME DAY
PM - Tom Long (EPROD)
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

August 26, 2022

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

RE: Jones A LS 7 OrderNo.: 2208D45

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 2 sample(s) on 8/23/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2208D45**
Date Reported: **8/26/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-16
Project: Jones A LS 7
Collection Date: 8/22/2022 11:00:00 AM
Lab ID: 2208D45-001 **Matrix:** SOIL **Received Date:** 8/23/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	8/23/2022 12:39:44 PM	69695
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/23/2022 12:07:58 PM	69685
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/23/2022 12:07:58 PM	69685
Surr: DNOP	103	21-129		%Rec	1	8/23/2022 12:07:58 PM	69685
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	6.4	3.8		mg/Kg	1	8/23/2022 9:30:27 AM	G90483
Surr: BFB	152	37.7-212		%Rec	1	8/23/2022 9:30:27 AM	G90483
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	8/23/2022 9:30:27 AM	B90483
Toluene	0.058	0.038		mg/Kg	1	8/23/2022 9:30:27 AM	B90483
Ethylbenzene	ND	0.038		mg/Kg	1	8/23/2022 9:30:27 AM	B90483
Xylenes, Total	0.27	0.075		mg/Kg	1	8/23/2022 9:30:27 AM	B90483
Surr: 4-Bromofluorobenzene	94.9	70-130		%Rec	1	8/23/2022 9:30:27 AM	B90483

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

Qualifiers:

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

Analytical Report
Lab Order **2208D45**
Date Reported: **8/26/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-17
Project: Jones A LS 7
Collection Date: 8/22/2022 11:05:00 AM
Lab ID: 2208D45-002 **Matrix:** SOIL **Received Date:** 8/23/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	8/23/2022 12:52:09 PM	69695
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/23/2022 12:18:38 PM	69685
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/23/2022 12:18:38 PM	69685
Surr: DNOP	96.7	21-129		%Rec	1	8/23/2022 12:18:38 PM	69685
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	8/23/2022 9:53:52 AM	G90483
Surr: BFB	104	37.7-212		%Rec	1	8/23/2022 9:53:52 AM	G90483
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	8/23/2022 9:53:52 AM	B90483
Toluene	ND	0.036		mg/Kg	1	8/23/2022 9:53:52 AM	B90483
Ethylbenzene	ND	0.036		mg/Kg	1	8/23/2022 9:53:52 AM	B90483
Xylenes, Total	ND	0.072		mg/Kg	1	8/23/2022 9:53:52 AM	B90483
Surr: 4-Bromofluorobenzene	89.7	70-130		%Rec	1	8/23/2022 9:53:52 AM	B90483

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208D45**

26-Aug-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **MB-69695**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **69695**	RunNo: **90492**
Prep Date: **8/23/2022**	Analysis Date: **8/23/2022**	SeqNo: **3232550** Units: **mg/Kg**

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

Sample ID: **LCS-69695**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **69695**	RunNo: **90492**
Prep Date: **8/23/2022**	Analysis Date: **8/23/2022**	SeqNo: **3232551** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.4	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208D45**

26-Aug-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **LCS-69685**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **69685**	RunNo: **90486**
Prep Date: **8/23/2022**	Analysis Date: **8/23/2022**	SeqNo: **3231313** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	15	50.00	0	87.0	64.4	127			
Surr: DNOP	3.6		5.000		71.6	21	129			

Sample ID: **MB-69685**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **69685**	RunNo: **90486**
Prep Date: **8/23/2022**	Analysis Date: **8/23/2022**	SeqNo: **3231315** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.5		10.00		95.0	21	129			

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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208D45**

26-Aug-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **G90483**	RunNo: **90483**
Prep Date:	Analysis Date: **8/23/2022**	SeqNo: **3231925** 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	1200		1000		119	37.7	212			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **G90483**	RunNo: **90483**
Prep Date:	Analysis Date: **8/23/2022**	SeqNo: **3231926** 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	102	72.3	137			
Surr: BFB	2100		1000		209	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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208D45**

26-Aug-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **B90483**	RunNo: **90483**
Prep Date:	Analysis Date: **8/23/2022**	SeqNo: **3231951** 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		92.7	70	130			

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **B90483**	RunNo: **90483**
Prep Date:	Analysis Date: **8/23/2022**	SeqNo: **3231952** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.9	80	120			
Toluene	0.98	0.050	1.000	0	97.8	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.4	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.9	80	120			
Surr: 4-Bromofluorobenzene	0.94		1.000		94.5	70	130			

Sample ID: **2208d45-001ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-16**	Batch ID: **B90483**	RunNo: **90483**
Prep Date:	Analysis Date: **8/23/2022**	SeqNo: **3231953** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.67	0.019	0.7502	0.01305	87.6	68.8	120			
Toluene	0.74	0.038	0.7502	0.05754	91.6	73.6	124			
Ethylbenzene	0.71	0.038	0.7502	0.02783	91.0	72.7	129			
Xylenes, Total	2.3	0.075	2.251	0.2704	90.4	75.7	126			
Surr: 4-Bromofluorobenzene	0.73		0.7502		97.0	70	130			

Sample ID: **2208d45-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-16**	Batch ID: **B90483**	RunNo: **90483**
Prep Date:	Analysis Date: **8/23/2022**	SeqNo: **3231954** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.67	0.019	0.7502	0.01305	87.3	68.8	120	0.347	20	
Toluene	0.75	0.038	0.7502	0.05754	91.9	73.6	124	0.282	20	
Ethylbenzene	0.72	0.038	0.7502	0.02783	91.9	72.7	129	0.988	20	
Xylenes, Total	2.3	0.075	2.251	0.2704	92.4	75.7	126	1.92	20	
Surr: 4-Bromofluorobenzene	0.74		0.7502		98.1	70	130	0	0	

Qualifiers:

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

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: 2208D45 RcptNo: 1

Received By: Juan Rojas 8/23/2022 7:00:00 AM

Completed By: Juan Rojas 8/23/2022 7:16:11 AM

Reviewed By: NB 8/23/22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° 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: JNB/23/22

Special Handling (if applicable)

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

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

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

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: Jones A LS #7

Project #: See notes

Project Manager: KSummers

Sampler: RDeechilly
On Ice: ☒ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): 0.5+6.2=6.7 (°C)

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2208D45	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
8/22/22	1100	S	S-16	(1) 4oz Jar	Cool	-001	X	X									X
8/22/22	1105	S	S-17	(1) 4oz Jar	Cool	-002	X	X									X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8/22/22	1346			Courier	8/22/22	1346
8/22/22	1752			Courier	8/23/22	7:00

Remarks: SAME DAY
PM - Tom Long (EPROD)
PayKey - 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

