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

Date Release Discovered: 10/14/2016

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

# **Release Notification**

# **Responsible Party**

Responsible Party: Enterprise Field Se	ervices, LLC	OGRID: <b>241</b> 0	602			
Contact Name: Thomas Long		Contact Tele	Contact Telephone: 505-599-2286			
Contact email:tjlong@eprod.com		Incident # (assigned by OCD) #) nAB1629934570				
Contact mailing address: 614 Reilly Av 87401	e, Farmington, NM	-				
	Location of F	Release So	urce			
Latitude <u>32.1340004</u>	Longitude <b>-1</b>	04.046157	NAD 83 in decimal degrees to 5 decimal places)			
Site Name: Pipeline ROW 1002			Site Type Natural Gas Processing			

Plant

Serial # (if applicable) N/A

Unit Letter	Section	Township	Range	County
D	13	25S	28F	Eddy

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☐ Private (Name: Henry McDonald )

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below) Crude Oil Volume Released (bbls) Volume Recovered (bbls) ☐ Produced Water Volume Released (bbls) Volume Recovered (bbls) Yes No Is the concentration of dissolved chloride in the produced water >10,000 mg/l? Volume Released (bbls): 1-2 BBLS Volume Recovered (bbls): None Natural Gas Volume Released (Mcf): 83 MCF Volume Recovered (Mcf): None Other (describe) Volume/Weight Released (provide units) Volume/Weight Recovered (provide units)

Cause of Release: On October 14, 2016, Enterprise has a release of natural gas and natural gas liquids form the 1002 pipeline. No fire nor injuries occurred. No emergency service responded. From October 14, 2016, through October 31, 2016, Enterprise initiated remediation activities with Talon/LPE providing third party sampling and report preparation. Talon/LPE prepared a Closure Report, dated November 11, 2016, for submittal to the New Mexico EMNRD OCD which was subsequently rejected. From November 28, 2023, to February 13, 2024, Enterprise initiated additional investigation/remediation activities with Ensolum, LLC providing third party sampling and report preparation. A small volume of soil exceeding NMOCD remediation standards was identified during the secondary investigation. 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 it	ems must be included in the closure report.
A scaled site and sampling diagram as described in 19.15.29.1	1 NMAC
Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office
☐ Laboratory analyses of final sampling (Note: appropriate ODC	District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and ren human health or the environment. In addition, OCD acceptance of a compliance with any other federal, state, or local laws and/or regula restore, reclaim, and re-vegetate the impacted surface area to the cor accordance with 19.15.29.13 NMAC including notification to the Or	nediate contamination that pose a threat to groundwater, surface water, a C-141 report does not relieve the operator of responsibility for tions. The responsible party acknowledges they must substantially notitions that existed prior to the release or their final land use in CD when reclamation and re-vegetation are complete.  Citle: Senior Environmental Scientist
email: tjlong@eprod.com Tele	
OCD Only	
Received by:	Date:
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations.
Closure Approved by:	Date:
Printed Name:	Title:



### **REVISED CLOSURE REPORT**

Property:

Pipeline ROW, 1002

32.134004° N, 104.046157° W
Unit D, S13 T25S, R28E
Eddy County, New Mexico
NMOCD Incident ID: nAB1629934570

Ensolum Project No. 03B1226313

March 1, 2024

Prepared for:

Enterprise Field Services LLC PO Box 4324 Houston, TX 77210

**Attn: Thomas Long** 

Prepared by:

Beaux Jennings

Project Manager

Senior Project Manager



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SOIL SAMPLING PROGRAM	3
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	1.1 SITE DESCRIPTION & BACKGROUND  1.2 PROJECT OBJECTIVE

### **LIST OF APPENDICES**

Appendix A: Figures

Appendix B: Supporting Documentation

**Appendix C:** Photographic Documentation

Appendix D: Table

Appendix E: Laboratory Data Sheets & Chain-of-Custody Documentation

Appendix F: Previous Report(s)



