

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

State of New Mexico  
Energy Minerals and Natural  
Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party: <b>Enterprise Field Services, LLC</b>	OGRID: <b>241602</b>
Contact Name: <b>Thomas Long</b>	Contact Telephone: <b>505-599-2286</b>
Contact email: <b>tjlong@eprod.com</b>	<b>Incident # (assigned by OCD): NAPP2105422276</b>
Contact mailing address: <b>614 Reilly Ave, Farmington, NM 87401</b>	

### Location of Release Source

Latitude **36.949568** Longitude **-107.906979** (NAD 83 in decimal degrees to 5 decimal places)

Site Name <b>Cedar Hill Compressor Station</b>	Site Type <b>Natural Gas Compressor Station</b>
Date Release Discovered: : <b>02/11/2021</b>	Serial Number (if applicable): <b>N/A</b>

Unit Letter	Section	Township	Range	County
<b>N</b>	<b>29</b>	<b>32N</b>	<b>10W</b>	<b>San Juan</b>

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: **Kennon Allen Decker**)

### Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) <b>5 Barrels</b>	Volume Recovered (bbls) <b>None</b>
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> Condensate	Volume Released (bbls):	Volume Recovered (bbls):
<input type="checkbox"/> Natural Gas	Volume Released (Mcf):	Volume Recovered (Mcf):
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

**Cause of Release:** On February 11, 2021, Enterprise had a release of produced water and lubrication oil at the Cedar Hill Compressor Station. The release was a result of the Emergency Shutdown (ESD) event. The released fluids were ejected from the facility ESD vent. The fluids impacted private property to the north and east. No residences were affected. An area of approximately 100 feet long by 50 feet wide was impacted by the released fluids. No washes/waterways were affected. Remediation activities were completed on March 23, 2021. The final excavation dimensions measured approximately 125 feet long by 100 feet wide by one foot deep. Approximately 68 cubic yards of hydrocarbon impacted soil was excavated and transported to a New Mexico Oil Conservation Division (NMOCD) approved land farm. A third party closure report is included with this "Final." C-141.

Incident ID	
District RP	
Facility ID	
Application ID	

## Closure

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

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

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

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

Printed Name: Jon E. Fields

Title: Director, Environmental

Signature: 

Date: 9/28/2021

email: jefields@eprod.com

Telephone: (713) 381-6684

### OCD Only

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

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

Closure Approved by: Nelson Velez

Date: 05/10/2022

Printed Name: Nelson Velez

Title: Environmental Specialist – Adv



## CLOSURE REPORT

Property:

**Cedar Hill Compressor Station (2/11/21)  
SW ¼, S29 T32N R10W  
San Juan County, New Mexico**

**NM EMNRD OCD Incident ID No. NAPP2105422276**

May 14, 2021  
Ensolum Project No. 05A1226138

Prepared for:

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

Prepared by:

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

---

Ranee DeeChilly  
Environmental Scientist

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

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Kyle Summers  
Senior Project Manager

## Table of Contents

<b>1.0</b>	<b>INTRODUCTION.....</b>	<b>1</b>
1.1	Site Description & Background.....	1
1.2	Project Objective.....	1
<b>2.0</b>	<b>CLOSURE CRITERIA.....</b>	<b>1</b>
<b>3.0</b>	<b>SOIL REMEDIATION ACTIVITIES.....</b>	<b>3</b>
<b>4.0</b>	<b>SOIL SAMPLING PROGRAM.....</b>	<b>3</b>
<b>5.0</b>	<b>LABORATORY ANALYTICAL METHODS.....</b>	<b>5</b>
<b>6.0</b>	<b>DATA EVALUATION.....</b>	<b>5</b>
6.1	Waste Characterization Sample.....	5
6.2	Evaluation and Excavation Samples.....	5
<b>7.0</b>	<b>RECLAMATION AND REVEGETATION.....</b>	<b>6</b>
<b>8.0</b>	<b>FINDINGS AND RECOMMENDATION.....</b>	<b>6</b>
<b>9.0</b>	<b>STANDARDS OF CARE, LIMITATIONS, AND RELIANCE.....</b>	<b>6</b>
9.1	Standard of Care.....	6
9.2	Limitations.....	7
9.3	Reliance.....	7

### LIST OF APPENDICES

<b>Appendix A:</b>	<b>Figures</b>
	Figure 1 Topographic Map
	Figure 2 Site Vicinity Map
	Figure 3 Site Map with Soil Analytical Results
<b>Appendix B:</b>	<b>Siting Figures and Documentation</b>
	Figure A 1.0 Mile Radius Water Well Map
	Figure B Cathodic Protection Well Recorded Depth to Water
	Figure C 300 Foot Radius Watercourse and Drainage Identification
	Figure D 300 Foot Radius Occupied Structure Identification
	Figure E Water Well and Natural Spring Location
	Figure F Wetlands
	Figure G Mines, Mills, and Quarries
	Figure H 100-Year Flood Plain Map
<b>Appendix C:</b>	<b>Executed C-138 Solid Waste Acceptance Form</b>
<b>Appendix D:</b>	<b>Photographic Documentation</b>
<b>Appendix E:</b>	<b>Regulatory Correspondence</b>
<b>Appendix F:</b>	<b>Tables</b>
	Table 1 – Soil Analytical Summary - Excavation
	Table 2A – Waste Characterization Sample – Laboratory Results
	Table 2B – Waste Characterization Sample – Rule of 20 Projection
<b>Appendix G:</b>	<b>Laboratory Data Sheets &amp; Chain of Custody Documentation</b>





## CLOSURE REPORT

**Cedar Hill Compressor Station (2/11/21)**  
**SW ¼, S29 T32N R10W**  
**San Juan County, New Mexico**

**Ensolum Project No. 05A1226138**

### 1.0 INTRODUCTION

#### 1.1 Site Description & Background

<b>Operator:</b>	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
<b>Site Name:</b>	Cedar Hill Compressor Station (2/11/21) (Site)
<b>Incident ID</b>	NAPP2105422276
<b>Location:</b>	36.949568° North, 107.906979° West Southwest (NW) ¼ of Section 29, Township 32 North, Range 10 West San Juan County, New Mexico
<b>Property:</b>	Private
<b>Regulatory:</b>	New Mexico (NM) Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On February 11, 2021, a release of produced water and lubrication seal oil occurred from a blowdown vent stack during an emergency shutdown event at the Site. The release resulted in an overspray area surrounding the vent stack and outside the facility fence. Soils were sampled and analyzed during February and March 2021 to delineate the extent of soil impact at the Site. On March 22, 2021, Enterprise initiated activities to remediate petroleum hydrocarbon impact.

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

#### 1.2 Project Objective

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

### 2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the NM EMNRD OCD. To address activities related to oil and gas releases, the NM EMNRD OCD references 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. Ensolum, LLC (Ensolum) utilized information provided by Enterprise, the general site characteristics, and information available from the NM Office of the State Engineer (OSE) and the NM EMNRD OCD imaging database to determine the appropriate closure criteria for the Site. Supporting figures and documentation associated with the following bullets are provided in **Appendix B**.

- The OSE tracks the usage and assignment of water rights and water well installations and records this information in the Water Rights Reporting System (WRRS) database. Water wells and other

Closure Report  
Enterprise Field Services, LLC  
Cedar Hill Compressor Station (2/11/21)  
May 14, 2021



points of diversion (PODs) are each assigned POD numbers in the database (which is searchable and includes an interactive map). One (1) POD (SJ-02662) was identified within one (1) mile of the Site. The depth to water for SJ-02662 was not recorded, but the total depth of the well is listed at 50 feet below grade surface (bgs). POD SJ-02662 is located at an elevation that is 150 feet lower than the Site (near the Animas River). The average depth to water for additional PODs located over one (1) mile in adjacent Public Land Survey System (PLSS) sections is approximately 41 feet bgs (**Figure A, Appendix B**).

- Three (3) cathodic wells were identified in the adjacent PLSS section of the Site in the NM EMNRD OCD imaging database. The record for the closest cathodic protection well (Scott Com #291 (Unit N, Sec 29, T32N, R10W)) indicates a depth to water of approximately 110 feet bgs. This cathodic protection well is located approximately 0.2 miles northwest of the Site and at a higher elevation (6,081 feet, based on the well record) than the Site (5,980 feet). The record for the cathodic protection well located near the Scott #1A and #20 (Unit NW, Sec 29, T32N, R10W) well locations indicates a depth to water of approximately 110 feet bgs. This cathodic protection well is located approximately 0.7 miles northwest of the Site and at a slightly higher elevation (5,988 feet, based on the well record) than the Site. The record for the cathodic protection well located near the Scott #1 and #100 (Unit H, Sec 29, T32N, R10W) well locations indicates a depth to water of approximately 60 feet bgs. This cathodic protection well is located approximately 0.8 miles northeast of the Site and at a higher elevation (6,179 feet, based on the well record) than the Site (**Figure B, Appendix B**).
- The Site is located within 300 feet of a NM EMNRD OCD-defined significant watercourse. An ephemeral wash is located approximately 10 feet east of the site (**Figure C, Appendix B**).
- The Site is not located within 200 feet of a lakebed, sinkhole, or playa lake.
- The Site is not located within 300 feet of a permanent residence, school, hospital, institution, or church (**Figure D, Appendix B**).
- No springs, or private domestic fresh water wells used by less than five (5) households for domestic or stock watering purposes were identified within 500 feet of the Site (**Figure E, Appendix B**).
- No fresh water wells or springs were identified within 1,000 feet of the Site (**Figure E, Appendix B**).
- The Site is not located within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to New Mexico Statutes Annotated (NMSA) 1978, Section 3-27-3.
- Based on information identified in the United States (US) Fish & Wildlife Service National Wetlands Inventory Wetlands Mapper, the Site is not located within 300 feet of a wetland (**Figure F, Appendix B**).
- Based on information identified on the NM Mining and Minerals Division's Geographic Information System (GIS) Maps and Mine Data database, the Site is not located within an area overlying a subsurface mine (**Figure G, Appendix B**).
- The Site is not located within an unstable area.
- Based on information identified in the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) geospatial database, the Site is not located within a 100-year floodplain (**Figure H, Appendix B**).

Closure Report  
Enterprise Field Services, LLC  
Cedar Hill Compressor Station (2/11/21)  
May 14, 2021



Based on the identified siting criteria, cleanup goals for soils remaining in place at the Site include:

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

\*Constituents are measured in milligrams per kilogram (mg/kg)

<sup>1</sup> – Total Petroleum Hydrocarbon (TPH). Gasoline Range Organics (GRO). Diesel Range Organics (DRO). Motor Oil/Lube Oil Range Organics (MRO).

<sup>2</sup> – Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX).

### 3.0 SOIL REMEDIATION ACTIVITIES

On March 22, 2021, Enterprise initiated activities to remediate petroleum hydrocarbon impact resulting from the blowdown event. During the remediation and corrective action activities, OFT Construction, Inc (OFT) provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The entire sampling area measured approximately 125 feet long and 100 feet wide at the maximum extents. The final scraped/excavated area measured approximately 80 feet long and 40 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 12 inches bgs.

The lithology encountered during the completion of remediation activities consisted of unconsolidated silty sand underlain by sandstone.

Approximately 68 cubic yards of petroleum hydrocarbon affected soils was transported to the Industrial Ecosystems, Inc (IEI) landfarm for disposal/remediation. The executed C-138 solid waste acceptance form is provided in **Appendix C**. The affected soils from the Site were analytically evaluated for proper disposal prior to transport due to the anticipated presence of lubricating oil associated with the vent stack. The waste characterization sample (OS-1) data is provided in **Table 2A** of **Appendix F**. The excavation was backfilled with imported fill and then contoured to the surrounding grade.

The map in **Figure 3 (Appendix A)** identifies the approximate soil sample locations and depicts the approximate dimensions of the excavated/scraped area with respect to Site structures and appurtenances. Photographic documentation of the field activities is included in **Appendix D**.

### 4.0 SOIL SAMPLING PROGRAM

Ensolum field screened soil samples from the undisturbed soils and later from the excavation utilizing a calibrated Dextil PetroFLAG<sup>®</sup> hydrocarbon analyzer system and a photoionization detector (PID) fitted with a 10.6 eV lamp.

Ensolum's soil sampling program included the collection of 28 composite soil samples (OS-1 through OS-21, OS-1R1, OS-1R2W, OS-1R2E, OS-4R1, OS-9R1, OS-10R1, and OS-13R1) for laboratory analysis. The composite samples were comprised of five (5) aliquots each. The NM EMNRD OCD provided approval to increase the sampling interval from 200 square (ft<sup>2</sup>) to 400 ft<sup>2</sup>. A clean shovel was utilized to obtain fresh aliquots from each area of the excavation. Regulatory correspondence is provided in **Appendix E**.

Closure Report  
Enterprise Field Services, LLC  
Cedar Hill Compressor Station (2/11/21)  
May 14, 2021



### **First Sampling Event**

On February 25, 2021, eight (8) soil samples (OS-1 through OS-8) were collected from the ground surface to evaluate potential COC concentrations and the lateral extent of potential impact. In addition, OS-1 was analyzed for Resource Conservation and Recovery Act metals (RCRA-8) to allow proper disposal evaluation.

Analytical results for samples OS-1 and OS-4 indicated NM EMNRD OCD closure criteria exceedances for TPH.

### **Second Sampling Event**

On March 8, 2021, a second sampling event was performed at the Site. After the first sampling event determined that impact had indeed occurred, the NM EMNRD OCD was notified of the release and the second sampling event. No representative was present during sampling activities.

Composite soil samples OS-9 through OS-14 were collected from the ground surface to further delineate the lateral extent of soil impact.

Subsequent analytical results indicated TPH concentrations that exceeded the NM EMNRD OCD closure criteria for composite soil samples OS-9, OS-10, and OS-13.

### **Third Sampling Event**

On March 19, 2021, additional soil samples were collected to further delineate the lateral extent of soil impact. The New Mexico EMNRD OCD was notified of the sampling event although no representative was present during sampling activities.

Composite soil samples OS-15 through OS-21 were collected from the ground surface at the Site. In response to the data exceedances of samples OS-1, OS-4, OS-9, OS-10, and OS-13, the affected areas were scraped/excavated and the soil was transported to a NM EMNRD OCD-approved landfarm for disposal/remediation.

### **Fourth Sampling Event**

On March 23, 2021, a fourth sampling event was performed at the Site. The NM EMNRD OCD was notified of the sampling event although no representative was present during sampling activities.

Composite soil samples OS-1R1 (6"), OS-4R1 (6"), OS-9R1 (8), OS-10R1 (6"), and OS-13R1 (6") were collected from the scraped/excavated areas to replace composite soil samples OS-1, OS-4, OS-9, OS-10, and OS-13 that were removed by excavation. Subsequent soil analytical results indicated a TPH concentration that exceeded the NM EMNRD OCD closure criteria for sample OS-1R1. In response to the data exceedance, the sample area associated with OS-1R1 was further scraped/excavated and the soil was transported to a NM EMNRD OCD-approved landfarm for disposal/remediation.

### **Fifth Sampling Event**

On March 29, 2021, a fifth sampling event was performed at the Site. The NM EMNRD OCD was notified of the sampling event although no representative was present during sampling activities.

Composite soil samples OS-1R2E (0"-12") and OS-1R2W (0"-12") were collected from the scraped/excavated areas to replace composite soil sample OS-1R1 that were removed by excavation.

All samples were placed in laboratory prepared containers. 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.

Closure Report  
Enterprise Field Services, LLC  
Cedar Hill Compressor Station (2/11/21)  
May 14, 2021



## 5.0 LABORATORY ANALYTICAL METHODS

The composite soil samples were analyzed for BTEX using Environmental Protection Agency (EPA) SW-846 Method 8021/8260; TPH GRO/DRO/MRO using EPA SW-846 Method 8015; and chlorides using EPA Method 300.0. Soil Sample OS-1 was also analyzed for RCRA-8.

The laboratory analytical results for the waste characterization and excavation samples are summarized in **Table 1A**, **Table 2A**, and **Table 2B** in **Appendix F**. The laboratory data sheets and executed chain-of-custody forms are provided in **Appendix G**.

## 6.0 DATA EVALUATION

### 6.1 Waste Characterization Sample

Ensolum compared the benzene and RCRA 8 metals analytical results or laboratory practical quantitation limits (PQLs) / reporting limits (RLs) associated with composite soil sample OS-1 (waste characterization sample) to the applicable NM EMNRD OCD closure criteria and the Toxicity Characteristic Leaching Procedure (TCLP) regulatory limits.

#### **Benzene, BTEX, and TPH – New Mexico EMNRD OCD Closure Criteria**

- The laboratory analytical results for the waste characterization soil sample (OS-1) indicate benzene is not present in concentrations greater than the laboratory PQLs/RLs.
- The laboratory analytical results for the waste characterization soil sample (OS-1) indicate total BTEX is not present in concentrations greater than the laboratory PQLs/RLs.
- The laboratory analytical results for the waste characterization soil sample (OS-1) indicate a combined TPH GRO/DRO/MRO concentration of 150 mg/kg.

#### **Benzene and RCRA 8 Metals – Toxicity**

Although the waste characterization soil sample (OS-1) was not analyzed utilizing the TCLP protocol, the total concentration data can still be utilized to determine if there is a potential for a TCLP permissible level exceedance. For 100% physically solid wastes, the maximum leachate concentration is 1/20 of the total concentration in the waste (based on the extraction method for a TCLP analysis). Therefore, if this value (total concentration divided by 20) is less than the regulatory TCLP threshold, a TCLP analysis should not be necessary<sup>1</sup> (this is often referred to as the “Rule of 20”). Sample OS-1 did not exceed the Rule of 20 for any of the analyzed RCRA COCs. The Rule of 20 projected equivalents are provided in **Table 2B (Appendix F)**.

### 6.2 Evaluation and Excavation Samples

Ensolum compared the BTEX, TPH, and chloride laboratory analytical results associated with the composite soil samples (OS-1R2W, OS-1R2E, OS-2, OS-3, OS-4R1, OS-5 through OS-8, OS-9R1, OS-10R1, OS-11, OS-12, OS-13R1, OS-14 through OS-21) to the applicable NM EMNRD OCD closure criteria. In the event that the laboratory did not quantify a result for BTEX or chloride, Ensolum compared the laboratory supplied PQLs/RLs to the New Mexico EMNRD OCD closure criteria. Due to the high PQLs/RLs associated with the TPH ranges when using EPA SW-846 Method #8015, Ensolum only compared the quantified results to the New Mexico EMNRD OCD closure criteria. Soils associated with soil samples OS-

<sup>1</sup> Federal Register – [60 FR 66389, December 21, 1995]

Closure Report  
Enterprise Field Services, LLC  
Cedar Hill Compressor Station (2/11/21)  
May 14, 2021



1, OS-1R1, OS-4, OS-9, OS-10, and OS-13 were removed from the Site and transported to the landfarm for disposal/remediation and are not included in the following discussion.

- The laboratory analytical results for the composite soil samples collected from soils remaining at the Site indicate that benzene is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable NM EMNRD OCD closure criteria of 10 mg/kg.
- The laboratory analytical results for the composite soil samples collected at the Site indicate that total BTEX is not present at 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 OS-2, OS-6, OS-12, OS-14, OS-18, and OS-13R1 indicate total combined TPH GRO/DRO/MRO concentrations ranging from 17 mg/kg (OS-14) to 91 mg/kg (OS-2), which are less than the applicable NM EMNRD OCD closure criteria of 100 mg/kg. The laboratory analytical results for the other composite soil samples collected from soils remaining at the Site indicate that total 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.
- The laboratory analytical results for the composite soil samples collected from soils remaining at the Site indicate chloride is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable NM EMNRD OCD closure criteria of 600 mg/kg for chlorides.

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

## 7.0 RECLAMATION AND REVEGETATION

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

## 8.0 FINDINGS AND RECOMMENDATION

- Twenty-eight (28) composite soil samples were collected from the Site. Based on laboratory analytical results, the soils remaining in place at the Site do not exhibit COC concentrations above the applicable New Mexico EMNRD OCD closure criteria.
- Approximately 68 cubic yards of petroleum hydrocarbon affected soils was transported to the IEI landfarm for disposal/remediation. The excavation was backfilled using imported fill and was contoured to the surrounding grade.

**Based on field observations and laboratory analytical results, no additional 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



Closure Report  
Enterprise Field Services, LLC  
Cedar Hill Compressor Station (2/11/21)  
May 14, 2021



work of third parties supplying information used in the report (e.g., laboratories, regulatory agencies, or other third parties).