September 08, 2022

Kyle Summers

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

RE: Jones A LS 7 OrderNo.: 2209144

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/3/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2209144**
Date Reported: **9/8/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-18
Project: Jones A LS 7
Collection Date: 9/2/2022 9:00:00 AM
Lab ID: 2209144-001 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**NAI**
Chloride	ND	61		mg/Kg	20	9/6/2022 11:21:43 AM	69971
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/6/2022 10:26:14 AM	69963
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/6/2022 10:26:14 AM	69963
Surr: DNOP	82.5	21-129		%Rec	1	9/6/2022 10:26:14 AM	69963
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	9/6/2022 9:20:35 AM	69961
Surr: BFB	99.4	37.7-212		%Rec	5	9/6/2022 9:20:35 AM	69961
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.12		mg/Kg	5	9/6/2022 9:20:35 AM	69961
Toluene	ND	0.24		mg/Kg	5	9/6/2022 9:20:35 AM	69961
Ethylbenzene	ND	0.24		mg/Kg	5	9/6/2022 9:20:35 AM	69961
Xylenes, Total	ND	0.48		mg/Kg	5	9/6/2022 9:20:35 AM	69961
Surr: 4-Bromofluorobenzene	90.7	70-130		%Rec	5	9/6/2022 9:20:35 AM	69961

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209144**

08-Sep-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **MB-69971** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **69971** RunNo: **90821**

Prep Date: **9/6/2022** Analysis Date: **9/6/2022** SeqNo: **3247546** Units: **mg/Kg**

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

Sample ID: **LCS-69971** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **69971** RunNo: **90821**

Prep Date: **9/6/2022** Analysis Date: **9/6/2022** SeqNo: **3247547** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.5	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209144**

08-Sep-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **LCS-69963** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **69963** RunNo: **90816**

Prep Date: **9/6/2022** Analysis Date: **9/6/2022** SeqNo: **3246556** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	33	15	50.00	0	66.1	64.4	127			
Surr: DNOP	3.1		5.000		62.4	21	129			

Sample ID: **MB-69963** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **69963** RunNo: **90816**

Prep Date: **9/6/2022** Analysis Date: **9/6/2022** SeqNo: **3246558** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.7		10.00		77.0	21	129			

Sample ID: **2209144-001AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **S-18** Batch ID: **69963** RunNo: **90816**

Prep Date: **9/6/2022** Analysis Date: **9/6/2022** SeqNo: **3246573** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	14	45.66	0	78.3	36.1	154			
Surr: DNOP	3.1		4.566		68.8	21	129			

Sample ID: **2209144-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **S-18** Batch ID: **69963** RunNo: **90816**

Prep Date: **9/6/2022** Analysis Date: **9/6/2022** SeqNo: **3246575** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	33	14	46.08	0	71.6	36.1	154	8.04	33.9	
Surr: DNOP	3.0		4.608		64.6	21	129	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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209144**

08-Sep-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **mb-69961** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **69961** RunNo: **90809**

Prep Date: **9/4/2022** Analysis Date: **9/6/2022** SeqNo: **3246744** 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	960		1000		95.8	37.7	212			

Sample ID: **2209144-001ams** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **S-18** Batch ID: **69961** RunNo: **90809**

Prep Date: **9/4/2022** Analysis Date: **9/6/2022** SeqNo: **3246747** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	25	24.85	0	100	70	130			
Surr: BFB	5800		4970		117	37.7	212			

Sample ID: **2209144-001amsd** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **S-18** Batch ID: **69961** RunNo: **90809**

Prep Date: **9/4/2022** Analysis Date: **9/6/2022** SeqNo: **3246748** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	25	24.83	0	100	70	130	0.0994	20	
Surr: BFB	5900		4965		118	37.7	212	0	0	

Sample ID: **lcs-69961** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **69961** RunNo: **90809**

Prep Date: **9/4/2022** Analysis Date: **9/6/2022** SeqNo: **3246836** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	102	72.3	137			
Surr: BFB	2000		1000		197	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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209144**

08-Sep-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **mb-69961** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **69961** RunNo: **90809**

Prep Date: **9/4/2022** Analysis Date: **9/6/2022** SeqNo: **3246793** 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	0.90		1.000		90.5	70	130			

Sample ID: **LCS-69961** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **69961** RunNo: **90809**

Prep Date: **9/4/2022** Analysis Date: **9/6/2022** SeqNo: **3246794** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	87.8	80	120			
Toluene	0.93	0.050	1.000	0	93.0	80	120			
Ethylbenzene	0.93	0.050	1.000	0	92.6	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.6	80	120			
Surr: 4-Bromofluorobenzene	0.91		1.000		90.5	70	130			

Sample ID: **2209144-001a ms** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **S-18** Batch ID: **69961** RunNo: **90809**

Prep Date: **9/4/2022** Analysis Date: **9/6/2022** SeqNo: **3246796** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.12	0.9990	0	88.6	68.8	120			
Toluene	0.94	0.25	0.9990	0	93.8	73.6	124			
Ethylbenzene	0.94	0.25	0.9990	0	94.4	72.7	129			
Xylenes, Total	2.8	0.50	2.997	0.09884	91.1	75.7	126			
Surr: 4-Bromofluorobenzene	4.6		4.995		91.5	70	130			

Sample ID: **2209144-001a msd** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **S-18** Batch ID: **69961** RunNo: **90809**

Prep Date: **9/4/2022** Analysis Date: **9/6/2022** SeqNo: **3246797** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.12	0.9891	0	88.3	68.8	120	1.33	20	
Toluene	0.93	0.25	0.9891	0	93.7	73.6	124	1.05	20	
Ethylbenzene	0.94	0.25	0.9891	0	95.4	72.7	129	0.00728	20	
Xylenes, Total	2.8	0.49	2.967	0.09884	92.3	75.7	126	0.251	20	
Surr: 4-Bromofluorobenzene	4.5		4.946		91.9	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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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: 2209144 | RcptNo: 1

Received By: Tracy Casarrubias 9/3/2022 9:00:00 AM

Completed By: Tracy Casarrubias 9/3/2022 11:44:48 AM

Reviewed By: 9/6/22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° 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 9/3/22

Special Handling (if applicable)

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

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.1	Good	Yes			

Chain-of-Custody Record

Client: Ensolum, LLC

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

Phone #:

email or Fax#: KSummers@ensolumcom

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush 100% Same Day

Project Name: Jones A LS #7

Project #:

Project Manager: K. Summers

Sampler: L. Daniell

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 3.3 - 0.2 = 3.1 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2209144	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)
9/2/22	9:00	S	S-18	1 4oz jar	(cool)	001	X	X					X			

Date:	Time:	Relinquished by:	Received by:	Via: Courier	Date	Time
9/2/22	15:22				9/3/22	9:00
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks: PM Tom Long
Pay Key - RB21200

Same Day

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

September 14, 2022

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

RE: Jones A LS 7 OrderNo.: 2209428

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 7 sample(s) on 9/9/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2209428**
Date Reported: **9/14/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-19
Project: Jones A LS 7 **Collection Date:** 9/8/2022 11:30:00 AM
Lab ID: 2209428-001 **Matrix:** MEOH (SOIL) **Received Date:** 9/9/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/9/2022 10:41:32 AM	70075
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	18	15		mg/Kg	1	9/9/2022 12:05:46 PM	70068
Motor Oil Range Organics (MRO)	79	49		mg/Kg	1	9/9/2022 12:05:46 PM	70068
Surr: DNOP	112	21-129		%Rec	1	9/9/2022 12:05:46 PM	70068
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	18		mg/Kg	5	9/9/2022 8:49:02 AM	G90918
Surr: BFB	105	37.7-212		%Rec	5	9/9/2022 8:49:02 AM	G90918
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.089		mg/Kg	5	9/9/2022 8:49:02 AM	B90918
Toluene	ND	0.18		mg/Kg	5	9/9/2022 8:49:02 AM	B90918
Ethylbenzene	ND	0.18		mg/Kg	5	9/9/2022 8:49:02 AM	B90918
Xylenes, Total	ND	0.35		mg/Kg	5	9/9/2022 8:49:02 AM	B90918
Surr: 4-Bromofluorobenzene	94.6	70-130		%Rec	5	9/9/2022 8:49:02 AM	B90918