### **REVISED CLOSURE REPORT**

Pipeline ROW, 1002

32.134004° N, 104.046157° W
Unit D, S13 T25S, R28E
Eddy County, New Mexico
NMOCD Incident ID: nAB1629934570

Ensolum Project No. 03B1226313

### 1.0 INTRODUCTION

### 1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC (Enterprise)
Site Name:	Pipeline ROW, 1002
Location:	32.134004° N, 104.046157° W Unit D, S13, T25S, R28E Eddy County, New Mexico
Property:	Private (Henry McDonald)
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On October 14, 2016, Enterprise was notified of a release on the 1002 natural gas pipeline. Immediate response action commenced in accordance with the Enterprise *General Release Notification, Response and Remediation Plan* (dated March 2015). Enterprise isolated the leaking portion, and the pipeline section was shut down to carry out repair activities. Approximately 83 thousand cubic feet (MCF) of natural gas liquids (NGLs) and one (1) gallon (gal) of pipeline liquid was released from the pipeline and impacted surface soils in the vicinity of the release point. Notification was made to the New Mexico EMNRD OCD on October 14, 2016, and was subsequently assigned Incident ID: nAB1629934570.

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

### 1.2 Project Objective

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

### 2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. In order to address activities related to exempt oil and gas releases, the New Mexico EMNRD OCD references New Mexico Administrative Code (NMAC) 19.15.29 *Releases*, which establishes investigation and abatement action requirements for sites subject to reporting and/or corrective action. Ensolum, LLC (Ensolum) utilized information provided by Enterprise, the general site characteristics, and information available from the New Mexico Office of the State Engineer (OSE) and the New Mexico EMNRD OCD Imaging database to determine the appropriate closure criteria for the Site.



- The Site is located within 300 feet of a New Mexico EMNRD OCD-defined continuously flowing watercourse or significant watercourse.
- The Site is not located within 200 feet of a lakebed, sinkhole or playa lake.
- The Site is not located within 300 feet from a permanent residence, school, hospital, institution or church.
- According to the OSE WRSS database there are no private, domestic freshwater wells used by less than five (5) households for domestic or stock water purposes identified within 500 feet of the Site.
- According to the OSE WRSS database there are no freshwater well records identified within 1,000 feet of the Site.
- 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 NMSA 1978, Section 3-27-3.
- The Site is located within 300 feet of a wetland.
- Based on information identified on the New Mexico Mining and Minerals Division's GIS, Maps and Mine Data database, the Site is not located within an area overlying a subsurface mine.
- Based on the Karst Occurrence Potential (.kmz) provided by the BLM, the Site is located within a relatively stable area, also referred to as low karst.
- The Site is located within a 100-year floodplain.

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								
Minimum depth below any point within horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent Method		Limit						
	Chloride	EPA 300.0 or SM4500 CI B	600 mg/kg or Background						
≤ 50 feet	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	100 mg/kg						
2 00 leet	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg						
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg						

### 3.0 SOIL REMEDIATION ACTIVITIES

From October 14, 2016, to October 31, 2016, initial site investigation and remediation activities were conducted by Talon/LPE (Talon) and New Mexico Rentals (NMR) utilizing a rubber-tired backhoe to remove all potentially impacted material, build two containment dams with clean material to prevent further migration of contaminated surface water, and to remove all potentially impacted surface water from the Site.

Excavated soil was removed and subsequently stockpiled on Site in preparation for disposal off-Site at an approved New Mexico EMNRD OCD approved facility. During that time, additional impacted soil removed

March 1, 2024 **Page 3** 

from the release area was mixed and blended utilizing excavation equipment to promote bioremediation of the petroleum hydrocarbons.

Talon prepared a *Closure Report*, dated November 11, 2016, for submittal to the New Mexico EMNRD OCD.