## 9.2 Limitations

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

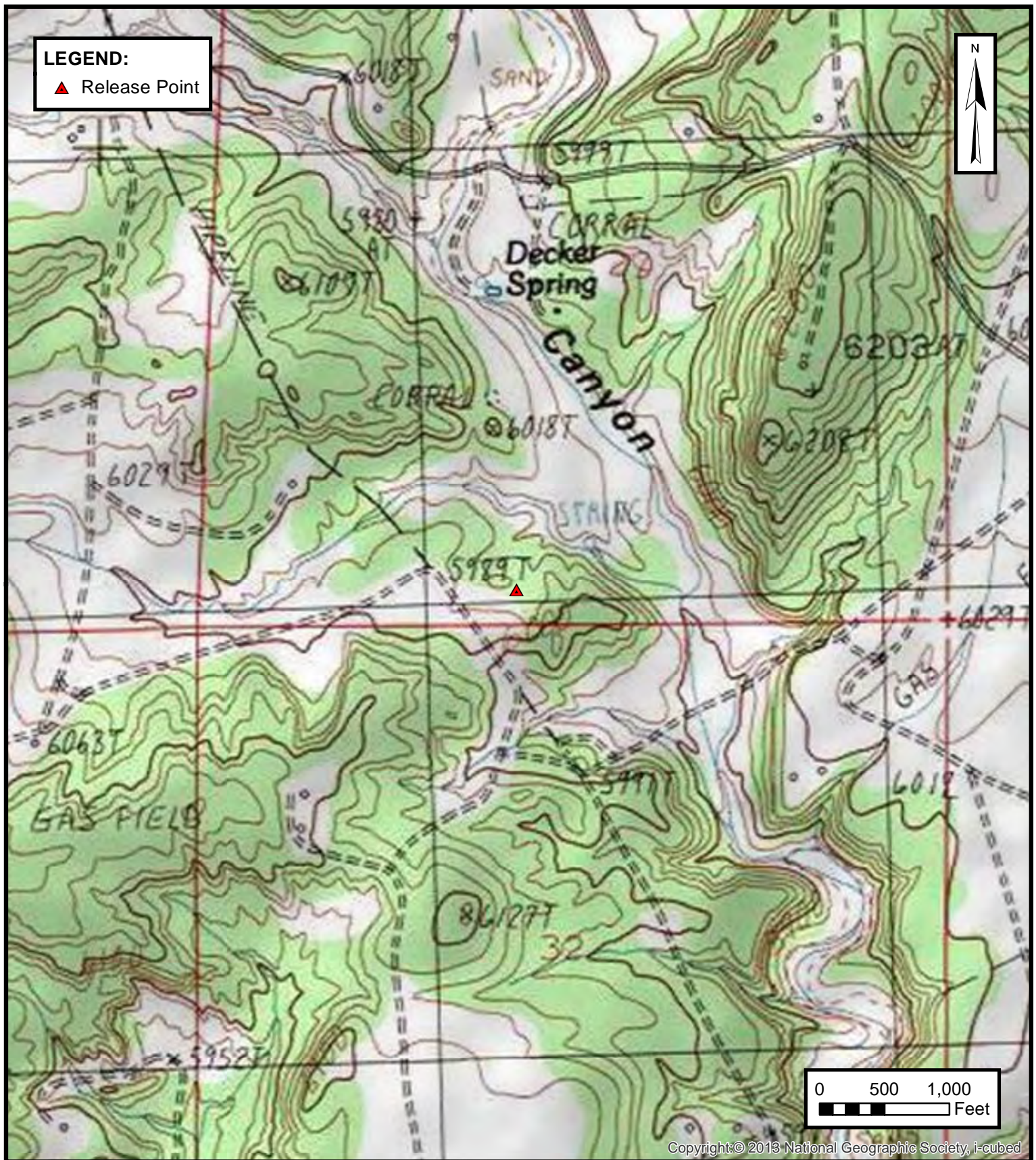
## 9.3 Reliance

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



## APPENDIX A

### Figures



**ENSOLUM**  
 Environmental & Hydrogeologic Consultants

### TOPOGRAPHIC MAP

ENTERPRISE FIELD SERVICES, LLC  
 CEDAR HILL COMPRESSOR STATION (2/11/21)  
 SW ¼, S29 T32N R10W, San Juan County, New Mexico  
 36.949568° N, 107.906979° W

PROJECT NUMBER: 05A1226138

FIGURE

1





**SITE VICINITY MAP**

ENTERPRISE FIELD SERVICES, LLC  
CEDAR HILL COMPRESSOR STATION (2/11/21)  
SW ¼, S29 T32N R10W, San Juan County, New Mexico  
36.949568° N, 107.906979° W

PROJECT NUMBER: 05A1226138

**FIGURE**  
**2**





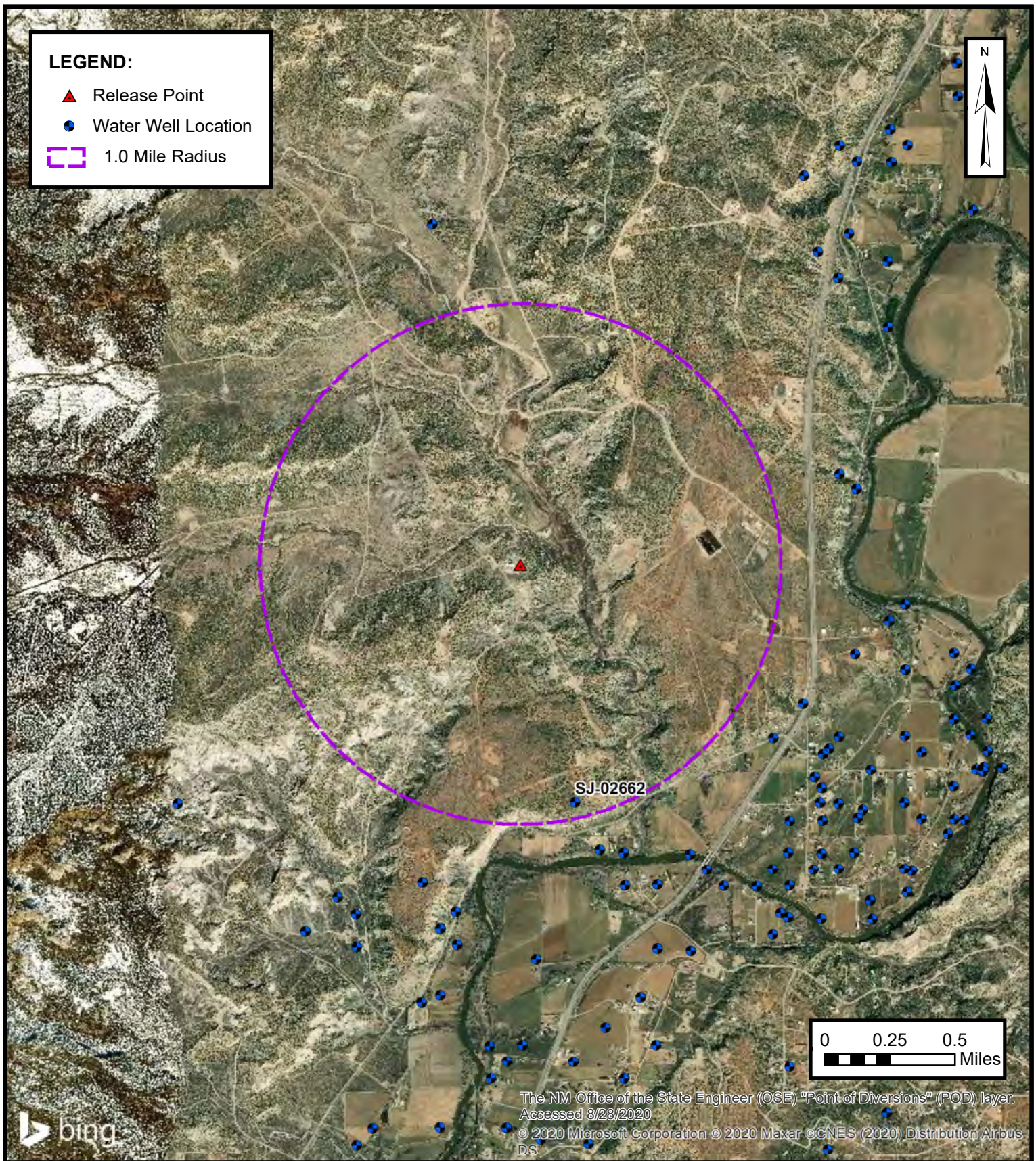


## APPENDIX B

### Siting Figures and Documentation

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**ENSOLUM**  
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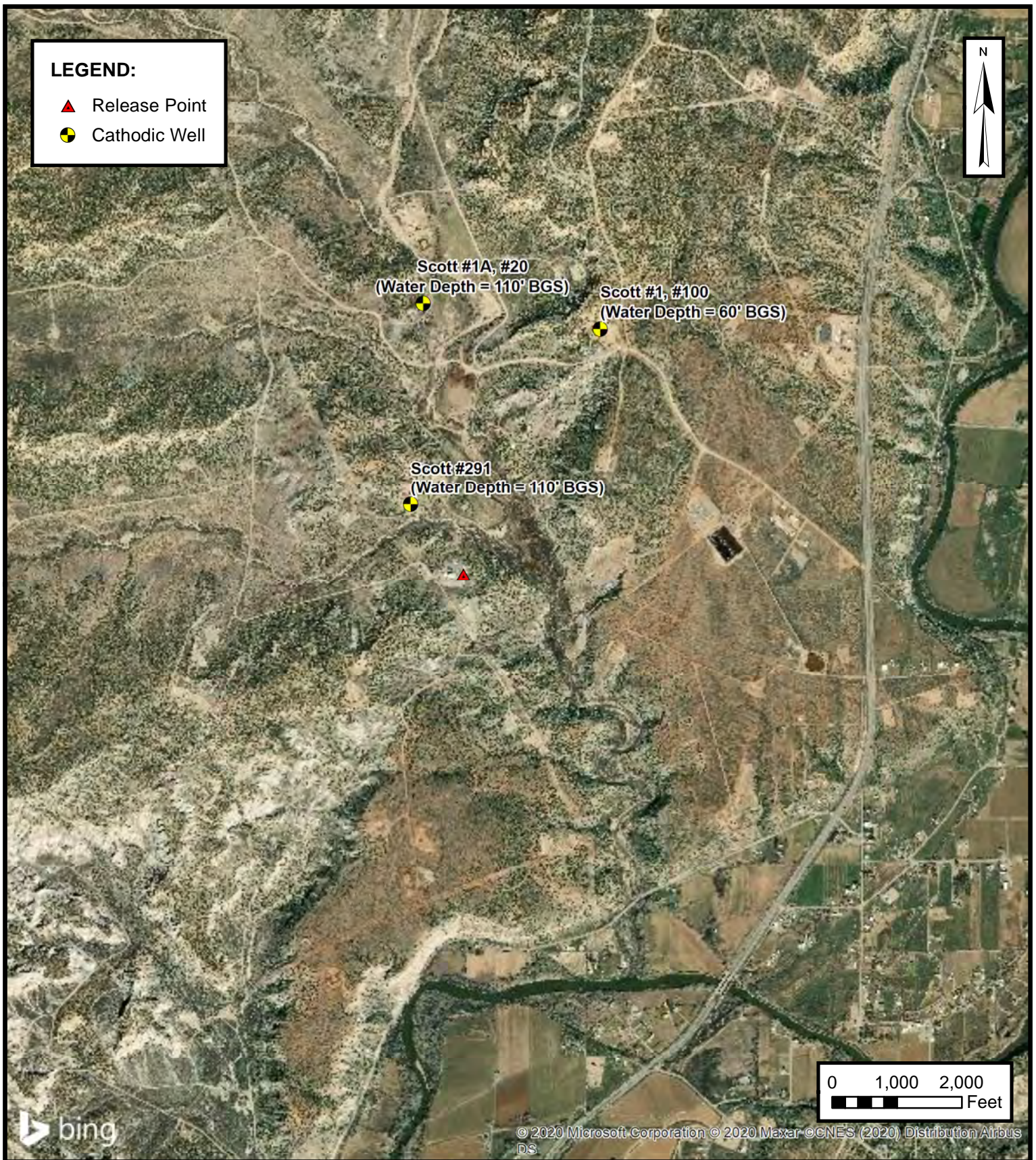
**1.0 MILE RADIUS WATER WELL MAP**

ENTERPRISE FIELD SERVICES, LLC  
 CEDAR HILL COMPRESSOR STATION (2/11/21)  
 SW ¼, S29 T32N R10W, San Juan County, New Mexico  
 36.949568° N, 107.906979° W

PROJECT NUMBER: 05A1226138

**FIGURE**  
**A**





**CATHODIC PROTECTION WELL RECORDED  
DEPTH TO WATER**

ENTERPRISE FIELD SERVICES, LLC  
CEDAR HILL COMPRESSOR STATION (2/11/21)  
SW ¼, S29 T32N R10W, San Juan County, New Mexico  
36.949568° N, 107.906979° W

PROJECT NUMBER: 05A1226138

**FIGURE  
B**





**300 FOOT RADIUS  
WATERCOURSE AND DRAINAGE IDENTIFICATION**

ENTERPRISE FIELD SERVICES, LLC  
CEDAR HILL COMPRESSOR STATION (2/11/21)  
SW ¼, S29 T32N R10W, San Juan County, New Mexico  
36.949568° N, 107.906979° W

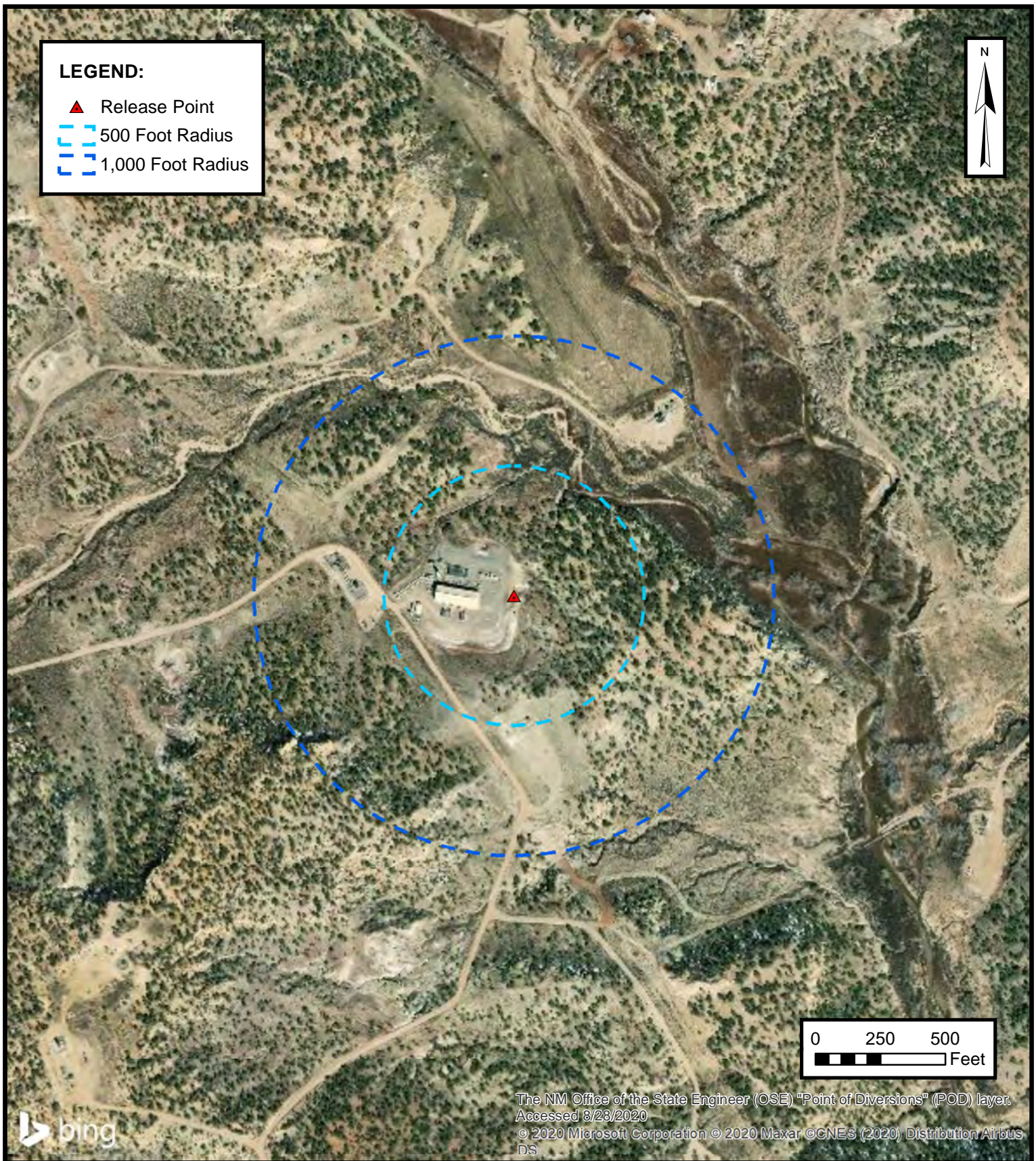
PROJECT NUMBER: 05A1226138

**FIGURE  
C**









**ENSOLUM**  
 Environmental & Hydrogeologic Consultants

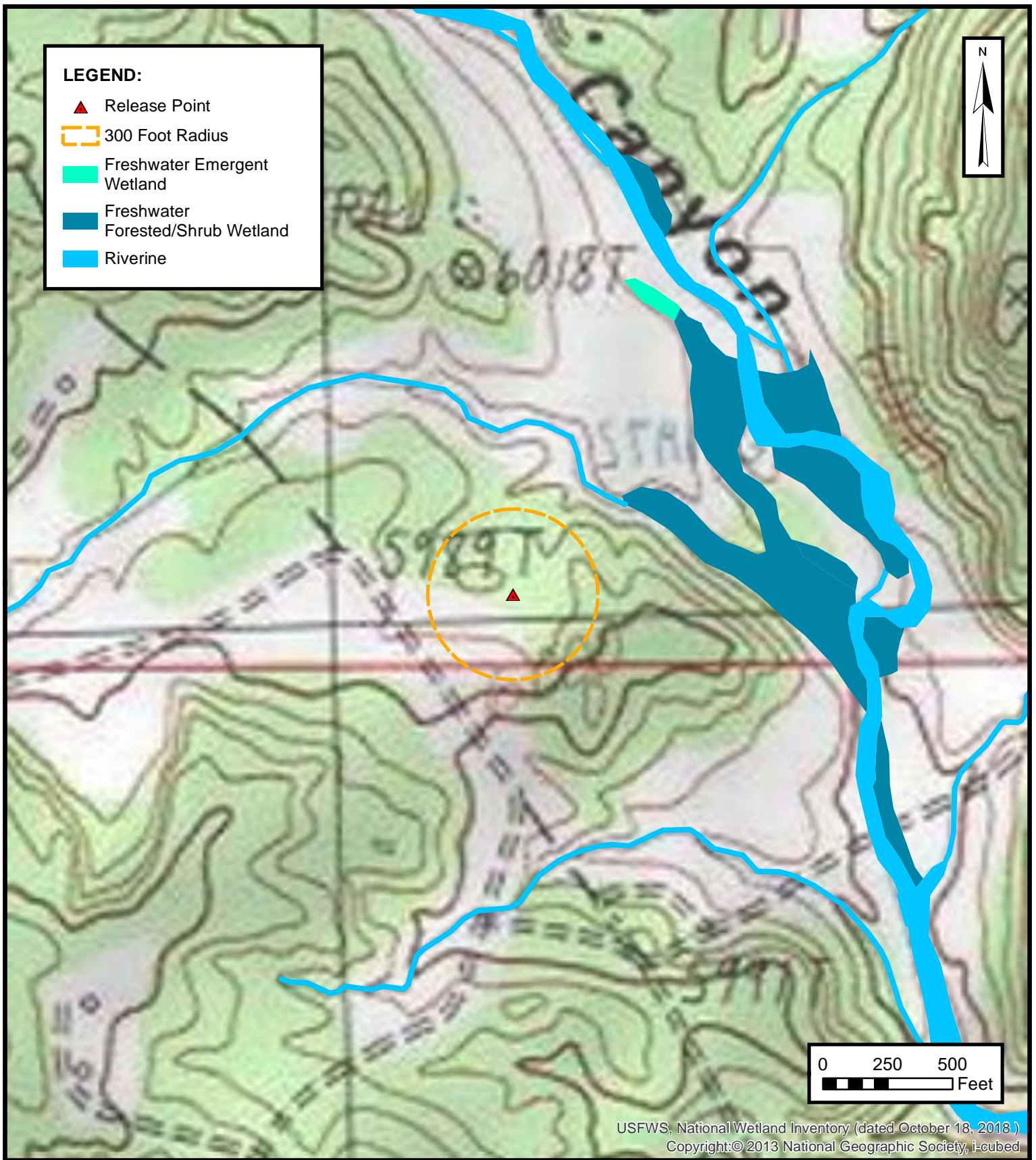
### WATER WELL AND NATURAL SPRING LOCATION

ENTERPRISE FIELD SERVICES, LLC  
 CEDAR HILL COMPRESSOR STATION (2/11/21)  
 SW ¼, S29 T32N R10W, San Juan County, New Mexico  
 36.949568° N, 107.906979° W