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

Qualifiers:

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

Analytical Report
Lab Order **2209428**
Date Reported: **9/14/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-20
Project: Jones A LS 7 **Collection Date:** 9/8/2022 11:40:00 AM
Lab ID: 2209428-002 **Matrix:** MEOH (SOIL) **Received Date:** 9/9/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/9/2022 10:53:57 AM	70075
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/9/2022 12:16:32 PM	70068
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/9/2022 12:16:32 PM	70068
Surr: DNOP	98.1	21-129		%Rec	1	9/9/2022 12:16:32 PM	70068
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	19		mg/Kg	5	9/9/2022 9:12:26 AM	G90918
Surr: BFB	101	37.7-212		%Rec	5	9/9/2022 9:12:26 AM	G90918
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.097		mg/Kg	5	9/9/2022 9:12:26 AM	B90918
Toluene	ND	0.19		mg/Kg	5	9/9/2022 9:12:26 AM	B90918
Ethylbenzene	ND	0.19		mg/Kg	5	9/9/2022 9:12:26 AM	B90918
Xylenes, Total	ND	0.39		mg/Kg	5	9/9/2022 9:12:26 AM	B90918
Surr: 4-Bromofluorobenzene	92.1	70-130		%Rec	5	9/9/2022 9:12:26 AM	B90918

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

Qualifiers:

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

Analytical Report
Lab Order **2209428**
Date Reported: **9/14/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-21
Project: Jones A LS 7 **Collection Date:** 9/8/2022 11:50:00 AM
Lab ID: 2209428-003 **Matrix:** MEOH (SOIL) **Received Date:** 9/9/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/9/2022 11:06:22 AM	70075
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/9/2022 12:27:14 PM	70068
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/9/2022 12:27:14 PM	70068
Surr: DNOP	95.2	21-129		%Rec	1	9/9/2022 12:27:14 PM	70068
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	18		mg/Kg	5	9/9/2022 9:35:52 AM	G90918
Surr: BFB	102	37.7-212		%Rec	5	9/9/2022 9:35:52 AM	G90918
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.091		mg/Kg	5	9/9/2022 9:35:52 AM	B90918
Toluene	ND	0.18		mg/Kg	5	9/9/2022 9:35:52 AM	B90918
Ethylbenzene	ND	0.18		mg/Kg	5	9/9/2022 9:35:52 AM	B90918
Xylenes, Total	ND	0.36		mg/Kg	5	9/9/2022 9:35:52 AM	B90918
Surr: 4-Bromofluorobenzene	93.9	70-130		%Rec	5	9/9/2022 9:35:52 AM	B90918

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

Qualifiers:

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

Analytical Report
Lab Order **2209428**
Date Reported: **9/14/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-22
Project: Jones A LS 7 **Collection Date:** 9/8/2022 12:00:00 PM
Lab ID: 2209428-004 **Matrix:** MEOH (SOIL) **Received Date:** 9/9/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/9/2022 11:18:46 AM	70075
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/9/2022 12:37:57 PM	70068
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/9/2022 12:37:57 PM	70068
Surr: DNOP	89.5	21-129		%Rec	1	9/9/2022 12:37:57 PM	70068
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	20		mg/Kg	5	9/9/2022 9:59:18 AM	G90918
Surr: BFB	100	37.7-212		%Rec	5	9/9/2022 9:59:18 AM	G90918
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.098		mg/Kg	5	9/9/2022 9:59:18 AM	B90918
Toluene	ND	0.20		mg/Kg	5	9/9/2022 9:59:18 AM	B90918
Ethylbenzene	ND	0.20		mg/Kg	5	9/9/2022 9:59:18 AM	B90918
Xylenes, Total	ND	0.39		mg/Kg	5	9/9/2022 9:59:18 AM	B90918
Surr: 4-Bromofluorobenzene	93.0	70-130		%Rec	5	9/9/2022 9:59:18 AM	B90918

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

Qualifiers:

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

Analytical Report
Lab Order **2209428**
Date Reported: **9/14/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-23
Project: Jones A LS 7 **Collection Date:** 9/8/2022 12:10:00 PM
Lab ID: 2209428-005 **Matrix:** MEOH (SOIL) **Received Date:** 9/9/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/9/2022 11:31:10 AM	70075
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/9/2022 12:48:46 PM	70068
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/9/2022 12:48:46 PM	70068
Surr: DNOP	98.0	21-129		%Rec	1	9/9/2022 12:48:46 PM	70068
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	42	20		mg/Kg	5	9/9/2022 10:22:50 AM	G90918
Surr: BFB	127	37.7-212		%Rec	5	9/9/2022 10:22:50 AM	G90918
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.10		mg/Kg	5	9/9/2022 10:22:50 AM	B90918
Toluene	ND	0.20		mg/Kg	5	9/9/2022 10:22:50 AM	B90918
Ethylbenzene	ND	0.20		mg/Kg	5	9/9/2022 10:22:50 AM	B90918
Xylenes, Total	1.3	0.40		mg/Kg	5	9/9/2022 10:22:50 AM	B90918
Surr: 4-Bromofluorobenzene	95.2	70-130		%Rec	5	9/9/2022 10:22:50 AM	B90918

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

Qualifiers:

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

Analytical Report
Lab Order **2209428**
Date Reported: **9/14/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-24
Project: Jones A LS 7 **Collection Date:** 9/8/2022 12:20:00 PM
Lab ID: 2209428-006 **Matrix:** MEOH (SOIL) **Received Date:** 9/9/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/9/2022 11:43:36 AM	70075
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/9/2022 12:59:34 PM	70068
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/9/2022 12:59:34 PM	70068
Surr: DNOP	89.8	21-129		%Rec	1	9/9/2022 12:59:34 PM	70068
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	9/9/2022 10:46:31 AM	G90918
Surr: BFB	95.2	37.7-212		%Rec	1	9/9/2022 10:46:31 AM	G90918
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	9/9/2022 10:46:31 AM	B90918
Toluene	ND	0.038		mg/Kg	1	9/9/2022 10:46:31 AM	B90918
Ethylbenzene	ND	0.038		mg/Kg	1	9/9/2022 10:46:31 AM	B90918
Xylenes, Total	ND	0.075		mg/Kg	1	9/9/2022 10:46:31 AM	B90918
Surr: 4-Bromofluorobenzene	89.6	70-130		%Rec	1	9/9/2022 10:46:31 AM	B90918

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

Qualifiers:

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

Analytical Report
Lab Order **2209428**
Date Reported: **9/14/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-25
Project: Jones A LS 7 **Collection Date:** 9/8/2022 12:30:00 PM
Lab ID: 2209428-007 **Matrix:** MEOH (SOIL) **Received Date:** 9/9/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/9/2022 11:56:00 AM	70075
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/9/2022 1:10:23 PM	70068
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/9/2022 1:10:23 PM	70068
Surr: DNOP	91.2	21-129		%Rec	1	9/9/2022 1:10:23 PM	70068
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	9/9/2022 11:10:01 AM	G90918
Surr: BFB	97.5	37.7-212		%Rec	1	9/9/2022 11:10:01 AM	G90918
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	9/9/2022 11:10:01 AM	B90918
Toluene	ND	0.035		mg/Kg	1	9/9/2022 11:10:01 AM	B90918
Ethylbenzene	ND	0.035		mg/Kg	1	9/9/2022 11:10:01 AM	B90918
Xylenes, Total	ND	0.071		mg/Kg	1	9/9/2022 11:10:01 AM	B90918
Surr: 4-Bromofluorobenzene	90.4	70-130		%Rec	1	9/9/2022 11:10:01 AM	B90918

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209428**

14-Sep-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **MB-70075**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **70075**	RunNo: **90923**
Prep Date: **9/9/2022**	Analysis Date: **9/9/2022**	SeqNo: **3252131** Units: **mg/Kg**

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

Sample ID: **LCS-70075**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **70075**	RunNo: **90923**
Prep Date: **9/9/2022**	Analysis Date: **9/9/2022**	SeqNo: **3252132** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.4	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209428**

14-Sep-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **LCS-69992**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **LCSS**	Batch ID: **69992**	RunNo: **90851**							
Prep Date: **9/6/2022**	Analysis Date: **9/8/2022**	SeqNo: **3248817**	Units: **%Rec**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.2		5.000		83.0	21	129			

Sample ID: **MB-69992**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **PBS**	Batch ID: **69992**	RunNo: **90851**							
Prep Date: **9/6/2022**	Analysis Date: **9/8/2022**	SeqNo: **3248818**	Units: **%Rec**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	13		10.00		131	21	129			S

Sample ID: **LCS-70068**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **LCSS**	Batch ID: **70068**	RunNo: **90851**							
Prep Date: **9/9/2022**	Analysis Date: **9/9/2022**	SeqNo: **3250676**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	15	50.00	0	71.8	64.4	127			
Surr: DNOP	3.4		5.000		67.7	21	129			

Sample ID: **MB-70068**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **PBS**	Batch ID: **70068**	RunNo: **90851**							
Prep Date: **9/9/2022**	Analysis Date: **9/9/2022**	SeqNo: **3250684**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.7		10.00		87.0	21	129			

Sample ID: **2209428-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **S-19**	Batch ID: **70068**	RunNo: **90851**							
Prep Date: **9/9/2022**	Analysis Date: **9/9/2022**	SeqNo: **3251917**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	14	48.31	17.60	59.2	36.1	154			
Surr: DNOP	4.5		4.831		93.4	21	129			

Sample ID: **2209428-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **S-19**	Batch ID: **70068**	RunNo: **90851**							
Prep Date: **9/9/2022**	Analysis Date: **9/9/2022**	SeqNo: **3251918**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	14	47.48	17.60	70.2	36.1	154	9.73	33.9	

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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209428**

14-Sep-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **2209428-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **S-19** Batch ID: **70068** RunNo: **90851**

Prep Date: **9/9/2022** Analysis Date: **9/9/2022** SeqNo: **3251918** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		4.748		99.1	21	129	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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209428**

14-Sep-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **G90918**	RunNo: **90918**
Prep Date:	Analysis Date: **9/9/2022**	SeqNo: **3251213** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		98.5	37.7	212			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **G90918**	RunNo: **90918**
Prep Date:	Analysis Date: **9/9/2022**	SeqNo: **3251214** 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	96.2	72.3	137			
Surr: BFB	2000		1000		199	37.7	212			

Sample ID: **2209428-001ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-19**	Batch ID: **G90918**	RunNo: **90918**
Prep Date:	Analysis Date: **9/9/2022**	SeqNo: **3251215** 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	102	70	130			
Surr: BFB	2100		1000		206	37.7	212			

Sample ID: **2209428-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-19**	Batch ID: **G90918**	RunNo: **90918**
Prep Date:	Analysis Date: **9/9/2022**	SeqNo: **3251216** 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	99.8	70	130	1.83	20	
Surr: BFB	2000		1000		204	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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209428**

14-Sep-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **B90918**	RunNo: **90918**
Prep Date:	Analysis Date: **9/9/2022**	SeqNo: **3251278** 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	0.91		1.000		91.4	70	130			

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **B90918**	RunNo: **90918**
Prep Date:	Analysis Date: **9/9/2022**	SeqNo: **3251279** 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	80	120			
Toluene	0.91	0.050	1.000	0	90.8	80	120			
Ethylbenzene	0.90	0.050	1.000	0	89.6	80	120			
Xylenes, Total	2.7	0.10	3.000	0	90.0	80	120			
Surr: 4-Bromofluorobenzene	0.94		1.000		94.5	70	130			

Sample ID: **2209428-002ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-20**	Batch ID: **B90918**	RunNo: **90918**
Prep Date:	Analysis Date: **9/9/2022**	SeqNo: **3251280** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	89.3	68.8	120			
Toluene	0.93	0.050	1.000	0.06760	86.5	73.6	124			
Ethylbenzene	0.93	0.050	1.000	0.05750	87.0	72.7	129			
Xylenes, Total	2.8	0.10	3.000	0.2809	83.1	75.7	126			
Surr: 4-Bromofluorobenzene	0.94		1.000		93.5	70	130			

Sample ID: **2209428-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-20**	Batch ID: **B90918**	RunNo: **90918**
Prep Date:	Analysis Date: **9/9/2022**	SeqNo: **3251281** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	87.8	68.8	120	1.75	20	
Toluene	0.93	0.050	1.000	0.06760	85.8	73.6	124	0.732	20	
Ethylbenzene	0.92	0.050	1.000	0.05750	85.8	72.7	129	1.26	20	
Xylenes, Total	2.8	0.10	3.000	0.2809	82.4	75.7	126	0.767	20	
Surr: 4-Bromofluorobenzene	0.96		1.000		95.6	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	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 range due to dilution or matrix interference		

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: 2209428 | RcptNo: 1

Received By:	Sean Livingston	9/9/2022 7:30:00 AM	S Livingston
Completed By:	Sean Livingston	9/9/2022 7:51:02 AM	S Livingston
Reviewed By:	TMC	9/9/22	

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° 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 9/9/22

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.4	Good				

Chain-of-Custody Record

Client: Ensolum, LLC

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

Phone #: ~~505~~ 575

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 1007. Same Day

Project Name: Jones A LS #7

Project #:

Project Manager: K. Summers

Sampler: Ly Daniell

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 0.4 ± 0 = 0.4 (°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. 2209428	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)
9/8/22	11:30	S	S-19	1402 jar	Cool	001	X	X					X			
9/8/22	11:40	S	S-20			002	X	X					X			
9/8/22	11:50	S	S-21			003	X	X					X			
9/8/22	12:00	S	S-22			004	X	X					X			
9/8/22	12:10	S	S-23			005	X	X					X			
9/8/22	12:20	S	S-24			006	X	X					X			
9/8/22	12:30	S	S-25			007	X	X					X			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
9/8/22	1534				9/8/22	1534
9/8/22	1842				9/9/22	7:30