**Figure 3** is a map that identifies approximate soil sample locations and depicts the approximate dimensions of the excavation (**Appendix F**).

#### 4.0 SOIL SAMPLING PROGRAM

From October 14, 2016, through October 31, 2016, Talon collected a total of nine confirmation soil samples (SS-1 through SS-5, SS-5B SS-5C, SS-6 and SS-7) from seven locations within the excavation area, at depths ranging from 1-5 feet below ground surface (bgs). Talon prepared a *Closure Report*, dated November 11, 2016, for submittal to the New Mexico EMNRD OCD.

A copy of the Talon *Closure Report*, dated November 11, 2016, detailing the remediation and sampling activities is included in **Appendix F**.

Based on correspondence received from the New Mexico EMNRD OCD on August 16, 2023, the initial closure report for the Site was denied. According to the New Mexico EMNRD OCD,

"The OCD has rejected the submitted Application for administrative approval of a release notification and corrective action (C-141), for incident ID (n#) nAB1629934570 for the following reasons: Impacted soil was mixed and blended for use of backfill without written approval from the OCD."

Following the denial of the Closure Report, Enterprise transferred the project over to Ensolum to take over future remediation activities.

On August 17, 2023, Enterprise was approved by the New Mexico EMNRD OCD a sampling variance request of 400 square-foot, 4-point composite samples to be collected from the former excavation extent utilizing a hand auger from depths ranging from 0-4 feet bgs. Due to refusal at depth at the Site preventing the utilization of a hand auger, it was determined by Enterprise and Ensolum that a Geoprobe<sup>©</sup> would be utilized to collect the new soil samples.

From November 28, 2023, to November 29, 2023, Ensolum arrived on-Site to collect four-point composite excavation floor samples at one-foot intervals throughout the backfilled material, reaching down to the original excavation floor, utilizing a Geoprobe<sup>©</sup>. A total of 16 excavation floor soil samples (SS-01 through SS-08) were collected from eight locations. The composite excavation floor samples were collected at varying depths in accordance with NMAC 19.15.29 (5) (d), which states that "the responsible party must submit at least two soil samples for laboratory analysis from each borehole or sample point (highest observed contamination and deepest depth investigated". Additionally, Ensolum collected eight background soil samples (BG-01 and BG-02) from two locations at depths ranging from 0-1, 1-2, 2-3, and 3-4 feet bgs, no closer than 50 feet but no greater than 100 feet from the lateral and horizontal extents of the impacted area.

Based on laboratory analytical results, additional excavation and sampling was required.

Subsequent to excavation activities, Ensolum returned to the site on February 13, 2024, to collect one composite excavation floor soil sample (SS-02) at a depth of three feet bgs. Based on the laboratory analytical data of the composite confirmation soil sample, no additional excavation/remediation is required.

The soil samples were collected and placed in laboratory prepared glassware, labeled/sealed using laboratory supplied labels and custody seals, and stored on ice in a cooler. The samples were relinquished to Hall Environmental Analysis Laboratory (Hall), recently acquired by Eurofins Environmental Testing South Central, LLC (Eurofins) in Albuquerque, New Mexico under proper chain-of-custody procedures.

March 1, 2024 **Page 4** 

### 5.0 SOIL LABORATORY ANALYTICAL METHODS

The confirmation soil samples were analyzed for total petroleum hydrocarbons (TPH)-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-motor oil/lube oil range organics (MRO) following Environmental Protection Agency (EPA) Method 8015M/D, BTEX using EPA Method 8021B, and chlorides using EPA Method 300.0.

Laboratory analytical results are summarized in **Table 1** in **Appendix D**. The executed chain-of-custody forms and laboratory data sheets are provided in **Appendix E**.

### 6.0 DATA EVALUATION

Ensolum compared the TPH GRO/DRO/MRO, BTEX and chloride concentrations and/or laboratory sample detection limits (SDLs) associated with the composite excavation floor soil samples (SS-01 through SS-08) and the background soil samples (BG-01 and BG-02) to the New Mexico EMNRD OCD closure criteria.