PROJECT NUMBER: 05A1226138

**FIGURE**  
**E**





**ENSOLUM**  
Environmental & Hydrogeologic Consultants

#### WETLANDS

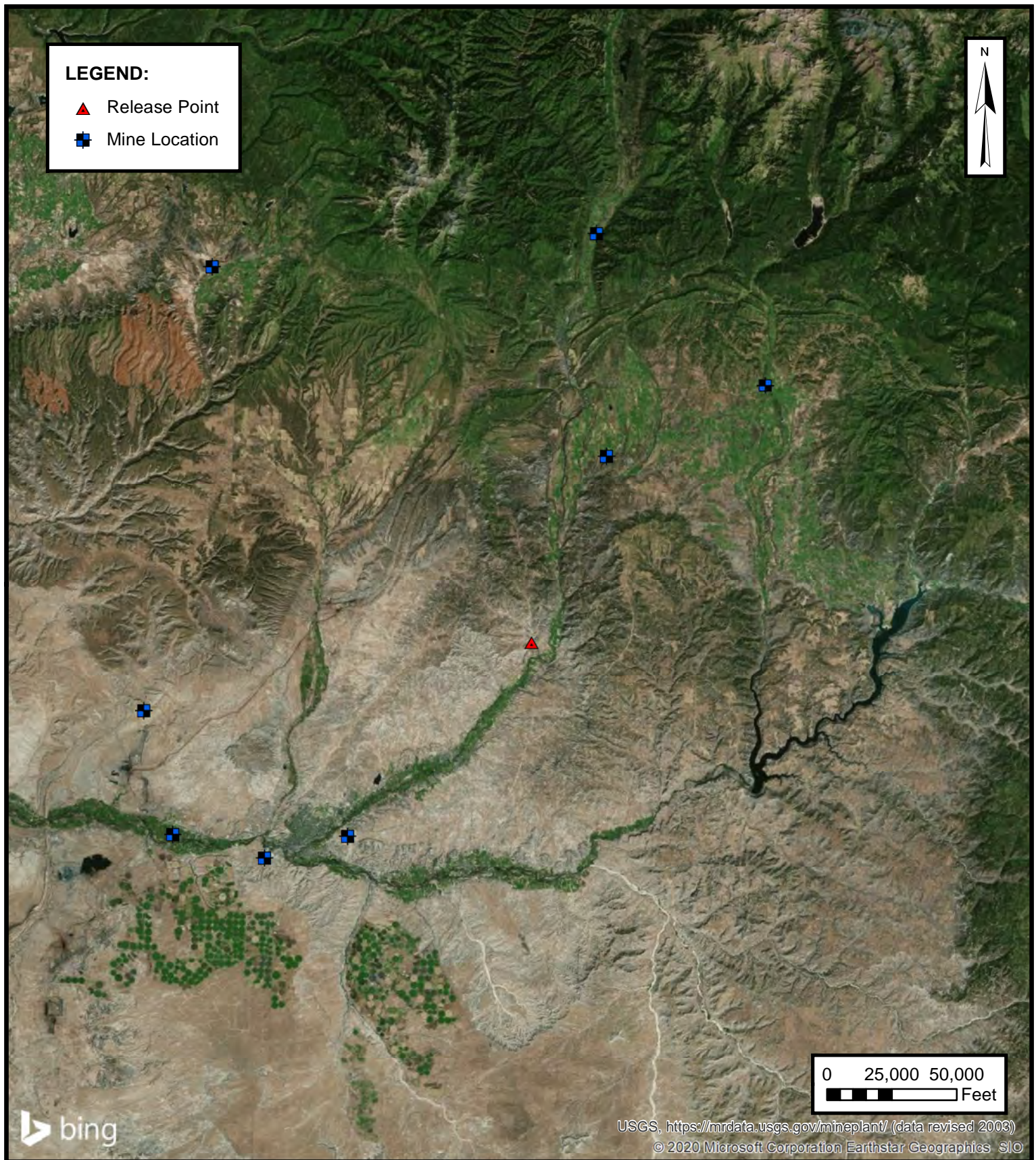
ENTERPRISE FIELD SERVICES, LLC  
CEDAR HILL COMPRESSOR STATION (2/11/21)  
SW ¼, S29 T32N R10W, San Juan County, New Mexico  
36.949568° N, 107.906979° W

PROJECT NUMBER: 05A1226138

FIGURE

F



**ENSOLUM**

Environmental &amp; Hydrogeologic Consultants

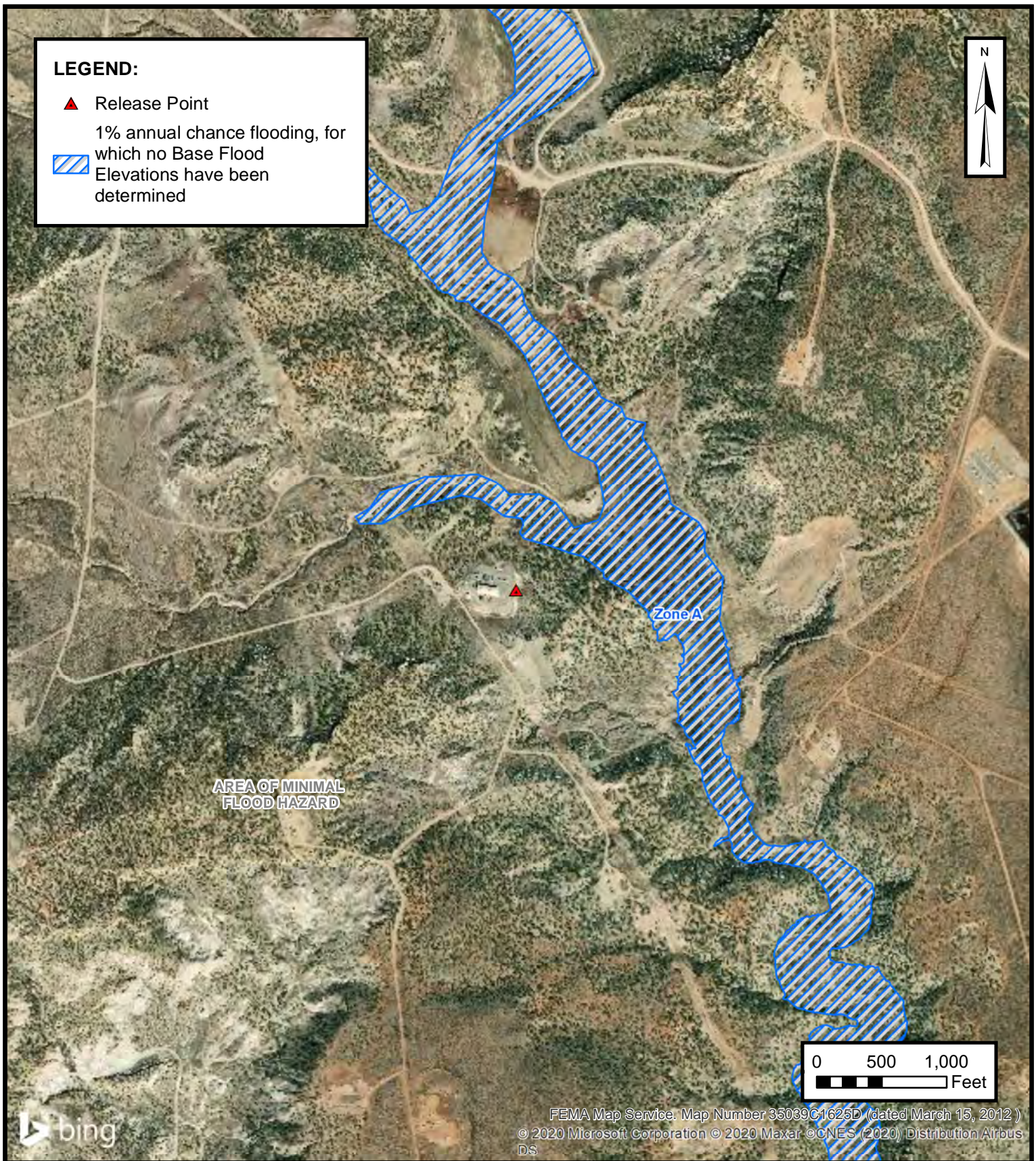
**MINES, MILLS AND QUARRIES**

ENTERPRISE FIELD SERVICES, LLC  
CEDAR HILL COMPRESSOR STATION (2/11/21)  
SW ¼, S29 T32N R10W, San Juan County, New Mexico  
36.949568° N, 107.906979° W

PROJECT NUMBER: 05A1226138

**FIGURE****G**





**ENSOLUM**  
 Environmental & Hydrogeologic Consultants

### 100-YEAR FLOOD PLAIN MAP

ENTERPRISE FIELD SERVICES, LLC  
 CEDAR HILL COMPRESSOR STATION (2/11/21)  
 SW ¼, S29 T32N R10W, San Juan County, New Mexico  
 36.949568° N, 107.906979° W

PROJECT NUMBER: 05A1226138

**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-Code	basin	County	Q Q Q						X	Y	Depth Well	Depth Water	Water Column	
				64	16	4	Sec	Tws	Rng						
<a href="#">SJ 00153</a>	SJAR	SJ		1	4	28	32N	10W	243109	4093718*		23	14	9	
<a href="#">SJ 00231</a>	SJAR	SJ			4	33	32N	10W	243244	4091907*		50	27	23	
<a href="#">SJ 00323</a>	SJAR	SJ				33	32N	10W	242843	4092320*		25	15	10	
<a href="#">SJ 00446</a>	SJAR	SJ		4	3	2	21	32N	10W	243272	4095620*		76	60	16
<a href="#">SJ 00489</a>	SJAR	SJ		1	4	4	21	32N	10W	243441	4095005*		65	30	35
<a href="#">SJ 00860</a>	SJAR	SJ			2	4	33	32N	10W	243459	4092105*		70	28	42
<a href="#">SJ 01110</a>	SJAR	SJ		4	2	4	33	32N	10W	243558	4092004*		60	20	40
<a href="#">SJ 01222</a>	SJAR	SJ			1	4	33	32N	10W	243057	4092112*		41	34	7
<a href="#">SJ 01346</a>	SJAR	SJ			1	4	33	32N	10W	243057	4092112*		70	40	30
<a href="#">SJ 01356</a>	SJAR	SJ			3	3	31	32N	10W	239013	4091829*		65	50	15
<a href="#">SJ 01435</a>	SJAR	SJ			3	4	21	32N	10W	243137	4094912*		70	40	30
<a href="#">SJ 01512</a>	SJAR	SJ			3	2	21	32N	10W	243173	4095721*		77	67	10
<a href="#">SJ 01546</a>	SJAR	SJ		3	2	2	33	32N	10W	243386	4092808*		230	160	70
<a href="#">SJ 01577</a>	SJAR	SJ			3	4	33	32N	10W	243043	4091706*		44	20	24
<a href="#">SJ 01897</a>	SJAR	SJ			4	2	33	32N	10W	243473	4092512*		54	25	29
<a href="#">SJ 02144</a>	SJAR	SJ					21	32N	10W	242948	4095545*		87	62	25
<a href="#">SJ 02381</a>	SJAR	SJ		3	4	2	21	32N	10W	243482	4095610*		65		
<a href="#">SJ 02733</a>	SJAR	SJ		3	1	4	33	32N	10W	242956	4092011*		28	16	12
<a href="#">SJ 02789</a>	SJAR	SJ		4	4	4	33	32N	10W	243544	4091598*		31	18	13
<a href="#">SJ 03429</a>	SJAR	SJ		3	1	3	20	32N	10W	240675	4095316*		103	54	49
<a href="#">SJ 03483</a>	SJAR	SJ		1	4	2	21	32N	10W	243482	4095810*		90		
<a href="#">SJ 03495</a>	SJAR	SJ		3	3	4	33	32N	10W	242942	4091605*		40	6	34
<a href="#">SJ 03568</a>	SJAR	SJ		3	3	4	33	32N	10W	242942	4091605*		80	8	72
<a href="#">SJ 03778 POD1</a>	SJAR	SJ		4	3	4	33	32N	10W	243156	4091615		60	30	30
<a href="#">SJ 03836 POD1</a>	SJAR	SJ		1	3	4	33	32N	10W	242903	4091870		72	19	53
<a href="#">SJ 03973 POD1</a>	SJAR	SJ		4	1	4	21	32N	10W	243211	4095180		43		

\*UTM location was derived from PLSS - see Help

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

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

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

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
<a href="#">SJ 03983 POD1</a>	SJAR	SJ		4	3	4	33	32N	10W	243190	4091663	39	26	13
<a href="#">SJ 04148 POD1</a>	SJAR	SJ			3	4	21	32N	10W	243017	4095074	280	160	120
<a href="#">SJ 04418 POD1</a>	SJAR	SJ		3	4	2	21	32N	10W	243401	4095682	100		

Average Depth to Water: **41 feet**

Minimum Depth: **6 feet**

Maximum Depth: **160 feet**

Record Count: 29

**PLSS Search:**

**Section(s):** 29, 19, 20, 21,  
28, 30, 31, 32,  
33

**Township:** 32N

**Range:** 10W

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

11/3/20 2:25 PM

Page 2 of 2

WATER COLUMN/ AVERAGE  
DEPTH TO WATER

#1-A 30-045-22743

#20 30-045-22071

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

Operator MERIDIAN OIL Location: Unit NW Sec. 29 Twp 32 Rng 10Name of Well/Wells or Pipeline Serviced SCOTT #1A, #20cps 1456wElevation 5988' Completion Date 7/17/79 Total Depth 400' Land Type\* N/ACasing, Sizes, Types & Depths N/AIf Casing is cemented, show amounts & types used N/AIf Cement or Bentonite Plugs have been placed, show depths & amounts used  
N/A

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

Fresh, Clear, Salty, Sulphur, Etc. 110' SAMPLE TAKENDepths gas encountered: N/AType & amount of coke breeze used: 42 SACKSDepths anodes placed: 360', 350', 340', 305', 295', 285', 250', 240', 225', 210'Depths vent pipes placed: 400'Vent pipe perforations: 220'Remarks: gb #1

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 LOGDrilling Log (Attach Hereto). ☐Completion Date 7/17/79

Well Name <u>SCOTT #1A</u> <u>SCOTT #20</u>		Location <u>CONTRACT #2 (2" X 60" DURATION)</u> <u>NW 29-32-10</u>		CPS No. <u>1456-W</u>	
Type & Size Bit Used <u>6 3/4"</u>				Work Order No. <u>57401-21</u> <u>57102-31</u>	
Anode Hole Depth <u>400' T.D. 400'</u>	Total Drilling Rig Time	<del>COKE</del> Coke Used <u>42 SACKS</u>	Lost Circulation Mat'l Used	No. Sacks Mud Used	
Anode Depth					
# 1 <u>360'</u>	# 2 <u>350'</u>	# 3 <u>340'</u>	# 4 <u>305'</u>	# 5 <u>295'</u>	# 6 <u>285'</u>
# 7 <u>250'</u>	# 8 <u>240'</u>	# 9 <u>225'</u>	# 10 <u>210'</u>		
Anode Output (Amps)					
# 1 <u>3.2</u>	# 2 <u>3.5</u>	# 3 <u>3.4</u>	# 4 <u>3.4</u>	# 5 <u>3.5</u>	# 6 <u>3.2</u>
# 7 <u>4.2</u>	# 8 <u>4.0</u>	# 9 <u>3.8</u>	# 10 <u>4.3</u>		
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 <u>11.5V</u>	Amps <u>17.2 A</u>	Ohms <u>.67 <math>\Omega</math></u>			

Remarks: STATIC 600' N = .78V ON SCOTT #1A

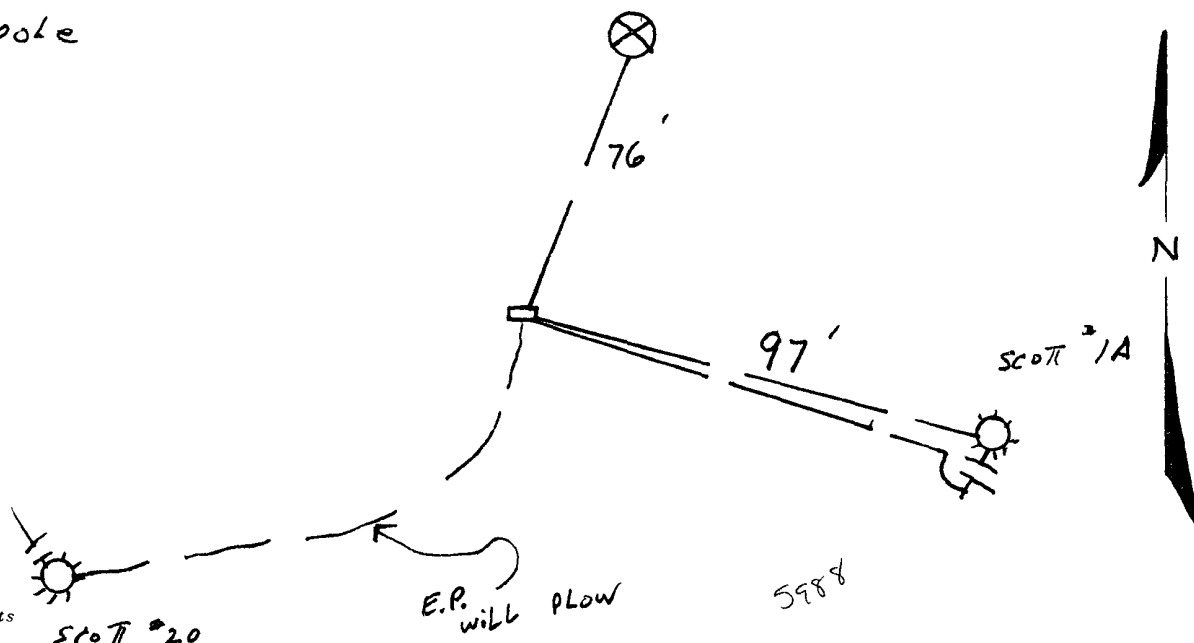
STATIC 600' N = .79V ON SCOTT #20 Driller SAID WATER AT 110', Drilled To 140', weighted 30 min. Could NOT BLOW WATER OUT OF Hole. Drilled To 240'. WATER STANDING IN hole next A.M. AT 180'. TOOK WATER sample. Hole MAKING APPROX. 5 GAL./MIN. Drilled 400'. Logged 400'. INSTALLED 400' of 1" P.V.C. VENT Pipe, Perforated 220'.

All Construction Completed

Ditch #1 cable = 173'  
extra cable = 117'  
Hole Depth - 100'

GROUND BED LAYOUT SKETCH

20' meter Loop pole  
40/16 Rect.



Original &amp; 1 Copy All Reports

SCOTT #20



## DAILY DRILLING REPORT

LEASE			WELL NO.			CONTRACTOR			RIG NO.			REPORT NO.			DATE			19		
MORNING						DAYLIGHT						EVENING								
Driller						Driller						Driller								
Total Men In Crew						Total Men In Crew						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.				
		NO. DC		SIZE	LENG.			NO. DC		SIZE	LENG.			NO. DC		SIZE	LENG.			
BIT NO.		NO. DC		SIZE	LENG.	BIT NO.		NO. DC		SIZE	LENG.	BIT NO.		NO. DC		SIZE	LENG.			
SERIAL NO.		STANDS				SERIAL NO.		STANDS				SERIAL NO.		STANDS						
TYPE		DOWN ON KELLY				TYPE		DOWN ON KELLY				TYPE		DOWN ON KELLY						
MAKE		TOTAL DEPTH				MAKE		TOTAL DEPTH				MAKE		TOTAL DEPTH						
MUD RECORD			MUD, ADDITIVES USED AND RECEIVED			MUD RECORD			MUD, ADDITIVES USED AND RECEIVED			MUD RECORD			MUD, ADDITIVES USED AND RECEIVED					
Time	WT.	Vis.				Time	WT.	Vis.				Time	WT.	Vis.						
0	10	SURFACE SANDSTONE				100	110	SHALE				205	300	SHALE						
10	30	SANDSTONE				110	140	SAND (WET)				300	310	SANDY SHALE						
30	35	SHALE				140	150	SHALE				310	315	SHALE						
35	45	SAND (WET)				150	152	SANDY SHALE				315	385	SANDY SHALE						
45	70	SHALE				152	170	SHALE				385	400	SHALE						
70	100	SAND (WET)				170	205	SAND (WET)												
REMARKS -						REMARKS -						REMARKS -								
												MAKING 5 gal per min @ 200'								

SIGNED: Poolpusher Posky Company Supervisor

Sheet: \_\_\_\_\_ of \_\_\_\_\_  
Date: \_\_\_\_\_  
By: \_\_\_\_\_  
File: \_\_\_\_\_

SCOTT \* 1A

SCOTT = 20

NW 29-32-10

57401-21

57102-21

CPS = 1456 W

MW	gals/mol
16.04 C <sub>1</sub>	6.4
30.07 C <sub>2</sub>	10.12
44.10 C <sub>3</sub>	10.42
58.12 iC <sub>4</sub>	12.38
58.12 nC <sub>4</sub>	11.93
72.15 iC <sub>5</sub>	13.85
72.15 nC <sub>5</sub>	13.71
86.18 iC <sub>6</sub>	15.50
86.18 C <sub>6</sub>	15.57
100.21 iC <sub>7</sub>	17.2
100.21 C <sub>7</sub>	17.46
114.23 C <sub>8</sub>	19.39
28.05 C <sub>2</sub>	9.64
42.08 C <sub>3</sub>	9.67

MW	MISC	gals/mol
32.00	O <sub>2</sub>	3.37
28.01	CO	4.19
44.01	CO <sub>2</sub>	6.38
64.06	SO <sub>2</sub>	5.50
34.08	H <sub>2</sub> S	5.17
28.01	N <sub>2</sub>	4.16
2.02	H <sub>2</sub>	3.38

180 - 2.0

2.0

90 - 1.9

2.2

200 - 2.4

2.3

10 - 2.4 — (10)

2.3

20 - 2.2

2.2 — (13)

30 - 2.2

2.2

40 - 2.6 — (9)

2.2

50 - 2.8 — (3)

3.4

60 - 2.0

1.5

70 - 1.4

1.4

80 - 1.7

2.2 — (6)

90 - 2.3

2.7 — (3)

300 - 2.1

2.3 — (4)

10 - 2.2

1.8

20 - 2.1

2.1

30 - 2.0

2.5

40 - 2.4 — (3)

2.3

50 - 2.3 — (2)

2.1

60 - 2.2 — (1)

2.0

70 - 2.0

2.2

80 - 2.2

2.0

90 - 1.7

1.7

+00 - Drilled To T.D.