Remarks: PM Tom Long
Paykey: RB21200

Same Day

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

September 26, 2022

Kyle Summers

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

RE: Jones A LS 7 OrderNo.: 2209550

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 8 sample(s) on 9/13/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2209550**
Date Reported: **9/26/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-26
Project: Jones A LS 7 **Collection Date:** 9/12/2022 3:00:00 PM
Lab ID: 2209550-001 **Matrix:** MEOH (SOIL) **Received Date:** 9/13/2022 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/13/2022 9:31:21 AM	70126
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	88	15		mg/Kg	1	9/13/2022 10:21:22 AM	70125
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/13/2022 10:21:22 AM	70125
Surr: DNOP	82.4	21-129		%Rec	1	9/13/2022 10:21:22 AM	70125
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	96	20		mg/Kg	5	9/13/2022 8:51:45 AM	G90976
Surr: BFB	242	37.7-212	S	%Rec	5	9/13/2022 8:51:45 AM	G90976
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.10		mg/Kg	5	9/13/2022 8:51:45 AM	B90976
Toluene	0.64	0.20		mg/Kg	5	9/13/2022 8:51:45 AM	B90976
Ethylbenzene	0.42	0.20		mg/Kg	5	9/13/2022 8:51:45 AM	B90976
Xylenes, Total	4.7	0.40		mg/Kg	5	9/13/2022 8:51:45 AM	B90976
Surr: 4-Bromofluorobenzene	96.8	70-130		%Rec	5	9/13/2022 8:51:45 AM	B90976

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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2209550**
Date Reported: **9/26/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-27
Project: Jones A LS 7 **Collection Date:** 9/12/2022 3:10:00 PM
Lab ID: 2209550-002 **Matrix:** MEOH (SOIL) **Received Date:** 9/13/2022 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/13/2022 9:43:45 AM	70126
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/13/2022 10:45:07 AM	70125
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/13/2022 10:45:07 AM	70125
Surr: DNOP	87.6	21-129		%Rec	1	9/13/2022 10:45:07 AM	70125
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	9/13/2022 9:15:20 AM	G90976
Surr: BFB	101	37.7-212		%Rec	1	9/13/2022 9:15:20 AM	G90976
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	9/13/2022 9:15:20 AM	B90976
Toluene	ND	0.039		mg/Kg	1	9/13/2022 9:15:20 AM	B90976
Ethylbenzene	ND	0.039		mg/Kg	1	9/13/2022 9:15:20 AM	B90976
Xylenes, Total	0.084	0.077		mg/Kg	1	9/13/2022 9:15:20 AM	B90976
Surr: 4-Bromofluorobenzene	89.0	70-130		%Rec	1	9/13/2022 9:15:20 AM	B90976

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

Qualifiers:

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

Analytical Report
Lab Order **2209550**
Date Reported: **9/26/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-28
Project: Jones A LS 7 **Collection Date:** 9/12/2022 3:20:00 PM
Lab ID: 2209550-003 **Matrix:** MEOH (SOIL) **Received Date:** 9/13/2022 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/13/2022 9:56:09 AM	70126
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	130	15		mg/Kg	1	9/13/2022 11:08:52 AM	70125
Motor Oil Range Organics (MRO)	100	50		mg/Kg	1	9/13/2022 11:08:52 AM	70125
Surr: DNOP	98.7	21-129		%Rec	1	9/13/2022 11:08:52 AM	70125
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	4.5	3.5		mg/Kg	1	9/13/2022 9:38:54 AM	G90976
Surr: BFB	145	37.7-212		%Rec	1	9/13/2022 9:38:54 AM	G90976
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.017		mg/Kg	1	9/13/2022 9:38:54 AM	B90976
Toluene	ND	0.035		mg/Kg	1	9/13/2022 9:38:54 AM	B90976
Ethylbenzene	ND	0.035		mg/Kg	1	9/13/2022 9:38:54 AM	B90976
Xylenes, Total	0.16	0.070		mg/Kg	1	9/13/2022 9:38:54 AM	B90976
Surr: 4-Bromofluorobenzene	91.2	70-130		%Rec	1	9/13/2022 9:38:54 AM	B90976

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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2209550**
Date Reported: **9/26/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-29
Project: Jones A LS 7 **Collection Date:** 9/12/2022 3:30:00 PM
Lab ID: 2209550-004 **Matrix:** MEOH (SOIL) **Received Date:** 9/13/2022 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/13/2022 10:08:34 AM	70126
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	37	15		mg/Kg	1	9/13/2022 11:32:41 AM	70125
Motor Oil Range Organics (MRO)	140	49		mg/Kg	1	9/13/2022 11:32:41 AM	70125
Surr: DNOP	97.4	21-129		%Rec	1	9/13/2022 11:32:41 AM	70125
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	18		mg/Kg	5	9/13/2022 10:02:21 AM	G90976
Surr: BFB	105	37.7-212		%Rec	5	9/13/2022 10:02:21 AM	G90976
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.091		mg/Kg	5	9/13/2022 10:02:21 AM	B90976
Toluene	ND	0.18		mg/Kg	5	9/13/2022 10:02:21 AM	B90976
Ethylbenzene	ND	0.18		mg/Kg	5	9/13/2022 10:02:21 AM	B90976
Xylenes, Total	0.46	0.37		mg/Kg	5	9/13/2022 10:02:21 AM	B90976
Surr: 4-Bromofluorobenzene	90.1	70-130		%Rec	5	9/13/2022 10:02:21 AM	B90976

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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2209550**
Date Reported: **9/26/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-30
Project: Jones A LS 7 **Collection Date:** 9/12/2022 3:40:00 PM
Lab ID: 2209550-005 **Matrix:** MEOH (SOIL) **Received Date:** 9/13/2022 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/13/2022 10:20:59 AM	70126
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/13/2022 11:56:26 AM	70125
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/13/2022 11:56:26 AM	70125
Surr: DNOP	93.6	21-129		%Rec	1	9/13/2022 11:56:26 AM	70125
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	9/13/2022 10:25:50 AM	G90976
Surr: BFB	98.0	37.7-212		%Rec	1	9/13/2022 10:25:50 AM	G90976
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	9/13/2022 10:25:50 AM	B90976
Toluene	ND	0.035		mg/Kg	1	9/13/2022 10:25:50 AM	B90976
Ethylbenzene	ND	0.035		mg/Kg	1	9/13/2022 10:25:50 AM	B90976
Xylenes, Total	ND	0.071		mg/Kg	1	9/13/2022 10:25:50 AM	B90976
Surr: 4-Bromofluorobenzene	89.8	70-130		%Rec	1	9/13/2022 10:25:50 AM	B90976

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

Qualifiers:

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

Analytical Report
Lab Order **2209550**
Date Reported: **9/26/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-31
Project: Jones A LS 7 **Collection Date:** 9/12/2022 3:50:00 PM
Lab ID: 2209550-006 **Matrix:** MEOH (SOIL) **Received Date:** 9/13/2022 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/13/2022 10:58:13 AM	70126
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	56	14		mg/Kg	1	9/13/2022 12:20:11 PM	70125
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/13/2022 12:20:11 PM	70125
Surr: DNOP	102	21-129		%Rec	1	9/13/2022 12:20:11 PM	70125
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	77	20		mg/Kg	5	9/13/2022 10:49:23 AM	G90976
Surr: BFB	172	37.7-212		%Rec	5	9/13/2022 10:49:23 AM	G90976
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.10		mg/Kg	5	9/13/2022 10:49:23 AM	B90976
Toluene	1.3	0.20		mg/Kg	5	9/13/2022 10:49:23 AM	B90976
Ethylbenzene	0.45	0.20		mg/Kg	5	9/13/2022 10:49:23 AM	B90976
Xylenes, Total	4.4	0.40		mg/Kg	5	9/13/2022 10:49:23 AM	B90976
Surr: 4-Bromofluorobenzene	94.4	70-130		%Rec	5	9/13/2022 10:49:23 AM	B90976

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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2209550**
Date Reported: **9/26/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-32
Project: Jones A LS 7 **Collection Date:** 9/12/2022 4:00:00 PM
Lab ID: 2209550-007 **Matrix:** MEOH (SOIL) **Received Date:** 9/13/2022 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/13/2022 11:10:37 AM	70126
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	62	15		mg/Kg	1	9/13/2022 12:44:03 PM	70125
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/13/2022 12:44:03 PM	70125
Surr: DNOP	99.3	21-129		%Rec	1	9/13/2022 12:44:03 PM	70125
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	36	20		mg/Kg	5	9/13/2022 11:12:57 AM	G90976
Surr: BFB	127	37.7-212		%Rec	5	9/13/2022 11:12:57 AM	G90976
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.10		mg/Kg	5	9/13/2022 11:12:57 AM	B90976
Toluene	0.50	0.20		mg/Kg	5	9/13/2022 11:12:57 AM	B90976
Ethylbenzene	ND	0.20		mg/Kg	5	9/13/2022 11:12:57 AM	B90976
Xylenes, Total	1.7	0.41		mg/Kg	5	9/13/2022 11:12:57 AM	B90976
Surr: 4-Bromofluorobenzene	94.0	70-130		%Rec	5	9/13/2022 11:12:57 AM	B90976

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

Qualifiers:

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

Analytical Report
Lab Order **2209550**
Date Reported: **9/26/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-33
Project: Jones A LS 7 **Collection Date:** 9/12/2022 4:10:00 PM
Lab ID: 2209550-008 **Matrix:** MEOH (SOIL) **Received Date:** 9/13/2022 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	61		mg/Kg	20	9/13/2022 11:23:01 AM	70126
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	260	15		mg/Kg	1	9/13/2022 1:07:48 PM	70125
Motor Oil Range Organics (MRO)	160	49		mg/Kg	1	9/13/2022 1:07:48 PM	70125
Surr: DNOP	104	21-129		%Rec	1	9/13/2022 1:07:48 PM	70125
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	9/13/2022 11:36:26 AM	G90976
Surr: BFB	96.0	37.7-212		%Rec	1	9/13/2022 11:36:26 AM	G90976
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.016		mg/Kg	1	9/13/2022 11:36:26 AM	B90976
Toluene	ND	0.033		mg/Kg	1	9/13/2022 11:36:26 AM	B90976
Ethylbenzene	ND	0.033		mg/Kg	1	9/13/2022 11:36:26 AM	B90976
Xylenes, Total	ND	0.065		mg/Kg	1	9/13/2022 11:36:26 AM	B90976
Surr: 4-Bromofluorobenzene	90.2	70-130		%Rec	1	9/13/2022 11:36:26 AM	B90976

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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209550**

26-Sep-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **MB-70126**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **70126**	RunNo: **90978**
Prep Date: **9/13/2022**	Analysis Date: **9/13/2022**	SeqNo: **3255241** Units: **mg/Kg**

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

Sample ID: **LCS-70126**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **70126**	RunNo: **90978**
Prep Date: **9/13/2022**	Analysis Date: **9/13/2022**	SeqNo: **3255242** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.7	90	110			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2209550**
26-Sep-22

Client: ENSOLUM
Project: Jones A LS 7

Sample ID: **MB-70125** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **70125** RunNo: **90980**
Prep Date: **9/13/2022** Analysis Date: **9/13/2022** SeqNo: **3253842** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.2		10.00		81.8	21	129			

Sample ID: **LCS-70125** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **70125** RunNo: **90980**
Prep Date: **9/13/2022** Analysis Date: **9/13/2022** SeqNo: **3253843** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	15	50.00	0	92.0	64.4	127			
Surr: DNOP	4.1		5.000		82.6	21	129			

Sample ID: **2209550-001AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-26** Batch ID: **70125** RunNo: **90980**
Prep Date: **9/13/2022** Analysis Date: **9/13/2022** SeqNo: **3260188** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	140	15	49.70	88.33	106	36.1	154			
Surr: DNOP	5.3		4.970		107	21	129			

Sample ID: **2209550-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-26** Batch ID: **70125** RunNo: **90980**
Prep Date: **9/13/2022** Analysis Date: **9/13/2022** SeqNo: **3260189** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	140	15	49.46	88.33	104	36.1	154	0.784	33.9	
Surr: DNOP	5.2		4.946		105	21	129	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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209550**

26-Sep-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **G90976**	RunNo: **90976**
Prep Date:	Analysis Date: **9/13/2022**	SeqNo: **3254266** 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		97.0	37.7	212			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **G90976**	RunNo: **90976**
Prep Date:	Analysis Date: **9/13/2022**	SeqNo: **3254267** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	72.3	137			
Surr: BFB	2000		1000		196	37.7	212			

Sample ID: **2209550-001ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-26**	Batch ID: **G90976**	RunNo: **90976**
Prep Date:	Analysis Date: **9/13/2022**	SeqNo: **3254268** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	210	20	99.60	95.66	112	70	130			
Surr: BFB	14000		3984		359	37.7	212			S

Sample ID: **2209550-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-26**	Batch ID: **G90976**	RunNo: **90976**
Prep Date:	Analysis Date: **9/13/2022**	SeqNo: **3254269** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	200	20	99.60	95.66	103	70	130	4.51	20	
Surr: BFB	14000		3984		348	37.7	212	0	0	S

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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209550**

26-Sep-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **B90976**	RunNo: **90976**
Prep Date:	Analysis Date: **9/13/2022**	SeqNo: **3254307** 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	0.91		1.000		90.6	70	130			

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **B90976**	RunNo: **90976**
Prep Date:	Analysis Date: **9/13/2022**	SeqNo: **3254308** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	90.0	80	120			
Toluene	0.93	0.050	1.000	0	93.5	80	120			
Ethylbenzene	0.93	0.050	1.000	0	92.9	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.8	80	120			
Surr: 4-Bromofluorobenzene	0.89		1.000		89.2	70	130			