Due to the presence of elevated concentrations of chloride in the surrounding soils, Ensolum utilized the detected concentrations of chloride in the background samples collected outside the impacted area (BG-01 and BG-02) to calculate the 95% Upper Tolerance Limit (UTL) for the Site. Ensolum compared the chloride concentrations and/or laboratory SDLs associated with the soil samples to the calculated site-specific UTL, located in **Table 1** in **Appendix D** and supporting documentation in **Appendix B**.

- Laboratory analytical results indicate total benzene concentrations for soils remaining in place within the former excavation extent and the background soil samples are below the laboratory SDLs and/or the applicable New Mexico EMNRD OCD closure criteria of 10 mg/kg.
- Laboratory analytical results indicate total BTEX concentrations for soils remaining in place within
  the former excavation extent and the background soil samples are below the laboratory SDLs
  and/or the applicable New Mexico EMNRD OCD closure criteria of 50 mg/kg.
- Laboratory analytical results indicate combined TPH GRO/DRO/MRO concentrations for soils remaining in place within the former excavation extent, with the exception of SS-02 from 0-3 feet bgs, and the background soil samples are below the laboratory SDLs and/or the applicable New Mexico EMNRD OCD closure criteria of 100 mg/kg.
- Subsequent to excavation activities and resampling of the soils remaining in place at SS-02 at a
  depth of 3 feet bgs, the soils remaining in place are now below the laboratory SDLs and/or the
  applicable New Mexico EMNRD OCD closure criteria of 100 mg/kg.
- Laboratory analytical results indicate chloride concentrations for soil remaining in place at the
  locations of the excavation floor soil samples (SS-01 through SS-08) and background soil samples
  (BG-01 and BG-02), do exceed the New Mexico EMNRD OCD closure criteria of 600 mg/kg;
  however, these concentrations do not exceed the calculated site-specific UTL of 10,346 mg/kg.

Laboratory analytical results are summarized in Table 1 in Appendix D.

#### 7.0 RECLAMATION AND RE-VEGETATION

Subsequent to the results of the confirmation soil sampling, the identified impacted soils were removed and taken off-site for proper disposal. The excavated area will be backfilled with clean fill material, and then contoured to the original surrounding grade. A landowner approved seed mixture will be sown into the surface of the backfill for re-vegetation.

March 1, 2024 **Page 5** 

### 8.0 FINDINGS AND RECOMMENDATION

- The primary objective of the closure activities was to reduce COC concentrations in the on-Site soils to below the applicable New Mexico EMNRD OCD closure criteria using the New Mexico EMNRD OCD's NMAC 19.15.29 Releases as guidance.
- Based on correspondence received from the New Mexico EMNRD OCD on August 16, 2023, the initial closure request following the submittal of the Closure Report, prepared by Talon and dated November 11, 2016, for the Site was denied. "The OCD has rejected the submitted Application for administrative approval of a release notification and corrective action (C-141), for incident ID (n#) nAB1629934570 for the following reasons: Impacted soil was mixed and blended for use of backfill without written approval from the OCD."
- From November 28, 2023 to November 29, 2023,, Ensolum arrived on-Site to collect four-point composite floor samples at one-foot intervals throughout the backfill material and down to the original excavation floor utilizing a Geoprobe<sup>®</sup>. A total of 16 excavation floor soil samples (SS-1 through SS-08) were collected from eight locations. The composite floor samples were collected at varying depths in accordance with NMAC 19.15.29 (5) (d). Additionally, Ensolum collected eight background soil samples (BG-01 and BG-02) from two locations at depths ranging from 0-1, 1-2, 2-3, and 3-4 feet bgs, no closer than 50 feet but no greater than 100 feet from the lateral and horizontal extents of the impacted area.
- Subsequent to excavation activities, Ensolum returned to the site on February 13, 2024, to collect
  one composite soil sample (SS-02) from the excavation floor at a depth of three feet bgs. Based
  on the laboratory analytical data of the composite confirmation soil sample, no additional
  excavation/remediation is required.
- Based on the soil analytical results, soils remaining in place do not exhibit COC concentrations above the applicable New Mexico EMNRD OCD closure criteria for TPH GRO/DRO/MRO, benzene, and total BTEX.
- Laboratory analytical results indicate chloride concentrations for soil remaining in place at the
  locations of the excavation floor soil samples (SS-01 through SS-08) and background soil samples
  (BG-01 and BG-02), do exceed the New Mexico EMNRD OCD closure criteria of 600 mg/kg;
  however, these concentrations do not exceed the calculated site-specific UTL of 10,346 mg/kg.