Driller said WATER AT 110'. Drilled To 140'; Weighted 30 min. could not blow WATER out of Hole. Drilled To 170'. WATER standing in hole next A.M. AT 180'. Drilled 400', Logged 400'. Installed 400' of 1" P.V.C. Vent Pipe Perforated 220'. Driller said Hole making approx. 5 gal./min.

11.5 ✓ 17.2A = 167 <sup>2</sup>  
7/17/79 *jl*

1 = 360' - 2.3 - 3.2  
2 = 350' - 2.6 - 3.5  
3 = 340' - 2.6 - 3.4  
4 = 330' - 2.6 - 3.4  
5 = 325' - 2.7 - 3.5  
6 = 285' - 2.5 - 3.2  
7 = 250' - 3.2 - 4.2  
8 = 240' - 2.8 - 4.0  
9 = 225' - 2.4 - 3.8  
10 = 210' - 2.8 - 4.3

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

Analysis No. 1-9662 Date 8-3-79

Operator EPNG Well Name SCOTT 1A

Location NW 29-32-11 County SAN JUAN State NM

Field  Formation

Sampled From CPS 1456 W 200'

Date Sampled  By

Tbg. Press.  Csg. Press.  Surface Csg. Press   
 ppm epm ppm epm

Sodium 5635 245 Chloride 3621 102

Calcium 280 14 Bicarbonate 117 2

Magnesium 7 1 Sulfate 7500 156

Iron PRESENT  Carbonate 0 0

H<sub>2</sub>S ABSENT  Hydroxide 0 0

cc: D.C.Adams Total Solids Dissolved 15832

R.A.Ullrich

E.R.Paulek

J.W.McCarthy

A.M.Smith

W.B.Shropshire

File

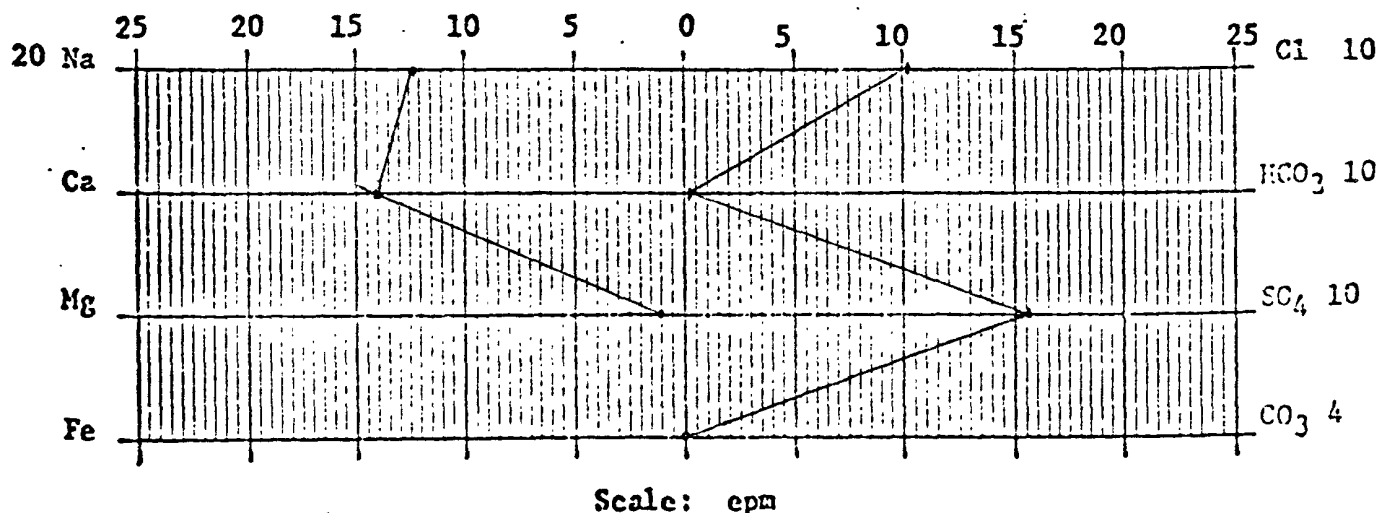
C. B. O'Nan

5 gal/min

Sp. Gr. 1.0067 at 60°F

Resistivity 75 ohm-cm at 75 °F

Cheryl Terwilliger  
 Chemist JWS



#291 30-045-28225

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS  
NORTHWESTERN NEW MEXICOOperator Meridian Oil Co. Location: Unit N Sec. 29 Twp 32 Rng 10

Name of Well/Wells or Pipeline Serviced \_\_\_\_\_

SCOTT COM #291Elevation 6081 Completion Date \_\_\_\_\_ Total Depth \_\_\_\_\_ Land Type PCasing Strings, Sizes, Types & Depths 12/8 SET 102' OF 8" PVC CASING.NO GAS, WATER, OR BOULDERS WERE ENCOUNTERED DURING CASING.If Casing Strings are cemented, show amounts & types used CementedWITH 23 SACKS.

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

NO

Depths &amp; thickness of water zones with description of water: Fresh, Clear,

Salty, Sulphur, Etc. 110' FreshDepths gas encountered: NOGround bed depth with type & amount of coke breeze used: 39.5' with5500 lbs of Horesco Type SW coke breezeDepths anodes placed: 360, 350, 330, 315, 300, 290, 239, 230, 220, 210, 200, 190, 180, 170, 160Depths vent pipes placed: 39.5Vent pipe perforations: bottom 260'

Remarks: \_\_\_\_\_

**RECEIVED**

JAN 31 1994

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.

#100 = 30-045-26840

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS  
NORTHWESTERN NEW MEXICO  
(Submit 3 copies to OCD Aztec Office)Operator MERIDIAN OIL Location: Unit H Sec. 29 Twp 32 Rng 10Name of Well/Wells or Pipeline Serviced SCOTT #1, #100cps 520wElevation 6179' Completion Date 4/25/88 Total Depth 360' Land Type\* N/ACasing, Sizes, Types & Depths N/AIf Casing is cemented, show amounts & types used N/A

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

N/ADepths & thickness of water zones with description water zone possible:Fresh, Clear, Salty, Sulphur, Etc. 60'**RECEIVED**

MAY 31 1991

Depths gas encountered: N/A**OIL CON. DIV.**  
**DIST. 3**Type & amount of coke breeze used: N/ADepths anodes placed: 315', 305', 295', 280', 265', 255', 245', 235', 225', 195', 18'  
14'Depths vent pipes placed: 340' OF 1" PVC VENT PIPEVent pipe perforations: 300'Remarks: qb #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. 10-88)

WELL CASING  
CATHODIC PROTECTION CONSTRUCTION REPORT  
DAILY LOG

10/25/88

Drilling Log (Attach Hereto) ☐

Completion Date 4/25/88

CPS	Well Name, Line or Plant: 12-35	Work Order #	Static:	Ins. Union Check
520 ✓	SCOTT #100	071043200	600' N = .80	<input type="checkbox"/> Good <input type="checkbox"/> Bad
	SCOTT #1 H 29-32-10	2048346A		COAL WELL
Location: H 29-32-10	Anode Size: 2" X 60"	Anode Type: DURATION	Size Bit: 6 3/4"	
Depth Drilled: 360'	Depth Logged: 340'	Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used
No. Sacks Mud Used				
Anode Depth:				
= 1 3/5'	= 2 305'	= 3 295'	= 4 280'	= 5 265'
= 6 255'	= 7 245'	= 8 235'	= 9 225'	= 10 195'
Anode Output (Amps):				
= 1 5.0	= 2 4.6	= 3 4.3	= 4 4.1	= 5 5.0
= 6 6.3	= 7 5.3	= 8 4.1	= 9 4.3	= 10 4.7
Anode Depth:				
= 11 185'	= 12 145'	= 13	= 14	= 15
= 16	= 17	= 18	= 19	= 20
Anode Output (Amps):				
= 11 4.1	= 12 4.4	= 13	= 14	= 15
= 16	= 17	= 18	= 19	= 20
Total Circuit Resistance:				
Volts 11.9	Amps 29.0	Ohms .41	No. 2 C.P. Cable Used	

Remarks: WATER AT 60'. TOOK WATER SAMPLE, INSTALLED 340' of 1" P.V.C. VENT pipe, PERFORATED 300'.

INSTALLED 12 ANODES IN THIS G.B. BECAUSE OF HIGH CURRENT REQUIREMENT ON SCOTT #1.

G.B. - 4074.00 ✓

Rectifier Size: — V — A

Addn'l Depth: —

Depth Credit: —160

Extra Cable: 230'

Ditch &amp; 1 Cable: 370'

- 560.00 ✓

55.20 ✓

259.00 ✓

25' Meter Pole: —

20' Meter Pole: —

10' Stub Pole: —

Junction Box: —

225.00 ✓

138.00 ✓

2 EXTRA ANODES (2" X 60")

EXTRA ANODE LEAD WIRE 330'

79.20 ✓

4270.40

TAX 213.52

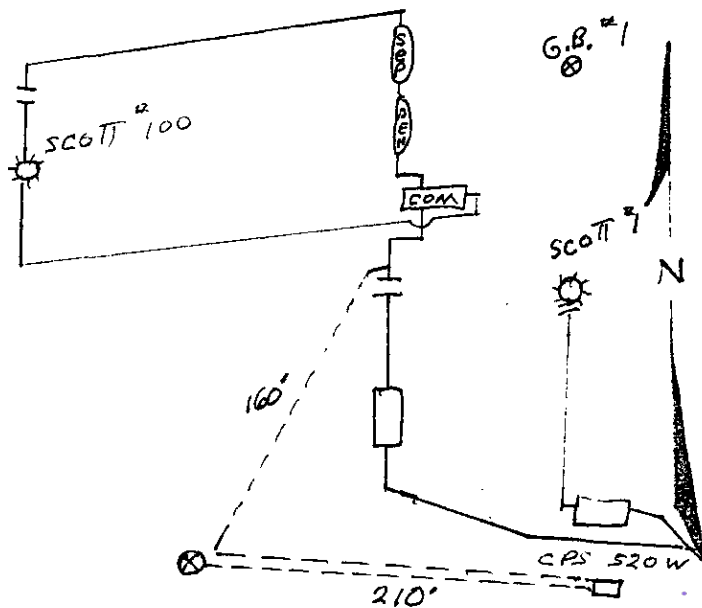
4483.92 OK 92

All Construction Completed

JE Stoltz  
(Signature)

G.B. #2

G.B. #1





D. CIASS DRILLING CO.Drill No. 3

## DRILLER'S WELL LOG

S. P. No. Sept #100 Date 4-24-88  
 Client Meridian Oil Co. Prospect \_\_\_\_\_  
 County SAN JUAN State New Mexico

If hole is a redrill or if moved from original staked position show distance  
 and direction moved: \_\_\_\_\_

FROM	TO	FORMATION — COLOR — HARDNESS
<u>0</u>	<u>30</u>	<u>Soft Sandstone</u>
<u>30</u>	<u>40</u>	<u>Shale</u>
<u>40</u>	<u>60</u>	<u>SAND</u>
<u>60</u>	<u>85</u>	<u>Soft Sandstone</u>
<u>85</u>	<u>180</u>	<u>SANDY Shale</u>
<u>180</u>	<u>240</u>	<u>Shale</u>
<u>240</u>	<u>280</u>	<u>SANDY Shale</u>
<u>280</u>	<u>360</u>	<u>Shale</u>

Mud \_\_\_\_\_ Bran \_\_\_\_\_ Lime \_\_\_\_\_

Rock Bit Number \_\_\_\_\_ Make \_\_\_\_\_

Remarks: Water @ 60 Ft.Driller Ronnie Brown

P.O. Box

Farmington, NM 87499

(505) 327-9215

(505) 325-1946

Date 4/25/88Company MeridianWell No. SCOTT #100 Location H-29-32-10 Volts Applied 11.40 Amperes 29.0

5		230	2.1		455		680
10		235	2.3 - (8)		460		685
15		240	2.5		465		690
20		245	3.0 - (7)		470		695
25		250	2.9		475		700
30		255	2.8 - (6)		480		705
35		260	2.2		485		710
40		265	2.5 - (5)		490		715
45		270	2.4		495		720
50		275	2.2		500		725
55		280	2.6 - (4)		505		730
60	3.1 WATER	285	2.4		510		735
65	2.0	290	2.1		515		740
70	2.2	295	2.4 - (3)		520		745
75	2.6 -	300	2.4		525		750
80	2.5	305	2.5 - (2)		530		755
85	2.0	310	2.6		535		760
90	2.7	315	2.5 - (1)		540		765
95	2.9 -	320	2.5		545		770
100	2.3	325	2.3		550		775
105	2.1	330	2.9		555		780
110	2.1	335	2.9		560		785
115	1.9	340		T.D	565		790
120	1.7	345			570		795
125	1.6	350			575		800
130	1.8	355			580		805
135	2.5	360		Drilled To	585		810
140	2.4	365			590		815
145	2.5 - (12)	370			595		820
150	2.2	375			600		825
155	2.0	380			605		830
160	1.8	385			610		835
165	1.4	390			615		840
170	1.2	395			620		845
175	1.5	400			625		850
180	2.2	405			630		855
185	2.3 - (11)	410			635		860
190	2.3	415			640		865
195	2.5 - (10)	420			645		870
200	2.2	425			650		875
205	2.1	430			655		880
210	1.7	435			660		885
215	1.9	440			665		890
220	2.3	445			670		895
225	2.3 - (9)	450			675		900



## 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.

## REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401
2. Originating Site: Cedar Hill Compressor Station
3. Location of Material (Street Address, City, State or ULSIR): UL F Section 29 T30N R10W; 36.949568, -107.906979
4. Source and Description of Waste: Source: Produce Water/Condensate/Soil from remediation activities associated with a produced water/lube oil release. Description: Hydrocarbon/water/soil from remediation activities associated with a produced water/lube oil release. Estimated Volume <u>50</u> yd <sup>3</sup> / bbls Known Volume (to be entered by the operator at the end of the haul) <u>18</u> yd <sup>3</sup> / bbls

### 5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

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

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

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

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

### GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long *Thomas Long*, 3-19-2021, representative for Enterprise Field Services, LLC authorizes IEI, Inc. to complete  
**Generator Signature**  
the required testing/sign the Generator Waste Testing Certification.

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

### 5. Transporter: OFT and Subcontractors, Riley Industrial

#### OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: \*JFJ Landfarm/Industrial Ecosystems, Inc. \* Permit #: NM 01-0010B

Address of Facility: #49 CR 2150 Aztec, New Mexico

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: *Betty Pruden*  
SIGNATURE: *Betty Pruden*  
Surface Waste Management Facility Authorized Agent

TITLE: *Clerk*  
TELEPHONE NO.: 505-632-1782

DATE: *3/19/21*



## APPENDIX D

### Photographic Documentation

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## SITE PHOTOGRAPHS

Closure Report  
Enterprise Field Services, LLC  
Cedar Hill Compressor Station (2/11/21)  
Ensolum Project No. 05A1226138

**Photograph 1**

Photograph Description: View of the sampling area during the first sampling event.

**Photograph 2**

Photograph Description: View of the sampling area during the first sampling event.

**Photograph 3**

Photograph Description: View of the sampling area during the second sampling event.





## SITE PHOTOGRAPHS

Closure Report  
Enterprise Field Services, LLC  
Cedar Hill Compressor Station (2/11/21)  
Ensolum Project No. 05A1226138

**Photograph 4**

Photograph Description: View of the sampling area during the second sampling event.

**Photograph 5**

Photograph Description: View of the sampling area outside of facility fence during the third sampling event.

**Photograph 6**

Photograph Description: View of the scraped/excavated areas (fourth sampling event).





## SITE PHOTOGRAPHS

Closure Report  
Enterprise Field Services, LLC  
Cedar Hill Compressor Station (2/11/21)  
Ensolum Project No. 05A1226138

**Photograph 7**

Photograph Description: View of the scraped/excavated areas (fourth sampling event).

**Photograph 8**

Photograph Description: View of the scraped/excavated area (fifth sampling event).

**Photograph 9**

Photograph Description: View of the final excavation after initial restoration.





## APPENDIX E

### Regulatory Correspondence

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## Ranee Deechilly

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**From:** Kyle Summers  
**Sent:** Friday, February 12, 2021 1:34 PM  
**To:** Ranee Deechilly; Chad D'Aponi  
**Subject:** FW: [EXTERNAL] RE: Cedar Hill Compressor Station - UL N Section 29 T32N R10W; 36.949568, -107.906979  
**Attachments:** image001.jpg; image001.jpg

FYI

Kyle Summers  
Principal  
903-821-5603  
Ensolum, LLC

-----Original Message-----

From: Long, Thomas <tjlong@eprod.com>  
Sent: Friday, February 12, 2021 1:25 PM  
To: Kyle Summers <ksummers@ensolum.com>  
Subject: Fwd: [EXTERNAL] RE: Cedar Hill Compressor Station - UL N Section 29 T32N R10W; 36.949568, -107.906979

FYI

Tom Long

Begin forwarded message:

From: "Smith, Cory, EMNRD" <Cory.Smith@state.nm.us>  
Date: February 12, 2021 at 1:20:02 PM MST  
To: "Long, Thomas" <tjlong@eprod.com>  
Cc: "Stone, Brian" <bmstone@eprod.com>  
Subject: [EXTERNAL] RE: Cedar Hill Compressor Station - UL N Section 29 T32N R10W; 36.949568, -107.906979

[Use caution with links/attachments]  
Tom,

Thank you for the update OCD approves both request as the picture doesn't show any major staining etc.

Please look to see if the trees are impacted with mist if needed they may need to be cleaned. Please include this approval in your final C-141

Cory Smith • Environmental Specialist  
Environmental Bureau  
EMNRD - Oil Conservation Division  
1000 Rio Brazos | Aztec, NM 87410  
505.334.6178 x115 | Cory.Smith@state.nm.us<mailto:Cory.Smith@state.nm.us>  
[http://www.emnrd.state.nm.us/OCD/<https://urldefense.proofpoint.com/v2/url?u=http-3A\\_\\_www.emnrd.state.nm.us\\_OCD\\_&d=DwMFJg&c=6zpojTjipf-nAlEmob0p1NKp0XhcK4lau5zCDf5n3i4&r=ddvZ1T9a\\_VnOax5oP1jlng&m=bRhKdaglISkq7m1hRAR19bdB5qOZzoUEOA9ONwAwyoZo&s=5Tj28ibv9OGQMKsYnBNfq1Abp29SwUnyF6AGjXGIFmQ&e=>](http://www.emnrd.state.nm.us/OCD/<https://urldefense.proofpoint.com/v2/url?u=http-3A__www.emnrd.state.nm.us_OCD_&d=DwMFJg&c=6zpojTjipf-nAlEmob0p1NKp0XhcK4lau5zCDf5n3i4&r=ddvZ1T9a_VnOax5oP1jlng&m=bRhKdaglISkq7m1hRAR19bdB5qOZzoUEOA9ONwAwyoZo&s=5Tj28ibv9OGQMKsYnBNfq1Abp29SwUnyF6AGjXGIFmQ&e=>)

From: Long, Thomas <tjlong@eprod.com>  
Sent: Friday, February 12, 2021 10:12 AM  
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>  
Cc: Stone, Brian <bmstone@eprod.com>  
Subject: [EXT] FW: Cedar Hill Compressor Station - UL N Section 29 T32N R10W; 36.949568, -107.906979

Cory,

This email is a sample notification and a variance request. First, Enterprise is requesting a variance request from the required 200 square foot sample interval to a 400 square foot sample interval as that this is a surface release. Also, soil samples will be collected for laboratory analysis on Tuesday, February 16, 2021 at 10:00 a.m., weather permitting. This sampling event will be to evaluate the hydrocarbon impacts prior to initiating remediation with heavy equipment. In the event that the sample results are below the NMOCD remediation standards, the sample would also qualify for closure samples. I have attached a map with the approximate location of the impacts. I have also attached some pictures. Please acknowledge acceptance of the 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>

[logo]

From: Long, Thomas  
Sent: Thursday, February 11, 2021 5:00 PM  
To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us<mailto:Cory.Smith@state.nm.us>)'  
<Cory.Smith@state.nm.us<mailto:Cory.Smith@state.nm.us>>  
Cc: Stone, Brian <bmstone@eprod.com<mailto:bmstone@eprod.com>>  
Subject: Cedar Hill Compressor Station - UL N Section 29 T32N R10W; 36.949568, -107.906979

Cory,

This email is a notification that Entperise had a release of produced water/condensate/lube oil at the Cedar Hill Compressor Station this afternoon. The release is a result of an ESD ejecting fluids out of the facility vent. An area of approximately 60 feet long by 30 feet wide was affected. The impacts are also outside the facility fencing and on private lands. No washes were affected. No residences were affected. The release is located at UL N Section 29 T32N R10W; 36.949568, -107.906979. I will keep you updated as to the remediation activities. 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>