Sample ID: **2209550-002ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-27**	Batch ID: **B90976**	RunNo: **90976**
Prep Date:	Analysis Date: **9/13/2022**	SeqNo: **3254309** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.71	0.019	0.7728	0.01244	90.3	68.8	120			
Toluene	0.77	0.039	0.7728	0.03423	94.7	73.6	124			
Ethylbenzene	0.74	0.039	0.7728	0.01376	94.6	72.7	129			
Xylenes, Total	2.3	0.077	2.318	0.08447	94.3	75.7	126			
Surr: 4-Bromofluorobenzene	0.73		0.7728		94.0	70	130			

Sample ID: **2209550-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-27**	Batch ID: **B90976**	RunNo: **90976**
Prep Date:	Analysis Date: **9/13/2022**	SeqNo: **3254310** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.68	0.019	0.7728	0.01244	86.4	68.8	120	4.32	20	
Toluene	0.74	0.039	0.7728	0.03423	90.9	73.6	124	3.83	20	
Ethylbenzene	0.71	0.039	0.7728	0.01376	90.5	72.7	129	4.39	20	
Xylenes, Total	2.2	0.077	2.318	0.08447	90.4	75.7	126	4.00	20	
Surr: 4-Bromofluorobenzene	0.71		0.7728		92.3	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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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: **2209550** RcptNo: 1

Received By: **Juan Rojas** **9/13/2022 7:50:00 AM**

Completed By: **Cheyenne Cason** **9/13/2022 8:06:10 AM**

Reviewed By: 9-13-22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° 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 9/13/22

Special Handling (if applicable)

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

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.2	Good	Yes			

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 100% Same Day

Project Name: Jones A LS #7

Project #: See Notes

Project Manager: K. Summers

Sampler: L. Daniell

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 0.1 +0.1=0.2 (°C)

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2209556	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)
9/12/22	3:00	S	S-26	1402 jar	Cool	001	X	X					X			
9/12/22	3:10	S	S-27			002	X	X					X			
9/12/22	3:20	S	S-28			003	X	X					X			
9/12/22	3:30	S	S-29			004	X	X					X			
9/12/22	3:40	S	S-30			005	X	X					X			
9/12/22	3:50	S	S-31			006	X	X					X			
9/12/22	4:00	S	S-32			007	X	X					X			
9/12/22	4:10	S	S-33			008	X	X					X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
9/12/22	1715				9/12/22	1715
9/12/22	1823	Christen Walker		Courier	9/13/22	7:50

Remarks: PM Tom Long
Paykey: RB21200
Same Day

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

September 20, 2022

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

RE: Jones A LS 7 OrderNo.: 2209728

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 9/15/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2209728**
Date Reported: **9/20/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-34
Project: Jones A LS 7 **Collection Date:** 9/14/2022 1:50:00 PM
Lab ID: 2209728-001 **Matrix:** MEOH (SOIL) **Received Date:** 9/15/2022 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	9/15/2022 10:51:27 AM	70196
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/15/2022 2:55:35 PM	70192
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/15/2022 2:55:35 PM	70192
Surr: DNOP	76.1	21-129		%Rec	1	9/15/2022 2:55:35 PM	70192
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	42	20		mg/Kg	5	9/15/2022 9:03:18 AM	A91053
Surr: BFB	122	37.7-212		%Rec	5	9/15/2022 9:03:18 AM	A91053
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.10		mg/Kg	5	9/15/2022 9:03:18 AM	C91053
Toluene	0.48	0.20		mg/Kg	5	9/15/2022 9:03:18 AM	C91053
Ethylbenzene	0.21	0.20		mg/Kg	5	9/15/2022 9:03:18 AM	C91053
Xylenes, Total	2.0	0.40		mg/Kg	5	9/15/2022 9:03:18 AM	C91053
Surr: 4-Bromofluorobenzene	87.9	70-130		%Rec	5	9/15/2022 9:03:18 AM	C91053

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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2209728**
Date Reported: **9/20/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-35
Project: Jones A LS 7 **Collection Date:** 9/14/2022 2:00:00 PM
Lab ID: 2209728-002 **Matrix:** MEOH (SOIL) **Received Date:** 9/15/2022 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	9/15/2022 11:03:52 AM	70196
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/15/2022 10:54:50 AM	70192
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/15/2022 10:54:50 AM	70192
Surr: DNOP	92.9	21-129		%Rec	1	9/15/2022 10:54:50 AM	70192
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	9/15/2022 9:26:44 AM	A91053
Surr: BFB	90.9	37.7-212		%Rec	1	9/15/2022 9:26:44 AM	A91053
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	9/15/2022 9:26:44 AM	C91053
Toluene	ND	0.035		mg/Kg	1	9/15/2022 9:26:44 AM	C91053
Ethylbenzene	ND	0.035		mg/Kg	1	9/15/2022 9:26:44 AM	C91053
Xylenes, Total	ND	0.071		mg/Kg	1	9/15/2022 9:26:44 AM	C91053
Surr: 4-Bromofluorobenzene	88.4	70-130		%Rec	1	9/15/2022 9:26:44 AM	C91053

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

Qualifiers:

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

Analytical Report
Lab Order **2209728**
Date Reported: **9/20/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-36
Project: Jones A LS 7 **Collection Date:** 9/14/2022 2:10:00 PM
Lab ID: 2209728-003 **Matrix:** MEOH (SOIL) **Received Date:** 9/15/2022 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	9/15/2022 11:16:17 AM	70196
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/15/2022 11:05:37 AM	70192
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/15/2022 11:05:37 AM	70192
Surr: DNOP	84.5	21-129		%Rec	1	9/15/2022 11:05:37 AM	70192
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	9/15/2022 9:50:10 AM	A91053
Surr: BFB	89.0	37.7-212		%Rec	1	9/15/2022 9:50:10 AM	A91053
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	9/15/2022 9:50:10 AM	C91053
Toluene	ND	0.038		mg/Kg	1	9/15/2022 9:50:10 AM	C91053
Ethylbenzene	ND	0.038		mg/Kg	1	9/15/2022 9:50:10 AM	C91053
Xylenes, Total	ND	0.076		mg/Kg	1	9/15/2022 9:50:10 AM	C91053
Surr: 4-Bromofluorobenzene	87.0	70-130		%Rec	1	9/15/2022 9:50:10 AM	C91053

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

Qualifiers:

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

Analytical Report
Lab Order **2209728**
Date Reported: **9/20/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-37
Project: Jones A LS 7 **Collection Date:** 9/14/2022 2:20:00 PM
Lab ID: 2209728-004 **Matrix:** MEOH (SOIL) **Received Date:** 9/15/2022 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	9/15/2022 11:28:42 AM	70196
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/15/2022 11:16:21 AM	70192
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/15/2022 11:16:21 AM	70192
Surr: DNOP	86.3	21-129		%Rec	1	9/15/2022 11:16:21 AM	70192
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	9/15/2022 10:13:41 AM	A91053
Surr: BFB	88.5	37.7-212		%Rec	1	9/15/2022 10:13:41 AM	A91053
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	9/15/2022 10:13:41 AM	C91053
Toluene	ND	0.037		mg/Kg	1	9/15/2022 10:13:41 AM	C91053
Ethylbenzene	ND	0.037		mg/Kg	1	9/15/2022 10:13:41 AM	C91053
Xylenes, Total	ND	0.074		mg/Kg	1	9/15/2022 10:13:41 AM	C91053
Surr: 4-Bromofluorobenzene	86.9	70-130		%Rec	1	9/15/2022 10:13:41 AM	C91053

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209728**

20-Sep-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **MB-70196** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **70196** RunNo: **91056**

Prep Date: **9/15/2022** Analysis Date: **9/15/2022** SeqNo: **3258074** Units: **mg/Kg**

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

Sample ID: **LCS-70196** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **70196** RunNo: **91056**

Prep Date: **9/15/2022** Analysis Date: **9/15/2022** SeqNo: **3258075** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.3	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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209728**

20-Sep-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **LCS-70160** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **70160** RunNo: **91028**
Prep Date: **9/13/2022** Analysis Date: **9/14/2022** SeqNo: **3255495** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.4		5.000		68.7	21	129			

Sample ID: **MB-70160** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **70160** RunNo: **91028**
Prep Date: **9/13/2022** Analysis Date: **9/14/2022** SeqNo: **3255498** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.5		10.00		85.5	21	129			

Sample ID: **2209728-001AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-34** Batch ID: **70192** RunNo: **91028**
Prep Date: **9/15/2022** Analysis Date: **9/15/2022** SeqNo: **3256960** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	14	47.35	0	79.4	36.1	154			
Surr: DNOP	3.3		4.735		68.8	21	129			

Sample ID: **2209728-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-34** Batch ID: **70192** RunNo: **91028**
Prep Date: **9/15/2022** Analysis Date: **9/15/2022** SeqNo: **3256961** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	15	49.85	0	90.2	36.1	154	17.8	33.9	
Surr: DNOP	3.4		4.985		68.7	21	129	0	0	

Sample ID: **LCS-70132** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **70132** RunNo: **91028**
Prep Date: **9/13/2022** Analysis Date: **9/15/2022** SeqNo: **3256966** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	2.8		5.000		55.6	21	129			

Sample ID: **LCS-70156** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **70156** RunNo: **91028**
Prep Date: **9/13/2022** Analysis Date: **9/15/2022** SeqNo: **3256969** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.2		5.000		84.0	21	129			

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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209728**

20-Sep-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **LCS-70192** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **70192** RunNo: **91028**

Prep Date: **9/15/2022** Analysis Date: **9/15/2022** SeqNo: **3256971** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	15	50.00	0	79.7	64.4	127			
Surr: DNOP	3.4		5.000		67.5	21	129			

Sample ID: **MB-70132** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **70132** RunNo: **91028**

Prep Date: **9/13/2022** Analysis Date: **9/15/2022** SeqNo: **3256972** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.1		10.00		70.7	21	129			

Sample ID: **MB-70156** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **70156** RunNo: **91028**

Prep Date: **9/13/2022** Analysis Date: **9/15/2022** SeqNo: **3256975** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.3		10.00		83.3	21	129			

Sample ID: **MB-70192** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **70192** RunNo: **91028**

Prep Date: **9/15/2022** Analysis Date: **9/15/2022** SeqNo: **3256977** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.4		10.00		84.2	21	129			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209728**

20-Sep-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **A91053** RunNo: **91053**
Prep Date: Analysis Date: **9/15/2022** SeqNo: **3257259** 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	37.7	212			

Sample ID: **2.5ug gro lcs** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **A91053** RunNo: **91053**
Prep Date: Analysis Date: **9/15/2022** SeqNo: **3257260** 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	94.9	72.3	137			
Surr: BFB	1800		1000		183	37.7	212			

Sample ID: **2209728-001ams** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-34** Batch ID: **A91053** RunNo: **91053**
Prep Date: Analysis Date: **9/15/2022** SeqNo: **3257261** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	150	20	101.2	41.82	102	70	130			
Surr: BFB	8800		4049		218	37.7	212			S

Sample ID: **2209728-001amsd** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-34** Batch ID: **A91053** RunNo: **91053**
Prep Date: Analysis Date: **9/15/2022** SeqNo: **3257262** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	140	20	101.2	41.82	102	70	130	0.195	20	
Surr: BFB	9200		4049		228	37.7	212	0	0	S

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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209728**

20-Sep-22

Client: ENSOLUM

Project: Jones A LS 7

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **C91053**	RunNo: **91053**
Prep Date:	Analysis Date: **9/15/2022**	SeqNo: **3257337** 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		88.4	70	130			

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **C91053**	RunNo: **91053**
Prep Date:	Analysis Date: **9/15/2022**	SeqNo: **3257338** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	87.9	80	120			
Toluene	0.91	0.050	1.000	0	90.7	80	120			
Ethylbenzene	0.90	0.050	1.000	0	89.8	80	120			
Xylenes, Total	2.7	0.10	3.000	0	89.6	80	120			
Surr: 4-Bromofluorobenzene	0.89		1.000		88.7	70	130			

Sample ID: **2209728-002ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-35**	Batch ID: **C91053**	RunNo: **91053**
Prep Date:	Analysis Date: **9/15/2022**	SeqNo: **3257340** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.61	0.018	0.7067	0	86.9	68.8	120			
Toluene	0.64	0.035	0.7067	0.009258	89.2	73.6	124			
Ethylbenzene	0.64	0.035	0.7067	0	90.2	72.7	129			
Xylenes, Total	1.9	0.071	2.120	0.02664	88.8	75.7	126			
Surr: 4-Bromofluorobenzene	0.62		0.7067		88.3	70	130			

Sample ID: **2209728-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-35**	Batch ID: **C91053**	RunNo: **91053**
Prep Date:	Analysis Date: **9/15/2022**	SeqNo: **3257341** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.62	0.018	0.7067	0	88.1	68.8	120	1.37	20	
Toluene	0.65	0.035	0.7067	0.009258	90.1	73.6	124	0.923	20	
Ethylbenzene	0.65	0.035	0.7067	0	91.5	72.7	129	1.46	20	
Xylenes, Total	1.9	0.071	2.120	0.02664	89.6	75.7	126	0.954	20	
Surr: 4-Bromofluorobenzene	0.63		0.7067		88.7	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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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: 2209728 | RcptNo: 1

Received By: Juan Rojas 9/15/2022 7:35:00 AM

Completed By: Sean Livingston 9/15/2022 8:03:39 AM

Reviewed By: 9.15.22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° 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 9/15/22

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.9	Good				

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 100% Same Day

Project Name: Jones A LS #7

Project #: See Notes

Project Manager: K. Summers

Sampler:

On Ice: ~~☐ Yes~~ ☐ No

# of Coolers: 1

Cooler Temp(including CF): 3.9-0=3.9 (°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. 2209728	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)
9/14/22	~~13:50~~ 13:45	S	S-34	4oz jar	Cool	001	X	X					X			
9/14/22	14:00	S	S-35			002	X	X					X			
9/14/22	14:10	S	S-36			003	X	X					X			
9/14/22	14:20	S	S-37			004	X	X					X			

Date: 9/14/22 Time: 1544 Relinquished by:

Received by: Via: Date 9/14/22 Time 1544

Date: 9/15/22 Time: 1810 Relinquished by:

Received by: Via: Date Time

Remarks: PM Tom Long
Pay Key RB21200
Same Day

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

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

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

CONDITIONS

Action 161898

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 161898
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	12/9/2022