[logo]

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



## APPENDIX F

### Tables





**TABLE 1**  
Cedar Hill Compressor Station (2/11/21)  
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample Depth (inches)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX <sup>1</sup> (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO/MRO) <sup>1</sup> (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria (Tier I)				10	NE	NE	NE	50				100	600
Composite Soil Samples Removed by Excavation and Transported to the Landfarm for Disposal/Remediation													
OS-1	2.25.21	C	0 to 2	<0.025	<0.050	<0.050	<0.099	ND	<5.0	<10	150	150	<60
OS-1R1	3.23.21	C	6	<0.020	<0.039	<0.039	<0.079	ND	<3.9	12	160	170	<60
OS-4	2.25.21	C	0 to 2	<0.024	<0.049	<0.049	<0.097	ND	<4.9	9.9	280	290	<60
OS-9	3.08.21	C	0 to 2	<0.024	<0.049	<0.049	<0.097	ND	<4.9	32	1,200	1,200	<60
OS-10	3.08.21	C	0 to 2	<0.024	<0.048	<0.048	<0.096	ND	<4.8	18	570	590	<60
OS-13	3.08.21	C	0 to 2	<0.024	<0.048	<0.048	<0.095	ND	<4.8	11	230	240	<60
Composite Soil Samples													
OS-1R2E	3.29.21	C	0 to 12	<0.018	<0.036	<0.036	<0.071	ND	<3.6	<8.9	<44	ND	<60
OS-1R2W	3.29.21	C	0 to 12	<0.016	<0.031	<0.031	<0.063	ND	<3.1	<8.8	<44	ND	<60
OS-2	2.25.21	C	0 to 2	<0.025	<0.050	<0.050	<0.099	ND	<5.0	<9.6	91	91	<60
OS-3	2.25.21	C	0 to 2	<0.024	<0.048	<0.048	<0.097	ND	<4.8	<9.2	<46	ND	<60
OS-4R1	3.23.21	C	6	<0.017	<0.035	<0.035	<0.069	ND	<3.5	<9.5	<47	ND	<60
OS-5	2.25.21	C	0 to 2	<0.024	<0.049	<0.049	<0.098	ND	<4.9	<9.0	<45	ND	<60
OS-6	2.25.21	C	0 to 2	<0.024	<0.048	<0.048	<0.097	ND	<4.8	16	71	87	<60
OS-7	2.25.21	C	0 to 2	<0.025	<0.049	<0.049	<0.099	ND	<4.9	<9.5	<47	ND	<60
OS-8	2.25.21	C	0 to 2	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<9.3	<47	ND	<60
OS-9R1	3.23.21	C	8	<0.020	<0.039	<0.039	<0.079	ND	<3.9	<9.6	<48	ND	<60
OS-10R1	3.23.21	C	6	<0.018	<0.036	<0.036	<0.072	ND	<3.6	<9.7	<48	ND	<61
OS-11	3.08.21	C	0 to 2	<0.024	<0.048	<0.048	<0.096	ND	<4.8	<9.4	<47	ND	<60
OS-12	3.08.21	C	0 to 2	<0.023	<0.046	<0.046	<0.093	ND	<4.6	<9.7	81	81	<60
OS-13R1	3.23.21	C	6	<0.020	<0.040	<0.040	<0.080	ND	<4.0	<9.3	71	71	<60
OS-14	3.08.21	C	0 to 2	<0.025	<0.049	<0.049	<0.099	ND	<4.9	17	<48	17	<60
OS-15	3.19.21	C	0 to 2	<0.015	<0.031	<0.031	<0.062	ND	<3.1	<9.0	<45	ND	<60
OS-16	3.19.21	C	0 to 2	<0.016	<0.031	<0.031	<0.063	ND	<3.1	<9.7	<48	ND	<60
OS-17	3.19.21	C	0 to 2	<0.016	<0.032	<0.032	<0.065	ND	<3.2	<9.2	<46	ND	<60
OS-18	3.19.21	C	0 to 2	<0.016	<0.032	<0.032	<0.065	ND	<3.2	<8.6	68	68	<60
OS-19	3.19.21	C	0 to 2	<0.019	<0.037	<0.037	<0.075	ND	<3.7	<9.9	<50	ND	<59
OS-20	3.19.21	C	0 to 2	<0.020	<0.040	<0.040	<0.081	ND	<4.0	<9.8	<49	ND	<60
OS-21	3.19.21	C	0 to 2	<0.019	<0.038	<0.038	<0.075	ND	<3.8	<9.7	<48	ND	<60

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

<sup>1</sup> = Total combined concentrations are rounded to two (2) significant figures to match the laboratory resolution of the individual constituents.

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

NA = Not Analyzed

NE = Not established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPH = Total Petroleum Hydrocarbon

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics



**TABLE 2A**  
Cedar Hill Compressor Station (2/11/21)  
Waste Characterization Sample - Laboratory Results

Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample Depth (inches)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO/MRO) (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Mercury (mg/kg)
Waste Characterization Sample - Removed by Excavation																				
OS-1	2.25.21	C	0 to 2	<0.025	<0.050	<0.050	<0.099	ND	<5.0	<10	150	150	<2.5	180	<0.10	5.5	1.9	<2.5	<0.25	<0.034

**TABLE 2B**  
Cedar Hill Compressor Station (2/11/21)  
Waste Characterization Sample - TCLP Rule of 20 Projection

Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample Depth (inches)	Benzene (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Lead (mg/L)	Selenium (mg/L)	Silver (mg/L)	Mercury (mg/L)
TCLP Regulatory Limit (40 CFR 261.24)				0.5	5.0	100	1.0	5.0	5.0	1.0	5.0	0.2
Waste Characterization Sample - Projected Rule of 20 TCLP Equivalent												
OS-1 Projected TCLP*	2.25.21	C	0 to 2	<0.00125*	<0.125*	9*	<0.005*	0.275*	0.095*	<0.125*	<0.0125*	<0.0017*

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

TCLP = Toxicity Characteristic Leaching Procedure

mg/kg = milligram per kilogram

mg/L = milligram per liter

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPH = Total Petroleum Hydrocarbon

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics

\* Rule of 20 Projected TCLP Result





## APPENDIX G

### Laboratory Data Sheets & Chain of Custody Documentation

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

March 10, 2021

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Cedar Hill CS Feb 2021

OrderNo.: 2102B82

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 8 sample(s) on 2/26/2021 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued March 03, 2021.

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

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109



## Analytical Report

Lab Order 2102B82

Date Reported: 3/10/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-1

Project: Cedar Hill CS Feb 2021

Collection Date: 2/25/2021 10:00:00 AM

Lab ID: 2102B82-001

Matrix: SOIL

Received Date: 2/26/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/1/2021 8:14:28 PM	58397
<b>EPA METHOD 7471: MERCURY</b>							Analyst: <b>ags</b>
Mercury	ND	0.034		mg/Kg	1	3/9/2021 10:41:19 AM	58582
<b>EPA METHOD 6010B: SOIL METALS</b>							Analyst: <b>JLF</b>
Arsenic	ND	2.5		mg/Kg	1	3/8/2021 1:46:48 PM	58528
Barium	180	0.10		mg/Kg	1	3/8/2021 1:46:48 PM	58528
Cadmium	ND	0.10		mg/Kg	1	3/8/2021 1:46:48 PM	58528
Chromium	5.5	0.30		mg/Kg	1	3/8/2021 1:46:48 PM	58528
Lead	1.9	0.30		mg/Kg	1	3/8/2021 1:46:48 PM	58528
Selenium	ND	2.5		mg/Kg	1	3/8/2021 1:46:48 PM	58528
Silver	ND	0.25		mg/Kg	1	3/8/2021 1:46:48 PM	58528
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/1/2021 1:32:51 PM	58371
Motor Oil Range Organics (MRO)	150	50		mg/Kg	1	3/1/2021 1:32:51 PM	58371
Surr: DNOP	93.9	70-130		%Rec	1	3/1/2021 1:32:51 PM	58371
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/2/2021 11:19:55 AM	58363
Surr: BFB	100	75.3-105		%Rec	1	3/2/2021 11:19:55 AM	58363
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	3/2/2021 11:19:55 AM	58363
Toluene	ND	0.050		mg/Kg	1	3/2/2021 11:19:55 AM	58363
Ethylbenzene	ND	0.050		mg/Kg	1	3/2/2021 11:19:55 AM	58363
Xylenes, Total	ND	0.099		mg/Kg	1	3/2/2021 11:19:55 AM	58363
Surr: 4-Bromofluorobenzene	97.7	80-120		%Rec	1	3/2/2021 11:19:55 AM	58363

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

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

Page 1 of 18

## Analytical Report

Lab Order 2102B82

Date Reported: 3/10/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-2

Project: Cedar Hill CS Feb 2021

Collection Date: 2/25/2021 10:05:00 AM

Lab ID: 2102B82-002

Matrix: SOIL

Received Date: 2/26/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/1/2021 8:26:53 PM	58397
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/1/2021 1:56:37 PM	58371
Motor Oil Range Organics (MRO)	91	48		mg/Kg	1	3/1/2021 1:56:37 PM	58371
Surr: DNOP	93.3	70-130		%Rec	1	3/1/2021 1:56:37 PM	58371
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/2/2021 11:43:30 AM	58363
Surr: BFB	98.7	75.3-105		%Rec	1	3/2/2021 11:43:30 AM	58363
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.099		mg/Kg	1	3/2/2021 11:43:30 AM	58363
Benzene	ND	0.025		mg/Kg	1	3/2/2021 11:43:30 AM	58363
Toluene	ND	0.050		mg/Kg	1	3/2/2021 11:43:30 AM	58363
Ethylbenzene	ND	0.050		mg/Kg	1	3/2/2021 11:43:30 AM	58363
Xylenes, Total	ND	0.099		mg/Kg	1	3/2/2021 11:43:30 AM	58363
Surr: 4-Bromofluorobenzene	94.9	80-120		%Rec	1	3/2/2021 11:43:30 AM	58363

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

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

Page 2 of 18



## Analytical Report

Lab Order 2102B82

Date Reported: 3/10/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-3

Project: Cedar Hill CS Feb 2021

Collection Date: 2/25/2021 10:10:00 AM

Lab ID: 2102B82-003

Matrix: SOIL

Received Date: 2/26/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/1/2021 8:39:17 PM	58397
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	3/1/2021 2:20:24 PM	58371
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/1/2021 2:20:24 PM	58371
Surr: DNOP	92.6	70-130		%Rec	1	3/1/2021 2:20:24 PM	58371
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/2/2021 12:07:01 PM	58363
Surr: BFB	97.4	75.3-105		%Rec	1	3/2/2021 12:07:01 PM	58363
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	3/2/2021 12:07:01 PM	58363
Benzene	ND	0.024		mg/Kg	1	3/2/2021 12:07:01 PM	58363
Toluene	ND	0.048		mg/Kg	1	3/2/2021 12:07:01 PM	58363
Ethylbenzene	ND	0.048		mg/Kg	1	3/2/2021 12:07:01 PM	58363
Xylenes, Total	ND	0.097		mg/Kg	1	3/2/2021 12:07:01 PM	58363
Surr: 4-Bromofluorobenzene	94.2	80-120		%Rec	1	3/2/2021 12:07:01 PM	58363

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

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

Page 3 of 18

## Analytical Report

Lab Order 2102B82

Date Reported: 3/10/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-4

Project: Cedar Hill CS Feb 2021

Collection Date: 2/25/2021 10:15:00 AM

Lab ID: 2102B82-004

Matrix: SOIL

Received Date: 2/26/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/1/2021 8:51:42 PM	58397
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	9.9	9.4		mg/Kg	1	3/1/2021 2:44:12 PM	58371
Motor Oil Range Organics (MRO)	280	47		mg/Kg	1	3/1/2021 2:44:12 PM	58371
Surr: DNOP	95.1	70-130		%Rec	1	3/1/2021 2:44:12 PM	58371
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/2/2021 1:40:53 PM	58363
Surr: BFB	96.6	75.3-105		%Rec	1	3/2/2021 1:40:53 PM	58363
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	3/2/2021 1:40:53 PM	58363
Benzene	ND	0.024		mg/Kg	1	3/2/2021 1:40:53 PM	58363
Toluene	ND	0.049		mg/Kg	1	3/2/2021 1:40:53 PM	58363
Ethylbenzene	ND	0.049		mg/Kg	1	3/2/2021 1:40:53 PM	58363
Xylenes, Total	ND	0.097		mg/Kg	1	3/2/2021 1:40:53 PM	58363
Surr: 4-Bromofluorobenzene	93.5	80-120		%Rec	1	3/2/2021 1:40:53 PM	58363

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

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

Page 4 of 18



## Analytical Report

Lab Order 2102B82

Date Reported: 3/10/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-5

Project: Cedar Hill CS Feb 2021

Collection Date: 2/25/2021 10:20:00 AM

Lab ID: 2102B82-005

Matrix: SOIL

Received Date: 2/26/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/1/2021 9:04:07 PM	58397
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	3/1/2021 3:07:58 PM	58371
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	3/1/2021 3:07:58 PM	58371
Surr: DNOP	95.8	70-130		%Rec	1	3/1/2021 3:07:58 PM	58371
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/2/2021 2:04:33 PM	58363
Surr: BFB	99.2	75.3-105		%Rec	1	3/2/2021 2:04:33 PM	58363
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	3/2/2021 2:04:33 PM	58363
Toluene	ND	0.049		mg/Kg	1	3/2/2021 2:04:33 PM	58363
Ethylbenzene	ND	0.049		mg/Kg	1	3/2/2021 2:04:33 PM	58363
Xylenes, Total	ND	0.098		mg/Kg	1	3/2/2021 2:04:33 PM	58363
Surr: 4-Bromofluorobenzene	94.9	80-120		%Rec	1	3/2/2021 2:04:33 PM	58363

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

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

Page 5 of 18

## Analytical Report

Lab Order 2102B82

Date Reported: 3/10/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-6

Project: Cedar Hill CS Feb 2021

Collection Date: 2/25/2021 10:25:00 AM

Lab ID: 2102B82-006

Matrix: SOIL

Received Date: 2/26/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/1/2021 9:16:31 PM	58397
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/2/2021 1:53:01 AM	58368
Surr: BFB	93.5	70-130		%Rec	1	3/2/2021 1:53:01 AM	58368
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	16	9.8		mg/Kg	1	3/1/2021 10:14:00 PM	58372
Motor Oil Range Organics (MRO)	71	49		mg/Kg	1	3/1/2021 10:14:00 PM	58372
Surr: DNOP	115	70-130		%Rec	1	3/1/2021 10:14:00 PM	58372
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
Benzene	ND	0.024		mg/Kg	1	3/2/2021 1:53:01 AM	58368
Toluene	ND	0.048		mg/Kg	1	3/2/2021 1:53:01 AM	58368
Ethylbenzene	ND	0.048		mg/Kg	1	3/2/2021 1:53:01 AM	58368
Xylenes, Total	ND	0.097		mg/Kg	1	3/2/2021 1:53:01 AM	58368
Surr: 1,2-Dichloroethane-d4	91.3	70-130		%Rec	1	3/2/2021 1:53:01 AM	58368
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	3/2/2021 1:53:01 AM	58368
Surr: Dibromofluoromethane	101	70-130		%Rec	1	3/2/2021 1:53:01 AM	58368
Surr: Toluene-d8	98.6	70-130		%Rec	1	3/2/2021 1:53:01 AM	58368

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

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

Page 6 of 18

## Analytical Report

Lab Order 2102B82

Date Reported: 3/10/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-7

Project: Cedar Hill CS Feb 2021

Collection Date: 2/25/2021 10:30:00 AM

Lab ID: 2102B82-007

Matrix: SOIL

Received Date: 2/26/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/1/2021 10:18:35 PM	58409
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/2/2021 3:18:07 AM	58368
Surr: BFB	99.9	70-130		%Rec	1	3/2/2021 3:18:07 AM	58368
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/1/2021 10:42:14 PM	58372
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/1/2021 10:42:14 PM	58372
Surr: DNOP	88.0	70-130		%Rec	1	3/1/2021 10:42:14 PM	58372
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
Benzene	ND	0.025		mg/Kg	1	3/2/2021 3:18:07 AM	58368
Toluene	ND	0.049		mg/Kg	1	3/2/2021 3:18:07 AM	58368
Ethylbenzene	ND	0.049		mg/Kg	1	3/2/2021 3:18:07 AM	58368
Xylenes, Total	ND	0.099		mg/Kg	1	3/2/2021 3:18:07 AM	58368
Surr: 1,2-Dichloroethane-d4	95.9	70-130		%Rec	1	3/2/2021 3:18:07 AM	58368
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	3/2/2021 3:18:07 AM	58368
Surr: Dibromofluoromethane	96.2	70-130		%Rec	1	3/2/2021 3:18:07 AM	58368
Surr: Toluene-d8	97.4	70-130		%Rec	1	3/2/2021 3:18:07 AM	58368

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

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



## Analytical Report

Lab Order 2102B82

Date Reported: 3/10/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-8

Project: Cedar Hill CS Feb 2021

Collection Date: 2/25/2021 10:35:00 AM

Lab ID: 2102B82-008

Matrix: SOIL

Received Date: 2/26/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/1/2021 10:30:59 PM	58409
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/2/2021 4:43:04 AM	58368
Surr: BFB	94.9	70-130		%Rec	1	3/2/2021 4:43:04 AM	58368
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	3/1/2021 10:51:33 PM	58372
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/1/2021 10:51:33 PM	58372
Surr: DNOP	98.1	70-130		%Rec	1	3/1/2021 10:51:33 PM	58372
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
Benzene	ND	0.025		mg/Kg	1	3/2/2021 4:43:04 AM	58368
Toluene	ND	0.050		mg/Kg	1	3/2/2021 4:43:04 AM	58368
Ethylbenzene	ND	0.050		mg/Kg	1	3/2/2021 4:43:04 AM	58368
Xylenes, Total	ND	0.10		mg/Kg	1	3/2/2021 4:43:04 AM	58368
Surr: 1,2-Dichloroethane-d4	97.4	70-130		%Rec	1	3/2/2021 4:43:04 AM	58368
Surr: 4-Bromofluorobenzene	98.3	70-130		%Rec	1	3/2/2021 4:43:04 AM	58368
Surr: Dibromofluoromethane	99.3	70-130		%Rec	1	3/2/2021 4:43:04 AM	58368
Surr: Toluene-d8	95.0	70-130		%Rec	1	3/2/2021 4:43:04 AM	58368

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

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

Page 8 of 18

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

WO#: 2102B82

10-Mar-21

**Client:** ENSOLUM  
**Project:** Cedar Hill CS Feb 2021

Sample ID: <b>MB-58397</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58397</b>	RunNo: <b>75621</b>								
Prep Date: <b>3/1/2021</b>	Analysis Date: <b>3/1/2021</b>	SeqNo: <b>2673881</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-58397</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58397</b>	RunNo: <b>75621</b>								
Prep Date: <b>3/1/2021</b>	Analysis Date: <b>3/1/2021</b>	SeqNo: <b>2673882</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.0	90	110			

Sample ID: <b>MB-58409</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58409</b>	RunNo: <b>75621</b>								
Prep Date: <b>3/1/2021</b>	Analysis Date: <b>3/1/2021</b>	SeqNo: <b>2673911</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-58409</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58409</b>	RunNo: <b>75621</b>								
Prep Date: <b>3/1/2021</b>	Analysis Date: <b>3/1/2021</b>	SeqNo: <b>2673912</b> Units: <b>mg/Kg</b>								
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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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

Page 9 of 18

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

WO#: 2102B82

10-Mar-21

**Client:** ENSOLUM  
**Project:** Cedar Hill CS Feb 2021

Sample ID: <b>MB-58371</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58371</b>	RunNo: <b>75596</b>								
Prep Date: <b>2/27/2021</b>	Analysis Date: <b>3/1/2021</b>	SeqNo: <b>2672617</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		101	70	130			

Sample ID: <b>LCS-58371</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58371</b>	RunNo: <b>75596</b>								
Prep Date: <b>2/27/2021</b>	Analysis Date: <b>3/1/2021</b>	SeqNo: <b>2672618</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	103	68.9	141			
Surr: DNOP	5.3		5.000		106	70	130			

Sample ID: <b>2102B82-006AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>OS-6</b>	Batch ID: <b>58372</b>	RunNo: <b>75595</b>								
Prep Date: <b>2/27/2021</b>	Analysis Date: <b>3/1/2021</b>	SeqNo: <b>2673374</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	8.8	43.86	15.74	91.7	15	184			
Surr: DNOP	4.2		4.386		95.9	70	130			

Sample ID: <b>2102B82-006AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>OS-6</b>	Batch ID: <b>58372</b>	RunNo: <b>75595</b>								
Prep Date: <b>2/27/2021</b>	Analysis Date: <b>3/1/2021</b>	SeqNo: <b>2673406</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	62	9.5	47.71	15.74	96.6	15	184	9.94	23.9	
Surr: DNOP	5.5		4.771		114	70	130	0	0	

Sample ID: <b>MB-58372</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58372</b>	RunNo: <b>75595</b>								
Prep Date: <b>2/27/2021</b>	Analysis Date: <b>3/1/2021</b>	SeqNo: <b>2673430</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.5		10.00		75.0	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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

Page 10 of 18



QC SUMMARY REPORT  
Hall Environmental Analysis Laboratory, Inc.

WO#: 2102B82  
10-Mar-21

Client: ENSOLUM  
Project: Cedar Hill CS Feb 2021

Sample ID: LCS-58372	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 58372	RunNo: 75653								
Prep Date: 2/27/2021	Analysis Date: 3/2/2021	SeqNo: 2675522		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.7	68.9	141			
Surr: DNOP	4.8		5.000		96.4	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 Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit

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

WO#: 2102B82

10-Mar-21

**Client:** ENSOLUM  
**Project:** Cedar Hill CS Feb 2021

Sample ID: <b>mb-58363</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58363</b>	RunNo: <b>75601</b>								
Prep Date: <b>2/26/2021</b>	Analysis Date: <b>3/1/2021</b>	SeqNo: <b>2672880</b>	Units: <b>mg/Kg</b>							
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		96.0	75.3	105			

Sample ID: <b>lcs-58363</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58363</b>	RunNo: <b>75601</b>								
Prep Date: <b>2/26/2021</b>	Analysis Date: <b>3/1/2021</b>	SeqNo: <b>2672881</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.5	80	120			
Surr: BFB	1100		1000		106	75.3	105			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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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

Page 12 of 18

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

WO#: 2102B82

10-Mar-21

**Client:** ENSOLUM  
**Project:** Cedar Hill CS Feb 2021

Sample ID: <b>mb-58363</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58363</b>	RunNo: <b>75601</b>								
Prep Date: <b>2/26/2021</b>	Analysis Date: <b>3/1/2021</b>	SeqNo: <b>2672926</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.97		1.000		96.8	80	120			

Sample ID: <b>LCS-58363</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58363</b>	RunNo: <b>75601</b>								
Prep Date: <b>2/26/2021</b>	Analysis Date: <b>3/1/2021</b>	SeqNo: <b>2672927</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.84	0.10	1.000	0	84.0	70.9	141			
Benzene	0.93	0.025	1.000	0	93.1	80	120			
Toluene	0.97	0.050	1.000	0	96.6	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.6	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.6	80	120			
Surr: 4-Bromofluorobenzene	0.99		1.000		99.1	80	120			

**Qualifiers:**

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

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

Page 13 of 18



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

WO#: 2102B82

10-Mar-21

**Client:** ENSOLUM  
**Project:** Cedar Hill CS Feb 2021

Sample ID: <b>Ics-58368</b>	SampType: <b>LCS4</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>BatchQC</b>	Batch ID: <b>58368</b>	RunNo: <b>75617</b>								
Prep Date: <b>2/26/2021</b>	Analysis Date: <b>3/2/2021</b>	SeqNo: <b>2673807</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	104	80	120			
Toluene	1.0	0.050	1.000	0	104	80	120			
Ethylbenzene	1.1	0.050	1.000	0	106	80	120			
Xylenes, Total	3.3	0.10	3.000	0	110	80	120			
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		90.5	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.8	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.52		0.5000		105	70	130			

Sample ID: <b>mb-58368</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58368</b>	RunNo: <b>75617</b>								
Prep Date: <b>2/26/2021</b>	Analysis Date: <b>3/2/2021</b>	SeqNo: <b>2673808</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		91.9	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.2	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		99.6	70	130			
Surr: Toluene-d8	0.52		0.5000		103	70	130			

Sample ID: <b>2102b82-007ams</b>	SampType: <b>MS4</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>OS-7</b>	Batch ID: <b>58368</b>	RunNo: <b>75617</b>								
Prep Date: <b>2/26/2021</b>	Analysis Date: <b>3/2/2021</b>	SeqNo: <b>2673811</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	0.9901	0	94.4	71.1	115			
Toluene	0.92	0.050	0.9901	0	92.5	79.6	132			
Ethylbenzene	0.91	0.050	0.9901	0	92.1	83.8	134			
Xylenes, Total	2.8	0.099	2.970	0	93.5	82.4	132			
Surr: 1,2-Dichloroethane-d4	0.49		0.4950		99.9	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.4950		99.7	70	130			
Surr: Dibromofluoromethane	0.51		0.4950		102	70	130			
Surr: Toluene-d8	0.50		0.4950		101	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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

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

WO#: 2102B82

10-Mar-21

**Client:** ENSOLUM  
**Project:** Cedar Hill CS Feb 2021

Sample ID: <b>2102b82-007amsd</b>		SampType: <b>MSD4</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>						
Client ID: <b>OS-7</b>		Batch ID: <b>58368</b>		RunNo: <b>75617</b>						
Prep Date: <b>2/26/2021</b>		Analysis Date: <b>3/2/2021</b>		SeqNo: <b>2673812</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.025	0.9901	0	85.1	71.1	115	10.3	20	
Toluene	0.94	0.050	0.9901	0	95.2	79.6	132	2.90	20	
Ethylbenzene	0.93	0.050	0.9901	0	94.2	83.8	134	2.29	20	
Xylenes, Total	3.0	0.099	2.970	0	102	82.4	132	8.33	20	
Surr: 1,2-Dichloroethane-d4	0.47		0.4950		95.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.50		0.4950		101	70	130	0	0	
Surr: Dibromofluoromethane	0.48		0.4950		98.0	70	130	0	0	
Surr: Toluene-d8	0.50		0.4950		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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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

Page 15 of 18

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

WO#: 2102B82

10-Mar-21

**Client:** ENSOLUM  
**Project:** Cedar Hill CS Feb 2021

Sample ID: <b>MB-58582</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 7471: Mercury</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58582</b>	RunNo: <b>75799</b>								
Prep Date: <b>3/8/2021</b>	Analysis Date: <b>3/9/2021</b>	SeqNo: <b>2681881</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID: <b>LLCS-58582</b>	SampType: <b>LCSLL</b>	TestCode: <b>EPA Method 7471: Mercury</b>								
Client ID: <b>BatchQC</b>	Batch ID: <b>58582</b>	RunNo: <b>75799</b>								
Prep Date: <b>3/8/2021</b>	Analysis Date: <b>3/9/2021</b>	SeqNo: <b>2681882</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033	0.006660	0	88.8	70	130			

Sample ID: <b>LCS-58582</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 7471: Mercury</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58582</b>	RunNo: <b>75799</b>								
Prep Date: <b>3/8/2021</b>	Analysis Date: <b>3/9/2021</b>	SeqNo: <b>2681883</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	99.6	80	120			

**Qualifiers:**

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

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



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

WO#: 2102B82

10-Mar-21

**Client:** ENSOLUM  
**Project:** Cedar Hill CS Feb 2021

Sample ID: <b>MB-58528</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 6010B: Soil Metals</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58528</b>	RunNo: <b>75774</b>								
Prep Date: <b>3/4/2021</b>	Analysis Date: <b>3/8/2021</b>	SeqNo: <b>2680634</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Lead	ND	0.30								
Selenium	ND	2.5								
Silver	ND	0.25								

Sample ID: <b>LCS-58528</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 6010B: Soil Metals</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58528</b>	RunNo: <b>75774</b>								
Prep Date: <b>3/4/2021</b>	Analysis Date: <b>3/8/2021</b>	SeqNo: <b>2680636</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	2.5	25.00	0	96.0	80	120			
Barium	25	0.10	25.00	0	98.2	80	120			
Cadmium	24	0.10	25.00	0	97.7	80	120			
Chromium	24	0.30	25.00	0	97.5	80	120			
Lead	25	0.30	25.00	0	99.6	80	120			
Selenium	24	2.5	25.00	0	96.7	80	120			
Silver	5.0	0.25	5.000	0	100	80	120			

**Qualifiers:**

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

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

Page 17 of 18

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

WO#: 2102B82

10-Mar-21

**Client:** ENSOLUM  
**Project:** Cedar Hill CS Feb 2021

Sample ID: <b>lcs-58368</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>58368</b>		RunNo: <b>75617</b>							
Prep Date: <b>2/26/2021</b>	Analysis Date: <b>3/2/2021</b>		SeqNo: <b>2673831</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	87.4	70	130			
Surr: BFB	470		500.0		93.7	70	130			

Sample ID: <b>mb-58368</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>58368</b>		RunNo: <b>75617</b>							
Prep Date: <b>2/26/2021</b>	Analysis Date: <b>3/2/2021</b>		SeqNo: <b>2673833</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	480		500.0		96.0	70	130			

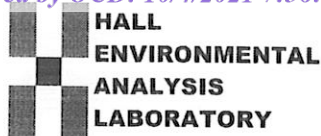
Sample ID: <b>2102b82-006ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>OS-6</b>	Batch ID: <b>58368</b>		RunNo: <b>75617</b>							
Prep Date: <b>2/26/2021</b>	Analysis Date: <b>3/2/2021</b>		SeqNo: <b>2673836</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	24.75	0	89.1	49.2	122			
Surr: BFB	460		495.0		93.0	70	130			

Sample ID: <b>2102b82-006amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>OS-6</b>	Batch ID: <b>58368</b>		RunNo: <b>75617</b>							
Prep Date: <b>2/26/2021</b>	Analysis Date: <b>3/2/2021</b>		SeqNo: <b>2673837</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.9	24.30	0	84.9	49.2	122	6.64	20	
Surr: BFB	470		485.9		95.8	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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



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

## Sample Log-In Check List

Client Name: ENSOLUM

Work Order Number: 2102B82

RcptNo: 1

Received By: Sean Livingston 2/26/2021 8:40:00 AM

Completed By: Sean Livingston 2/26/2021 8:53:20 AM

Reviewed By: JR 2/26/21

*Sean Livingston*  
*Sean Livingston*

### Chain of Custody

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

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐  
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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 ☐

*IO*  
*2/26/21*

# of preserved bottles checked for pH: \_\_\_\_\_  
( $<2$  or  $>12$  unless noted)  
Adjusted? \_\_\_\_\_  
Checked by: \_\_\_\_\_

### Special Handling (if applicable)

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

Person Notified:		Date:	
By Whom:		Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> 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	1.0	Good	Yes			
2	4.9	Good	Yes			
3	0.6	Good	Yes			



# HALL ENVIRONMENTAL ANALYSIS LABORATORY

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

Chain-of-Custody Record									
Client: Ensolum LLC		Turn-Around Time: 3-DAY							
		<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush		Project Name: Cedar Hill CS (Feb 2021)					
Mailing Address: 606 S. Rio Grande Suite A		Project #: See notes							
Aztec, NM 87410		Project Manager: Ksummers							
Phone #: _____									
email or Fax#: Ksummers@ensolum.com									
QA/QC Package:									
<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)									
Accreditation:		<input type="checkbox"/> AZ Compliance							
<input type="checkbox"/> NELAC <input type="checkbox"/> Other _____		Sampler: Reservoir/Landon Daniel							
<input type="checkbox"/> EDD (Type) _____		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		On Ice:					
		# of Coolers: 3		Cooler Temp (including CF): See remarks (°C)					
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.			
2/25/21	1000	S	OS-1	1 x 4oz Jer	COOL	2102372	001		
2/25/21	1005	S	OS-2	1 x 4oz Jer	COOL		002		
2/25/21	1010	S	OS-3	1 x 4oz Jer	COOL		003		
2/25/21	1015	S	OS-4	1 x 4oz Jer	COOL		004		
2/25/21	1020	S	OS-5	1 x 4oz Jer	COOL		005		
2/25/21	1025	S	OS-6	1 x 4oz Jer	COOL		006		
2/25/21	1030	S	OS-7	1 x 4oz Jer	COOL		007		
2/25/21	1035	S	OS-8	1 x 4oz Jer	COOL		008		
Date: 2/25/21		Time: 1151		Relinquished by: [Signature]		Received by: [Signature]		Date: 2/25/21 1151	
Date: 2/25/21		Time: 1754		Relinquished by: [Signature]		Received by: [Signature]		Date: 2/26/21 8:40	

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

March 15, 2021

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: Cedar Hills CS (Feb 2021)

OrderNo.: 2103420

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 6 sample(s) on 3/9/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a white background.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

## Analytical Report

Lab Order 2103420

Date Reported: 3/15/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-9

Project: Cedar Hills CS (Feb 2021)

Collection Date: 3/8/2021 12:10:00 PM

Lab ID: 2103420-001

Matrix: SOIL

Received Date: 3/9/2021 7:51:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/12/2021 3:28:59 AM	58680
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	32	20		mg/Kg	2	3/11/2021 10:16:45 AM	58633
Motor Oil Range Organics (MRO)	1200	98		mg/Kg	2	3/11/2021 10:16:45 AM	58633
Surr: DNOP	104	70-130		%Rec	2	3/11/2021 10:16:45 AM	58633
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/10/2021 11:46:58 AM	58615
Surr: BFB	107	75.3-105	S	%Rec	1	3/10/2021 11:46:58 AM	58615
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	3/10/2021 11:46:58 AM	58615
Toluene	ND	0.049		mg/Kg	1	3/10/2021 11:46:58 AM	58615
Ethylbenzene	ND	0.049		mg/Kg	1	3/10/2021 11:46:58 AM	58615
Xylenes, Total	ND	0.097		mg/Kg	1	3/10/2021 11:46:58 AM	58615
Surr: 4-Bromofluorobenzene	99.7	80-120		%Rec	1	3/10/2021 11:46:58 AM	58615

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

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

Page 1 of 10



## Analytical Report

Lab Order 2103420

Date Reported: 3/15/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-10

Project: Cedar Hills CS (Feb 2021)

Collection Date: 3/8/2021 12:15:00 PM

Lab ID: 2103420-002

Matrix: SOIL

Received Date: 3/9/2021 7:51:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/12/2021 3:41:24 AM	58680
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	18	9.4		mg/Kg	1	3/11/2021 11:43:19 AM	58633
Motor Oil Range Organics (MRO)	570	47		mg/Kg	1	3/11/2021 11:43:19 AM	58633
Surr: DNOP	115	70-130		%Rec	1	3/11/2021 11:43:19 AM	58633
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/10/2021 12:58:07 PM	58615
Surr: BFB	104	75.3-105		%Rec	1	3/10/2021 12:58:07 PM	58615
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	3/10/2021 12:58:07 PM	58615
Toluene	ND	0.048		mg/Kg	1	3/10/2021 12:58:07 PM	58615
Ethylbenzene	ND	0.048		mg/Kg	1	3/10/2021 12:58:07 PM	58615
Xylenes, Total	ND	0.096		mg/Kg	1	3/10/2021 12:58:07 PM	58615
Surr: 4-Bromofluorobenzene	96.5	80-120		%Rec	1	3/10/2021 12:58:07 PM	58615

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

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

Page 2 of 10

## Analytical Report

Lab Order 2103420

Date Reported: 3/15/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-11

Project: Cedar Hills CS (Feb 2021)

Collection Date: 3/8/2021 12:20:00 PM

Lab ID: 2103420-003

Matrix: SOIL

Received Date: 3/9/2021 7:51:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/12/2021 3:53:48 AM	58680
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/11/2021 11:52:58 AM	58633
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/11/2021 11:52:58 AM	58633
Surr: DNOP	110	70-130		%Rec	1	3/11/2021 11:52:58 AM	58633
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/10/2021 2:08:58 PM	58615
Surr: BFB	109	75.3-105	S	%Rec	1	3/10/2021 2:08:58 PM	58615
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	3/10/2021 2:08:58 PM	58615
Toluene	ND	0.048		mg/Kg	1	3/10/2021 2:08:58 PM	58615
Ethylbenzene	ND	0.048		mg/Kg	1	3/10/2021 2:08:58 PM	58615
Xylenes, Total	ND	0.096		mg/Kg	1	3/10/2021 2:08:58 PM	58615
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	3/10/2021 2:08:58 PM	58615

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

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

Page 3 of 10

## Analytical Report

Lab Order 2103420

Date Reported: 3/15/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-12

Project: Cedar Hills CS (Feb 2021)

Collection Date: 3/8/2021 12:25:00 PM

Lab ID: 2103420-004

Matrix: SOIL

Received Date: 3/9/2021 7:51:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/12/2021 4:31:02 AM	58680
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/11/2021 12:02:37 PM	58633
Motor Oil Range Organics (MRO)	81	49		mg/Kg	1	3/11/2021 12:02:37 PM	58633
Surr: DNOP	97.6	70-130		%Rec	1	3/11/2021 12:02:37 PM	58633
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/10/2021 2:32:24 PM	58615
Surr: BFB	109	75.3-105	S	%Rec	1	3/10/2021 2:32:24 PM	58615
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	3/10/2021 2:32:24 PM	58615
Toluene	ND	0.046		mg/Kg	1	3/10/2021 2:32:24 PM	58615
Ethylbenzene	ND	0.046		mg/Kg	1	3/10/2021 2:32:24 PM	58615
Xylenes, Total	ND	0.093		mg/Kg	1	3/10/2021 2:32:24 PM	58615
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	3/10/2021 2:32:24 PM	58615

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

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

Page 4 of 10



## Analytical Report

Lab Order 2103420

Date Reported: 3/15/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-13

Project: Cedar Hills CS (Feb 2021)

Collection Date: 3/8/2021 12:30:00 PM

Lab ID: 2103420-005

Matrix: SOIL

Received Date: 3/9/2021 7:51:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/12/2021 10:51:42 AM	58692
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	11	9.7		mg/Kg	1	3/11/2021 12:12:18 PM	58633
Motor Oil Range Organics (MRO)	230	48		mg/Kg	1	3/11/2021 12:12:18 PM	58633
Surr: DNOP	98.4	70-130		%Rec	1	3/11/2021 12:12:18 PM	58633
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/10/2021 4:06:26 PM	58615
Surr: BFB	109	75.3-105	S	%Rec	1	3/10/2021 4:06:26 PM	58615
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	3/10/2021 4:06:26 PM	58615
Toluene	ND	0.048		mg/Kg	1	3/10/2021 4:06:26 PM	58615
Ethylbenzene	ND	0.048		mg/Kg	1	3/10/2021 4:06:26 PM	58615
Xylenes, Total	ND	0.095		mg/Kg	1	3/10/2021 4:06:26 PM	58615
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	3/10/2021 4:06:26 PM	58615

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

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

## Analytical Report

Lab Order 2103420

Date Reported: 3/15/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-14

Project: Cedar Hills CS (Feb 2021)

Collection Date: 3/8/2021 12:35:00 PM

Lab ID: 2103420-006

Matrix: SOIL

Received Date: 3/9/2021 7:51:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/12/2021 11:04:06 AM	58692
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	17	9.6		mg/Kg	1	3/11/2021 12:22:00 PM	58633
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/11/2021 12:22:00 PM	58633
Surr: DNOP	98.2	70-130		%Rec	1	3/11/2021 12:22:00 PM	58633
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/10/2021 4:30:07 PM	58615
Surr: BFB	107	75.3-105	S	%Rec	1	3/10/2021 4:30:07 PM	58615
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	3/10/2021 4:30:07 PM	58615
Toluene	ND	0.049		mg/Kg	1	3/10/2021 4:30:07 PM	58615
Ethylbenzene	ND	0.049		mg/Kg	1	3/10/2021 4:30:07 PM	58615
Xylenes, Total	ND	0.099		mg/Kg	1	3/10/2021 4:30:07 PM	58615
Surr: 4-Bromofluorobenzene	99.9	80-120		%Rec	1	3/10/2021 4:30:07 PM	58615

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

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

Page 6 of 10

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

WO#: 2103420

15-Mar-21

**Client:** ENSOLUM  
**Project:** Cedar Hills CS (Feb 2021)

Sample ID: <b>MB-58680</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58680</b>	RunNo: <b>75865</b>								
Prep Date: <b>3/11/2021</b>	Analysis Date: <b>3/11/2021</b>	SeqNo: <b>2685093</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-58680</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58680</b>	RunNo: <b>75865</b>								
Prep Date: <b>3/11/2021</b>	Analysis Date: <b>3/11/2021</b>	SeqNo: <b>2685094</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.9	90	110			

Sample ID: <b>MB-58692</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58692</b>	RunNo: <b>75898</b>								
Prep Date: <b>3/12/2021</b>	Analysis Date: <b>3/12/2021</b>	SeqNo: <b>2686243</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-58692</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58692</b>	RunNo: <b>75898</b>								
Prep Date: <b>3/12/2021</b>	Analysis Date: <b>3/12/2021</b>	SeqNo: <b>2686244</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	98.5	90	110			

**Qualifiers:**

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

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

Page 7 of 10



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

WO#: 2103420

15-Mar-21

**Client:** ENSOLUM  
**Project:** Cedar Hills CS (Feb 2021)

Sample ID: <b>MB-58633</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58633</b>	RunNo: <b>75879</b>								
Prep Date: <b>3/10/2021</b>	Analysis Date: <b>3/11/2021</b>	SeqNo: <b>2684700</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		104	70	130			

Sample ID: <b>LCS-58633</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58633</b>	RunNo: <b>75879</b>								
Prep Date: <b>3/10/2021</b>	Analysis Date: <b>3/11/2021</b>	SeqNo: <b>2684702</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.0	68.9	141			
Surr: DNOP	5.3		5.000		107	70	130			

Sample ID: <b>2103420-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>OS-9</b>	Batch ID: <b>58633</b>	RunNo: <b>75879</b>								
Prep Date: <b>3/10/2021</b>	Analysis Date: <b>3/11/2021</b>	SeqNo: <b>2684705</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	18	46.08	31.11	51.7	15	184			
Surr: DNOP	4.9		4.608		107	70	130			

Sample ID: <b>2103420-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>OS-9</b>	Batch ID: <b>58633</b>	RunNo: <b>75879</b>								
Prep Date: <b>3/10/2021</b>	Analysis Date: <b>3/11/2021</b>	SeqNo: <b>2684707</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	19	47.80	31.11	44.3	15	184	1.93	23.9	
Surr: DNOP	5.0		4.780		105	70	130	0	0	

**Qualifiers:**

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

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

Page 8 of 10

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

WO#: 2103420

15-Mar-21

**Client:** ENSOLUM  
**Project:** Cedar Hills CS (Feb 2021)

Sample ID: <b>mb-58615</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58615</b>	RunNo: <b>75824</b>								
Prep Date: <b>3/9/2021</b>	Analysis Date: <b>3/10/2021</b>	SeqNo: <b>2683597</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		104	75.3	105			

Sample ID: <b>lcs-58615</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58615</b>	RunNo: <b>75824</b>								
Prep Date: <b>3/9/2021</b>	Analysis Date: <b>3/10/2021</b>	SeqNo: <b>2683598</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	113	80	120			
Surr: BFB	1200		1000		118	75.3	105			S

Sample ID: <b>2103420-001ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>OS-9</b>	Batch ID: <b>58615</b>	RunNo: <b>75824</b>								
Prep Date: <b>3/9/2021</b>	Analysis Date: <b>3/10/2021</b>	SeqNo: <b>2683603</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	32	5.0	24.98	0	129	61.3	114			S
Surr: BFB	1200		999.0		122	75.3	105			S

Sample ID: <b>2103420-001amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>OS-9</b>	Batch ID: <b>58615</b>	RunNo: <b>75824</b>								
Prep Date: <b>3/9/2021</b>	Analysis Date: <b>3/10/2021</b>	SeqNo: <b>2683604</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	32	4.8	23.97	0	133	61.3	114	0.899	20	S
Surr: BFB	1100		958.8		120	75.3	105	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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

Page 9 of 10

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

WO#: 2103420

15-Mar-21

**Client:** ENSOLUM  
**Project:** Cedar Hills CS (Feb 2021)

Sample ID: <b>mb-58615</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58615</b>	RunNo: <b>75824</b>								
Prep Date: <b>3/9/2021</b>	Analysis Date: <b>3/10/2021</b>	SeqNo: <b>2683621</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.97		1.000		97.2	80	120			

Sample ID: <b>LCS-58615</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58615</b>	RunNo: <b>75824</b>								
Prep Date: <b>3/9/2021</b>	Analysis Date: <b>3/10/2021</b>	SeqNo: <b>2683622</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	89.5	80	120			
Toluene	0.92	0.050	1.000	0	91.9	80	120			
Ethylbenzene	0.91	0.050	1.000	0	91.2	80	120			
Xylenes, Total	2.7	0.10	3.000	0	90.8	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID: <b>2103420-002ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>OS-10</b>	Batch ID: <b>58615</b>	RunNo: <b>75824</b>								
Prep Date: <b>3/9/2021</b>	Analysis Date: <b>3/10/2021</b>	SeqNo: <b>2683625</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.024	0.9606	0	97.0	76.3	120			
Toluene	0.97	0.048	0.9606	0	101	78.5	120			
Ethylbenzene	0.98	0.048	0.9606	0	102	78.1	124			
Xylenes, Total	2.9	0.096	2.882	0	101	79.3	125			
Surr: 4-Bromofluorobenzene	0.97		0.9606		101	80	120			

Sample ID: <b>2103420-002amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>OS-10</b>	Batch ID: <b>58615</b>	RunNo: <b>75824</b>								
Prep Date: <b>3/9/2021</b>	Analysis Date: <b>3/10/2021</b>	SeqNo: <b>2683626</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.024	0.9625	0	93.8	76.3	120	3.09	20	
Toluene	0.95	0.048	0.9625	0	98.3	78.5	120	2.29	20	
Ethylbenzene	0.97	0.048	0.9625	0	100	78.1	124	1.02	20	
Xylenes, Total	2.9	0.096	2.887	0	99.3	79.3	125	1.88	20	
Surr: 4-Bromofluorobenzene	0.98		0.9625		102	80	120	0	0	

**Qualifiers:**

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

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

Page 10 of 10





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

## Sample Log-In Check List

Client Name: **ENSOLUM**Work Order Number: **2103420**RcptNo: **1**Received By: **Cheyenne Cason** **3/9/2021 7:51:00 AM**Completed By: **Cheyenne Cason** **3/9/2021 7:54:53 AM**Reviewed By: **SGL 3/9/21**

### Chain of Custody

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

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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 ☐

*TO*  
# of preserved bottles checked for pH: 3/9/21  
( $<2$  or  $>12$  unless noted)  
Adjusted? \_\_\_\_\_  
Checked by: \_\_\_\_\_

### Special Handling (if applicable)

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

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

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.5	Good				

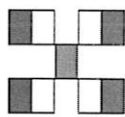
## Chain-of-Custody Record

Client:	Ensolum, LLC	
Mailing Address:	6060 S. Rio Grande Suite A Albuquerque, NM 87410	
Phone #:		
email or Fax#:	Ksummers@ensolum.com	
QA/QC Package:	<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)	
Accreditation:	<input type="checkbox"/> Az Compliance <input type="checkbox"/> NELAC <input type="checkbox"/> Other	
EDD (Type)		

Turn-Around Time:	3-DAY
<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush	
Project Name:	Cedar Hill OS (Feb 2021)
Project #:	See notes
Project Manager:	Ksummers
Sampler:	Deecheilly/Landon Darnell
On Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
# of Coolers:	
Cooler Temp (including CF):	16-21 = 15 (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
3/8/21	1210	S	OS-9	1x 4oz Jar	cool	2103420
3/8/21	1215	S	OS-10	1x 4oz Jar	cool	001
3/8/21	1220	S	OS-11	1x 4oz Jar	cool	002
3/8/21	1225	S	OS-12	1x 4oz Jar	cool	003
3/8/21	1230	S	OS-13	1x 4oz Jar	cool	004
3/8/21	1235	S	OS-14	1x 4oz Jar	cool	005
						006

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
3/8/21	1515	[Signature]	Mustela		3/8/21	1515
3/8/21	1756	[Signature]	Mustela		3/8/21	0751



# HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

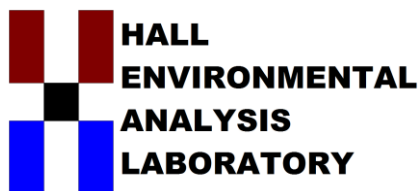
## Analysis Request

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

Remarks:

3-DAY  
TURNAROUND

PM-Tom Long (EPRD)  
Pay Key- GG11580  
Non AFE- N49762



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

March 24, 2021

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: Cedar Hill CS Feb 2021

OrderNo.: 2103A12

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 7 sample(s) on 3/20/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

## Analytical Report

Lab Order 2103A12

Date Reported: 3/24/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-15

Project: Cedar Hill CS Feb 2021

Collection Date: 3/19/2021 10:05:00 AM

Lab ID: 2103A12-001

Matrix: MEOH (SOIL)

Received Date: 3/20/2021 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/21/2021 10:50:51 AM	58868
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	3/20/2021 10:35:00 PM	58867
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	3/20/2021 10:35:00 PM	58867
Surr: DNOP	98.3	70-130		%Rec	1	3/20/2021 10:35:00 PM	58867
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	3.1		mg/Kg	1	3/20/2021 4:16:00 PM	58844
Surr: BFB	90.6	75.3-105		%Rec	1	3/20/2021 4:16:00 PM	58844
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.015		mg/Kg	1	3/20/2021 4:16:00 PM	58844
Toluene	ND	0.031		mg/Kg	1	3/20/2021 4:16:00 PM	58844
Ethylbenzene	ND	0.031		mg/Kg	1	3/20/2021 4:16:00 PM	58844
Xylenes, Total	ND	0.062		mg/Kg	1	3/20/2021 4:16:00 PM	58844
Surr: 4-Bromofluorobenzene	91.7	80-120		%Rec	1	3/20/2021 4:16:00 PM	58844

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

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



## Analytical Report

Lab Order 2103A12

Date Reported: 3/24/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-16

Project: Cedar Hill CS Feb 2021

Collection Date: 3/19/2021 10:10:00 AM

Lab ID: 2103A12-002

Matrix: MEOH (SOIL)

Received Date: 3/20/2021 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/21/2021 11:03:16 AM	58868
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/20/2021 10:48:05 PM	58867
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/20/2021 10:48:05 PM	58867
Surr: DNOP	97.6	70-130		%Rec	1	3/20/2021 10:48:05 PM	58867
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	3.1		mg/Kg	1	3/20/2021 4:36:00 PM	58844
Surr: BFB	95.0	75.3-105		%Rec	1	3/20/2021 4:36:00 PM	58844
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.016		mg/Kg	1	3/20/2021 4:36:00 PM	58844
Toluene	ND	0.031		mg/Kg	1	3/20/2021 4:36:00 PM	58844
Ethylbenzene	ND	0.031		mg/Kg	1	3/20/2021 4:36:00 PM	58844
Xylenes, Total	ND	0.063		mg/Kg	1	3/20/2021 4:36:00 PM	58844
Surr: 4-Bromofluorobenzene	94.6	80-120		%Rec	1	3/20/2021 4:36:00 PM	58844

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

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

## Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 2103A12

Date Reported: 3/24/2021

CLIENT: ENSOLUM

Client Sample ID: OS-17

Project: Cedar Hill CS Feb 2021

Collection Date: 3/19/2021 10:15:00 AM

Lab ID: 2103A12-003

Matrix: MEOH (SOIL)

Received Date: 3/20/2021 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/21/2021 11:15:41 AM	58868
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	3/20/2021 11:01:04 PM	58867
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/20/2021 11:01:04 PM	58867
Surr: DNOP	100	70-130		%Rec	1	3/20/2021 11:01:04 PM	58867
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	3/20/2021 4:56:00 PM	58844
Surr: BFB	89.1	75.3-105		%Rec	1	3/20/2021 4:56:00 PM	58844
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.016		mg/Kg	1	3/20/2021 4:56:00 PM	58844
Toluene	ND	0.032		mg/Kg	1	3/20/2021 4:56:00 PM	58844
Ethylbenzene	ND	0.032		mg/Kg	1	3/20/2021 4:56:00 PM	58844
Xylenes, Total	ND	0.065		mg/Kg	1	3/20/2021 4:56:00 PM	58844
Surr: 4-Bromofluorobenzene	91.1	80-120		%Rec	1	3/20/2021 4:56:00 PM	58844

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

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

## Analytical Report

Lab Order 2103A12

Date Reported: 3/24/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-18

Project: Cedar Hill CS Feb 2021

Collection Date: 3/19/2021 10:20:00 AM

Lab ID: 2103A12-004

Matrix: MEOH (SOIL)

Received Date: 3/20/2021 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/21/2021 11:28:05 AM	58868
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	8.6		mg/Kg	1	3/20/2021 11:14:16 PM	58867
Motor Oil Range Organics (MRO)	68	43		mg/Kg	1	3/20/2021 11:14:16 PM	58867
Surr: DNOP	106	70-130		%Rec	1	3/20/2021 11:14:16 PM	58867
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	3/20/2021 5:16:00 PM	58844
Surr: BFB	88.2	75.3-105		%Rec	1	3/20/2021 5:16:00 PM	58844
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.016		mg/Kg	1	3/20/2021 5:16:00 PM	58844
Toluene	ND	0.032		mg/Kg	1	3/20/2021 5:16:00 PM	58844
Ethylbenzene	ND	0.032		mg/Kg	1	3/20/2021 5:16:00 PM	58844
Xylenes, Total	ND	0.065		mg/Kg	1	3/20/2021 5:16:00 PM	58844
Surr: 4-Bromofluorobenzene	89.4	80-120		%Rec	1	3/20/2021 5:16:00 PM	58844

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

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

## Analytical Report

Lab Order 2103A12

Date Reported: 3/24/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-19

Project: Cedar Hill CS Feb 2021

Collection Date: 3/19/2021 10:25:00 AM

Lab ID: 2103A12-005

Matrix: MEOH (SOIL)

Received Date: 3/20/2021 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	59		mg/Kg	20	3/21/2021 11:40:29 AM	58868
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/22/2021 9:44:24 AM	58867
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/22/2021 9:44:24 AM	58867
Surr: DNOP	96.0	70-130		%Rec	1	3/22/2021 9:44:24 AM	58867
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	3/20/2021 5:36:00 PM	58844
Surr: BFB	92.5	75.3-105		%Rec	1	3/20/2021 5:36:00 PM	58844
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.019		mg/Kg	1	3/20/2021 5:36:00 PM	58844
Toluene	ND	0.037		mg/Kg	1	3/20/2021 5:36:00 PM	58844
Ethylbenzene	ND	0.037		mg/Kg	1	3/20/2021 5:36:00 PM	58844
Xylenes, Total	ND	0.075		mg/Kg	1	3/20/2021 5:36:00 PM	58844
Surr: 4-Bromofluorobenzene	92.1	80-120		%Rec	1	3/20/2021 5:36:00 PM	58844

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

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



## Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 2103A12

Date Reported: 3/24/2021

CLIENT: ENSOLUM

Client Sample ID: OS-20

Project: Cedar Hill CS Feb 2021

Collection Date: 3/19/2021 10:30:00 AM

Lab ID: 2103A12-006

Matrix: MEOH (SOIL)

Received Date: 3/20/2021 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/21/2021 11:52:53 AM	58868
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/20/2021 11:40:09 PM	58867
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/20/2021 11:40:09 PM	58867
Surr: DNOP	104	70-130		%Rec	1	3/20/2021 11:40:09 PM	58867
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	3/20/2021 5:56:00 PM	58844
Surr: BFB	88.8	75.3-105		%Rec	1	3/20/2021 5:56:00 PM	58844
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.020		mg/Kg	1	3/20/2021 5:56:00 PM	58844
Toluene	ND	0.040		mg/Kg	1	3/20/2021 5:56:00 PM	58844
Ethylbenzene	ND	0.040		mg/Kg	1	3/20/2021 5:56:00 PM	58844
Xylenes, Total	ND	0.081		mg/Kg	1	3/20/2021 5:56:00 PM	58844
Surr: 4-Bromofluorobenzene	89.4	80-120		%Rec	1	3/20/2021 5:56:00 PM	58844

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

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

## Analytical Report

Lab Order 2103A12

Date Reported: 3/24/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-21

Project: Cedar Hill CS Feb 2021

Collection Date: 3/19/2021 10:35:00 AM

Lab ID: 2103A12-007

Matrix: MEOH (SOIL)

Received Date: 3/20/2021 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/21/2021 12:05:18 PM	58868
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/20/2021 11:52:59 PM	58867
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/20/2021 11:52:59 PM	58867
Surr: DNOP	106	70-130		%Rec	1	3/20/2021 11:52:59 PM	58867
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	3/20/2021 6:15:00 PM	58844
Surr: BFB	91.8	75.3-105		%Rec	1	3/20/2021 6:15:00 PM	58844
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.019		mg/Kg	1	3/20/2021 6:15:00 PM	58844
Toluene	ND	0.038		mg/Kg	1	3/20/2021 6:15:00 PM	58844
Ethylbenzene	ND	0.038		mg/Kg	1	3/20/2021 6:15:00 PM	58844
Xylenes, Total	ND	0.075		mg/Kg	1	3/20/2021 6:15:00 PM	58844
Surr: 4-Bromofluorobenzene	89.6	80-120		%Rec	1	3/20/2021 6:15:00 PM	58844

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

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

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

WO#: 2103A12

24-Mar-21

**Client:** ENSOLUM**Project:** Cedar Hill CS Feb 2021

Sample ID: <b>MB-58868</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58868</b>	RunNo: <b>76089</b>								
Prep Date: <b>3/21/2021</b>	Analysis Date: <b>3/21/2021</b>	SeqNo: <b>2693797</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-58868</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58868</b>	RunNo: <b>76089</b>								
Prep Date: <b>3/21/2021</b>	Analysis Date: <b>3/21/2021</b>	SeqNo: <b>2693798</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.3	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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

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

WO#: 2103A12

24-Mar-21

**Client:** ENSOLUM  
**Project:** Cedar Hill CS Feb 2021

Sample ID: <b>MB-58867</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58867</b>	RunNo: <b>76096</b>								
Prep Date: <b>3/20/2021</b>	Analysis Date: <b>3/20/2021</b>	SeqNo: <b>2694152</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		101	70	130			

Sample ID: <b>LCS-58867</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58867</b>	RunNo: <b>76096</b>								
Prep Date: <b>3/20/2021</b>	Analysis Date: <b>3/20/2021</b>	SeqNo: <b>2694155</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.4	68.9	141			
Surr: DNOP	4.9		5.000		98.0	70	130			

**Qualifiers:**

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



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

WO#: 2103A12

24-Mar-21

**Client:** ENSOLUM**Project:** Cedar Hill CS Feb 2021

Sample ID: <b>LCS-58844</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>58844</b>		RunNo: <b>76105</b>							
Prep Date: <b>3/19/2021</b>	Analysis Date: <b>3/20/2021</b>		SeqNo: <b>2694523</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	109	80	120			
Surr: BFB	1000		1000		102	75.3	105			

Sample ID: <b>MB-58844</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>58844</b>		RunNo: <b>76105</b>							
Prep Date: <b>3/19/2021</b>	Analysis Date: <b>3/20/2021</b>		SeqNo: <b>2694524</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	870		1000		87.4	75.3	105			

Sample ID: <b>LCS-58732</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>58732</b>		RunNo: <b>76105</b>							
Prep Date: <b>3/15/2021</b>	Analysis Date: <b>3/20/2021</b>		SeqNo: <b>2694546</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		106	75.3	105			S

Sample ID: <b>MB-58732</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>58732</b>		RunNo: <b>76105</b>							
Prep Date: <b>3/15/2021</b>	Analysis Date: <b>3/20/2021</b>		SeqNo: <b>2694548</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		93.8	75.3	105			

Sample ID: <b>LCS-58803</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>58803</b>		RunNo: <b>76105</b>							
Prep Date: <b>3/17/2021</b>	Analysis Date: <b>3/21/2021</b>		SeqNo: <b>2694555</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		104	75.3	105			

Sample ID: <b>MB-58803</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>58803</b>		RunNo: <b>76105</b>							
Prep Date: <b>3/17/2021</b>	Analysis Date: <b>3/21/2021</b>		SeqNo: <b>2694556</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	930		1000		93.5	75.3	105			

**Qualifiers:**

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

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

Page 10 of 12

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

WO#: 2103A12

24-Mar-21

**Client:** ENSOLUM**Project:** Cedar Hill CS Feb 2021

Sample ID: <b>LCS-58844</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>58844</b>		RunNo: <b>76105</b>							
Prep Date: <b>3/19/2021</b>	Analysis Date: <b>3/20/2021</b>		SeqNo: <b>2694569</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	91.5	80	120			
Toluene	0.91	0.050	1.000	0	91.0	80	120			
Ethylbenzene	0.91	0.050	1.000	0	90.9	80	120			
Xylenes, Total	2.7	0.10	3.000	0	90.0	80	120			
Surr: 4-Bromofluorobenzene	0.93		1.000		93.0	80	120			

Sample ID: <b>MB-58844</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>58844</b>		RunNo: <b>76105</b>							
Prep Date: <b>3/19/2021</b>	Analysis Date: <b>3/20/2021</b>		SeqNo: <b>2694570</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.89		1.000		89.5	80	120			

Sample ID: <b>LCS-58732</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>58732</b>		RunNo: <b>76105</b>							
Prep Date: <b>3/15/2021</b>	Analysis Date: <b>3/20/2021</b>		SeqNo: <b>2694592</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.92		1.000		92.1	80	120			

Sample ID: <b>MB-58732</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>58732</b>		RunNo: <b>76105</b>							
Prep Date: <b>3/15/2021</b>	Analysis Date: <b>3/20/2021</b>		SeqNo: <b>2694593</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.94		1.000		93.6	80	120			

Sample ID: <b>LCS-58803</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>58803</b>		RunNo: <b>76105</b>							
Prep Date: <b>3/17/2021</b>	Analysis Date: <b>3/21/2021</b>		SeqNo: <b>2694598</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.95		1.000		94.7	80	120			

**Qualifiers:**

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

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

Page 11 of 12

QC SUMMARY REPORT  
Hall Environmental Analysis Laboratory, Inc.

WO#: 2103A12  
24-Mar-21

Client: ENSOLUM  
Project: Cedar Hill CS Feb 2021

Sample ID: MB-58803	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 58803	RunNo: 76105								
Prep Date: 3/17/2021	Analysis Date: 3/21/2021	SeqNo: 2694599			Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.93		1.000		92.8	80	120			

Qualifiers:

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



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

## Sample Log-In Check List

Client Name: ENSOLUM

Work Order Number: 2103A12

RcptNo: 1

Received By: Sean Livingston

3/20/2021 8:50:00 AM

Completed By: Sean Livingston

3/20/2021 9:33:53 AM

Reviewed By: *ML 03/20/2021**SG-L**SG-L*Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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: *SG-L 3/20/21*

Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.1	Good				
2	0.2	Good				



## Chain-of-Custody Record

Client: Ensolium, LLC  
 Mailing Address: 6016 S. Rio Grande, Suite A  
Artes, NM 87410  
 Phone #: \_\_\_\_\_  
 email or Fax#: Ksummers@ensolium.com  
 QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)  
 Accreditation: ☐ AZ Compliance ☐ NELAC ☐ Other \_\_\_\_\_  
☐ EDD (Type) \_\_\_\_\_

Turn-Around Time: same day  
☐ Standard ☒ Rush  
 Project Name: Cedar Hill CS (Feb 2021)  
 Project #: see notes

Project Manager: Ksummers  
 Sampler: Rouchilly / Jordan Darnell  
 On Ice: ☒ Yes ☐ No  
 # of Coolers: 2

Cooler Temp (including CF): 0.3-0.2 = 0.1 (°C)		HEAL No.	
Container Type and #		Preservative Type	
3/19/21	1005	S	OS-15
3/19/21	1010	S	OS-16
3/19/21	1015	S	OS-17
3/19/21	1020	S	OS-18
3/19/21	1025	S	OS-19
3/19/21	1030	S	OS-20
3/19/21	1035	S	OS-21

Date: 3/19/21 Time: 1517 Relinquished by: [Signature]  
 Date: 3/19/21 Time: 1756 Relinquished by: [Signature]



# HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

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

Remarks: same day  
PM - Tom Long (EPRD)  
Pay Key - 6611580  
Non AFE - N497462



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

March 25, 2021

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Cedar Hill CS Feb 2021

OrderNo.: 2103B11

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 3/24/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

## Analytical Report

Lab Order 2103B11

Date Reported: 3/25/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-1R1

Project: Cedar Hill CS Feb 2021

Collection Date: 3/23/2021 12:00:00 PM

Lab ID: 2103B11-001

Matrix: MEOH (SOIL)

Received Date: 3/24/2021 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/24/2021 3:58:34 PM	58931
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	12	9.3		mg/Kg	1	3/24/2021 11:32:52 AM	58924
Motor Oil Range Organics (MRO)	160	46		mg/Kg	1	3/24/2021 11:32:52 AM	58924
Surr: DNOP	109	70-130		%Rec	1	3/24/2021 11:32:52 AM	58924
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	3/24/2021 12:57:00 PM	58894
Surr: BFB	88.3	75.3-105		%Rec	1	3/24/2021 12:57:00 PM	58894
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.020		mg/Kg	1	3/24/2021 12:57:00 PM	58894
Toluene	ND	0.039		mg/Kg	1	3/24/2021 12:57:00 PM	58894
Ethylbenzene	ND	0.039		mg/Kg	1	3/24/2021 12:57:00 PM	58894
Xylenes, Total	ND	0.079		mg/Kg	1	3/24/2021 12:57:00 PM	58894
Surr: 4-Bromofluorobenzene	82.8	80-120		%Rec	1	3/24/2021 12:57:00 PM	58894

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

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

## Analytical Report

Lab Order 2103B11

Date Reported: 3/25/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-4R1

Project: Cedar Hill CS Feb 2021

Collection Date: 3/23/2021 12:05:00 PM

Lab ID: 2103B11-002

Matrix: MEOH (SOIL)

Received Date: 3/24/2021 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/24/2021 4:10:59 PM	58931
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/24/2021 1:21:39 PM	58924
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/24/2021 1:21:39 PM	58924
Surr: DNOP	99.4	70-130		%Rec	1	3/24/2021 1:21:39 PM	58924
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	3/24/2021 1:16:00 PM	58894
Surr: BFB	89.9	75.3-105		%Rec	1	3/24/2021 1:16:00 PM	58894
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.017		mg/Kg	1	3/24/2021 1:16:00 PM	58894
Toluene	ND	0.035		mg/Kg	1	3/24/2021 1:16:00 PM	58894
Ethylbenzene	ND	0.035		mg/Kg	1	3/24/2021 1:16:00 PM	58894
Xylenes, Total	ND	0.069		mg/Kg	1	3/24/2021 1:16:00 PM	58894
Surr: 4-Bromofluorobenzene	83.7	80-120		%Rec	1	3/24/2021 1:16:00 PM	58894

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

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



## Analytical Report

Lab Order 2103B11

Date Reported: 3/25/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-9R1

Project: Cedar Hill CS Feb 2021

Collection Date: 3/23/2021 12:10:00 PM

Lab ID: 2103B11-003

Matrix: MEOH (SOIL)

Received Date: 3/24/2021 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/24/2021 4:23:23 PM	58931
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/24/2021 11:56:52 AM	58924
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/24/2021 11:56:52 AM	58924
Surr: DNOP	96.2	70-130		%Rec	1	3/24/2021 11:56:52 AM	58924
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	3/24/2021 1:36:00 PM	58894
Surr: BFB	91.7	75.3-105		%Rec	1	3/24/2021 1:36:00 PM	58894
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.020		mg/Kg	1	3/24/2021 1:36:00 PM	58894
Toluene	ND	0.039		mg/Kg	1	3/24/2021 1:36:00 PM	58894
Ethylbenzene	ND	0.039		mg/Kg	1	3/24/2021 1:36:00 PM	58894
Xylenes, Total	ND	0.079		mg/Kg	1	3/24/2021 1:36:00 PM	58894
Surr: 4-Bromofluorobenzene	83.7	80-120		%Rec	1	3/24/2021 1:36:00 PM	58894

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

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

## Analytical Report

Lab Order 2103B11

Date Reported: 3/25/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-10R1

Project: Cedar Hill CS Feb 2021

Collection Date: 3/23/2021 12:15:00 PM

Lab ID: 2103B11-004

Matrix: MEOH (SOIL)

Received Date: 3/24/2021 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	61		mg/Kg	20	3/24/2021 4:35:48 PM	58931
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/24/2021 12:33:21 PM	58924
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/24/2021 12:33:21 PM	58924
Surr: DNOP	99.5	70-130		%Rec	1	3/24/2021 12:33:21 PM	58924
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	3/24/2021 1:56:00 PM	58894
Surr: BFB	89.9	75.3-105		%Rec	1	3/24/2021 1:56:00 PM	58894
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.018		mg/Kg	1	3/24/2021 1:56:00 PM	58894
Toluene	ND	0.036		mg/Kg	1	3/24/2021 1:56:00 PM	58894
Ethylbenzene	ND	0.036		mg/Kg	1	3/24/2021 1:56:00 PM	58894
Xylenes, Total	ND	0.072		mg/Kg	1	3/24/2021 1:56:00 PM	58894
Surr: 4-Bromofluorobenzene	84.6	80-120		%Rec	1	3/24/2021 1:56:00 PM	58894

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

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

## Analytical Report

Lab Order 2103B11

Date Reported: 3/25/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-13R1

Project: Cedar Hill CS Feb 2021

Collection Date: 3/23/2021 12:20:00 PM

Lab ID: 2103B11-005

Matrix: MEOH (SOIL)

Received Date: 3/24/2021 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/24/2021 4:48:12 PM	58931
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	3/24/2021 12:45:36 PM	58924
Motor Oil Range Organics (MRO)	71	46		mg/Kg	1	3/24/2021 12:45:36 PM	58924
Surr: DNOP	92.1	70-130		%Rec	1	3/24/2021 12:45:36 PM	58924
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	3/24/2021 2:16:00 PM	58894
Surr: BFB	92.2	75.3-105		%Rec	1	3/24/2021 2:16:00 PM	58894
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.020		mg/Kg	1	3/24/2021 2:16:00 PM	58894
Toluene	ND	0.040		mg/Kg	1	3/24/2021 2:16:00 PM	58894
Ethylbenzene	ND	0.040		mg/Kg	1	3/24/2021 2:16:00 PM	58894
Xylenes, Total	ND	0.080		mg/Kg	1	3/24/2021 2:16:00 PM	58894
Surr: 4-Bromofluorobenzene	86.9	80-120		%Rec	1	3/24/2021 2:16:00 PM	58894

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

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

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

WO#: 2103B11

25-Mar-21

**Client:** ENSOLUM  
**Project:** Cedar Hill CS Feb 2021

Sample ID: <b>MB-58931</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58931</b>	RunNo: <b>76172</b>								
Prep Date: <b>3/24/2021</b>	Analysis Date: <b>3/24/2021</b>	SeqNo: <b>2697723</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-58931</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58931</b>	RunNo: <b>76172</b>								
Prep Date: <b>3/24/2021</b>	Analysis Date: <b>3/24/2021</b>	SeqNo: <b>2697724</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.3	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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



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

WO#: 2103B11

25-Mar-21

**Client:** ENSOLUM  
**Project:** Cedar Hill CS Feb 2021

Sample ID: <b>MB-58924</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58924</b>	RunNo: <b>76162</b>								
Prep Date: <b>3/24/2021</b>	Analysis Date: <b>3/24/2021</b>	SeqNo: <b>2696655</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		102	70	130			

Sample ID: <b>LCS-58924</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58924</b>	RunNo: <b>76162</b>								
Prep Date: <b>3/24/2021</b>	Analysis Date: <b>3/24/2021</b>	SeqNo: <b>2696656</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	103	68.9	141			
Surr: DNOP	5.0		5.000		99.5	70	130			

Sample ID: <b>MB-58884</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58884</b>	RunNo: <b>76175</b>								
Prep Date: <b>3/23/2021</b>	Analysis Date: <b>3/24/2021</b>	SeqNo: <b>2696980</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		102	70	130			

Sample ID: <b>LCS-58884</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58884</b>	RunNo: <b>76175</b>								
Prep Date: <b>3/23/2021</b>	Analysis Date: <b>3/24/2021</b>	SeqNo: <b>2696983</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		87.8	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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

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

WO#: 2103B11

25-Mar-21

**Client:** ENSOLUM  
**Project:** Cedar Hill CS Feb 2021

Sample ID: <b>lcs-58894</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>58894</b>		RunNo: <b>76179</b>							
Prep Date: <b>3/22/2021</b>	Analysis Date: <b>3/24/2021</b>		SeqNo: <b>2697092</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	111	80	120			
Surr: BFB	1100		1000		107	75.3	105			S

Sample ID: <b>mb-58894</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>58894</b>		RunNo: <b>76179</b>							
Prep Date: <b>3/22/2021</b>	Analysis Date: <b>3/24/2021</b>		SeqNo: <b>2697093</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		93.8	75.3	105			

**Qualifiers:**

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

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

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

WO#: 2103B11

25-Mar-21

**Client:** ENSOLUM  
**Project:** Cedar Hill CS Feb 2021

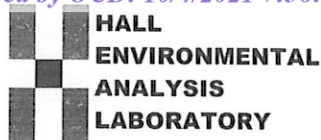
Sample ID: <b>lcs-58894</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>58894</b>			RunNo: <b>76179</b>						
Prep Date: <b>3/22/2021</b>	Analysis Date: <b>3/24/2021</b>			SeqNo: <b>2697104</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	1.000	0	85.1	80	120			
Toluene	0.85	0.050	1.000	0	85.0	80	120			
Ethylbenzene	0.85	0.050	1.000	0	85.1	80	120			
Xylenes, Total	2.5	0.10	3.000	0	84.8	80	120			
Surr: 4-Bromofluorobenzene	0.89		1.000		89.3	80	120			

Sample ID: <b>mb-58894</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>PBS</b>	Batch ID: <b>58894</b>			RunNo: <b>76179</b>						
Prep Date: <b>3/22/2021</b>	Analysis Date: <b>3/24/2021</b>			SeqNo: <b>2697105</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.89		1.000		88.6	80	120			

**Qualifiers:**

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

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



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

## Sample Log-In Check List

Client Name: **ENSOLUM**Work Order Number: **2103B11**

RcptNo: 1

Received By: **Scott Anderson** 3/24/2021 9:10:00 AMCompleted By: **Desiree Dominguez** 3/24/2021 9:27:49 AMReviewed By: **JO** 3/24/21

### Chain of Custody

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

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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: **ENM 3/24/21**

### Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.8	Good	Yes			







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

April 01, 2021

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: Cedar Hill CS Feb 2021

OrderNo.: 2103D35

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/30/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

## Analytical Report

Lab Order 2103D35

Date Reported: 4/1/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-1R2E

Project: Cedar Hill CS Feb 2021

Collection Date: 3/29/2021 11:30:00 AM

Lab ID: 2103D35-001

Matrix: MEOH (SOIL)

Received Date: 3/30/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/30/2021 9:52:32 AM	59055
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	3/30/2021 11:27:33 AM	59052
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	3/30/2021 11:27:33 AM	59052
Surr: DNOP	93.3	70-130		%Rec	1	3/30/2021 11:27:33 AM	59052
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	3/30/2021 8:14:12 AM	G76321
Surr: BFB	102	75.3-105		%Rec	1	3/30/2021 8:14:12 AM	G76321
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.018		mg/Kg	1	3/30/2021 8:14:12 AM	B76321
Toluene	ND	0.036		mg/Kg	1	3/30/2021 8:14:12 AM	B76321
Ethylbenzene	ND	0.036		mg/Kg	1	3/30/2021 8:14:12 AM	B76321
Xylenes, Total	ND	0.071		mg/Kg	1	3/30/2021 8:14:12 AM	B76321
Surr: 4-Bromofluorobenzene	98.4	80-120		%Rec	1	3/30/2021 8:14:12 AM	B76321

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

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

Page 1 of 6

## Analytical Report

Lab Order 2103D35

Date Reported: 4/1/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: OS-1R2W

Project: Cedar Hill CS Feb 2021

Collection Date: 3/29/2021 11:35:00 AM

Lab ID: 2103D35-002

Matrix: MEOH (SOIL)

Received Date: 3/30/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	3/30/2021 10:04:57 AM	59055
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	3/30/2021 11:37:09 AM	59052
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	3/30/2021 11:37:09 AM	59052
Surr: DNOP	92.7	70-130		%Rec	1	3/30/2021 11:37:09 AM	59052
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.1		mg/Kg	1	3/30/2021 8:37:51 AM	G76321
Surr: BFB	99.7	75.3-105		%Rec	1	3/30/2021 8:37:51 AM	G76321
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.016		mg/Kg	1	3/30/2021 8:37:51 AM	B76321
Toluene	ND	0.031		mg/Kg	1	3/30/2021 8:37:51 AM	B76321
Ethylbenzene	ND	0.031		mg/Kg	1	3/30/2021 8:37:51 AM	B76321
Xylenes, Total	ND	0.063		mg/Kg	1	3/30/2021 8:37:51 AM	B76321
Surr: 4-Bromofluorobenzene	97.0	80-120		%Rec	1	3/30/2021 8:37:51 AM	B76321

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

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



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

WO#: 2103D35

01-Apr-21

**Client:** ENSOLUM  
**Project:** Cedar Hill CS Feb 2021

Sample ID: <b>MB-59055</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>59055</b>	RunNo: <b>76305</b>								
Prep Date: <b>3/30/2021</b>	Analysis Date: <b>3/30/2021</b>	SeqNo: <b>2703352</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-59055</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>59055</b>	RunNo: <b>76305</b>								
Prep Date: <b>3/30/2021</b>	Analysis Date: <b>3/30/2021</b>	SeqNo: <b>2703353</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.3	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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

Page 3 of 6

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

WO#: 2103D35

01-Apr-21

**Client:** ENSOLUM  
**Project:** Cedar Hill CS Feb 2021

Sample ID: <b>MB-59052</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>59052</b>	RunNo: <b>76317</b>								
Prep Date: <b>3/30/2021</b>	Analysis Date: <b>3/30/2021</b>	SeqNo: <b>2702193</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		97.0	70	130			

Sample ID: <b>LCS-59052</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>59052</b>	RunNo: <b>76317</b>								
Prep Date: <b>3/30/2021</b>	Analysis Date: <b>3/30/2021</b>	SeqNo: <b>2702194</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.4	68.9	141			
Surr: DNOP	4.9		5.000		98.2	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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

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

WO#: 2103D35

01-Apr-21

**Client:** ENSOLUM  
**Project:** Cedar Hill CS Feb 2021

Sample ID: <b>mb</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>G76321</b>	RunNo: <b>76321</b>								
Prep Date:	Analysis Date: <b>3/30/2021</b>	SeqNo: <b>2702617</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		104	75.3	105			

Sample ID: <b>2.5ug gro lcs</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>G76321</b>	RunNo: <b>76321</b>								
Prep Date:	Analysis Date: <b>3/30/2021</b>	SeqNo: <b>2702618</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.4	80	120			
Surr: BFB	1100		1000		110	75.3	105			S

Sample ID: <b>2103d35-001ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>OS-1R2E</b>	Batch ID: <b>G76321</b>	RunNo: <b>76321</b>								
Prep Date:	Analysis Date: <b>3/30/2021</b>	SeqNo: <b>2702631</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	17	3.6	17.79	0	97.1	61.3	114			
Surr: BFB	800		711.7		112	75.3	105			S

Sample ID: <b>2103d35-001amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>OS-1R2E</b>	Batch ID: <b>G76321</b>	RunNo: <b>76321</b>								
Prep Date:	Analysis Date: <b>3/30/2021</b>	SeqNo: <b>2702632</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	3.6	17.79	0	102	61.3	114	5.33	20	
Surr: BFB	820		711.7		115	75.3	105	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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

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

WO#: 2103D35

01-Apr-21

**Client:** ENSOLUM**Project:** Cedar Hill CS Feb 2021

Sample ID: <b>mb</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>PBS</b>	Batch ID: <b>B76321</b>			RunNo: <b>76321</b>						
Prep Date:	Analysis Date: <b>3/30/2021</b>			SeqNo: <b>2702649</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		99.8	80	120			

Sample ID: <b>100ng btex lcs</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>B76321</b>			RunNo: <b>76321</b>						
Prep Date:	Analysis Date: <b>3/30/2021</b>			SeqNo: <b>2702650</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	96.6	80	120			
Toluene	0.98	0.050	1.000	0	98.5	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.1	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.6	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Sample ID: <b>2103d35-002ams</b>	SampType: <b>MS</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>OS-1R2W</b>	Batch ID: <b>B76321</b>			RunNo: <b>76321</b>						
Prep Date:	Analysis Date: <b>3/30/2021</b>			SeqNo: <b>2702663</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.60	0.016	0.6266	0	95.9	76.3	120			
Toluene	0.61	0.031	0.6266	0	97.5	78.5	120			
Ethylbenzene	0.60	0.031	0.6266	0	96.4	78.1	124			
Xylenes, Total	1.8	0.063	1.880	0	96.2	79.3	125			
Surr: 4-Bromofluorobenzene	0.64		0.6266		102	80	120			

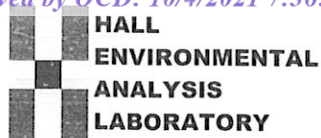
Sample ID: <b>2103d35-002amsd</b>	SampType: <b>MSD</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>OS-1R2W</b>	Batch ID: <b>B76321</b>			RunNo: <b>76321</b>						
Prep Date:	Analysis Date: <b>3/30/2021</b>			SeqNo: <b>2702664</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.60	0.016	0.6266	0	95.4	76.3	120	0.491	20	
Toluene	0.60	0.031	0.6266	0	96.4	78.5	120	1.10	20	
Ethylbenzene	0.60	0.031	0.6266	0	95.6	78.1	124	0.854	20	
Xylenes, Total	1.8	0.063	1.880	0	95.4	79.3	125	0.852	20	
Surr: 4-Bromofluorobenzene	0.65		0.6266		104	80	120	0	0	

**Qualifiers:**

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

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





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

## Sample Log-In Check List

Client Name: ENSOLUM

Work Order Number: 2103D35

RcptNo: 1

Received By: Juan Rojas

3/30/2021 8:00:00 AM

Completed By: Sean Livingston

3/30/2021 8:10:46 AM

Reviewed By: ENM

3/30/21

### Chain of Custody

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

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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 3/30/21

### 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	0.8	Good				

# HALL ENVIRONMENTAL ANALYSIS LABORATORY

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

Chain-of-Custody Record									
Client: Ensolum LLC		Turn-Around Time: <u>same day</u>							
		<input type="checkbox"/> Standard		<input checked="" type="checkbox"/> Rush					
Mailing Address: 600 S. Rio Grande Suite A		Project Name: Cedar Hill CS (Feb 2021)							
Aztec, NM 87410		Project #: see notes							
Phone #: _____		Project Manager: K Summers							
email or Fax#: Ksummers@ensolum.com									
QA/QC Package:									
<input type="checkbox"/> Standard		<input type="checkbox"/> Level 4 (Full Validation)							
Accreditation: <input type="checkbox"/> Az Compliance		Sampler: <u>POorchilly</u>							
<input type="checkbox"/> NELAC		<input type="checkbox"/> Other _____		On Ice: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
<input type="checkbox"/> EDD (Type) _____		# of Coolers: <u>1</u>							
		Cooler Temp (including CF): <u>0.8-0.0-0.8</u> (°C)							
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.			
3/29/21	1130	S	OS-1R2E	1x40 Jar	COOL	001			
3/29/21	1135	S	OS-1R2W	1x40 Jar	COOL	002			
Date:	Time:	Relinquished by:		Received by:		Via:	Date	Time	
3/29/21	1423	[Signature]		Christa Jara			3/29/21	1423	
Date:	Time:	Relinquished by:		Received by:		Via:	Date	Time	
3/29/21	1552	[Signature]		[Signature]			3/30/21	8:00	

necessary, samples submitted to Hail 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 53611

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 53611
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	5/10/2022