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

### 9.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

### 9.1 Standard of Care

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

### 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

Revised Closure Report Pipeline ROW, 1002

March 1, 2024 **Page 6** 

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 recommendations are based solely upon data available to Ensolum at the time of these services.

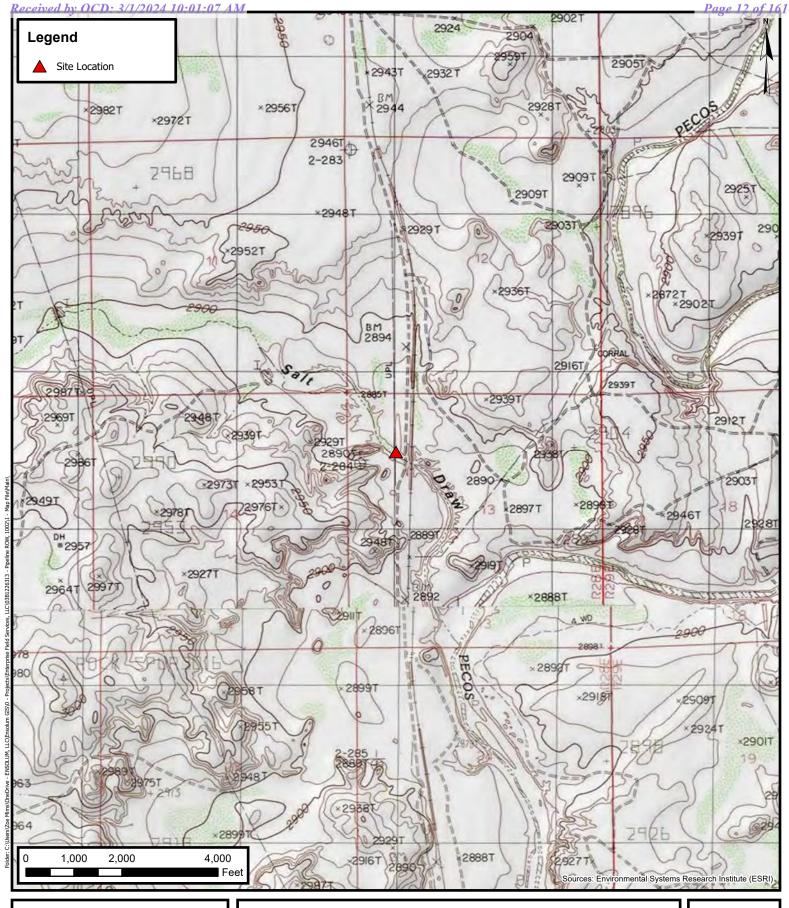
### 9.3 Reliance

This report has been prepared for the exclusive use of Enterprise Field Services, LLC, 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 Enterprise Field Services, LLC 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





# **Topographic Map** Enterprise Field Services, LLC

Enterprise Field Services, LLC Pipeline ROW, 1002 Incident Number: nAB1629934570 32.134004, -104.046157 Eddy County, New Mexico FIGURE 1

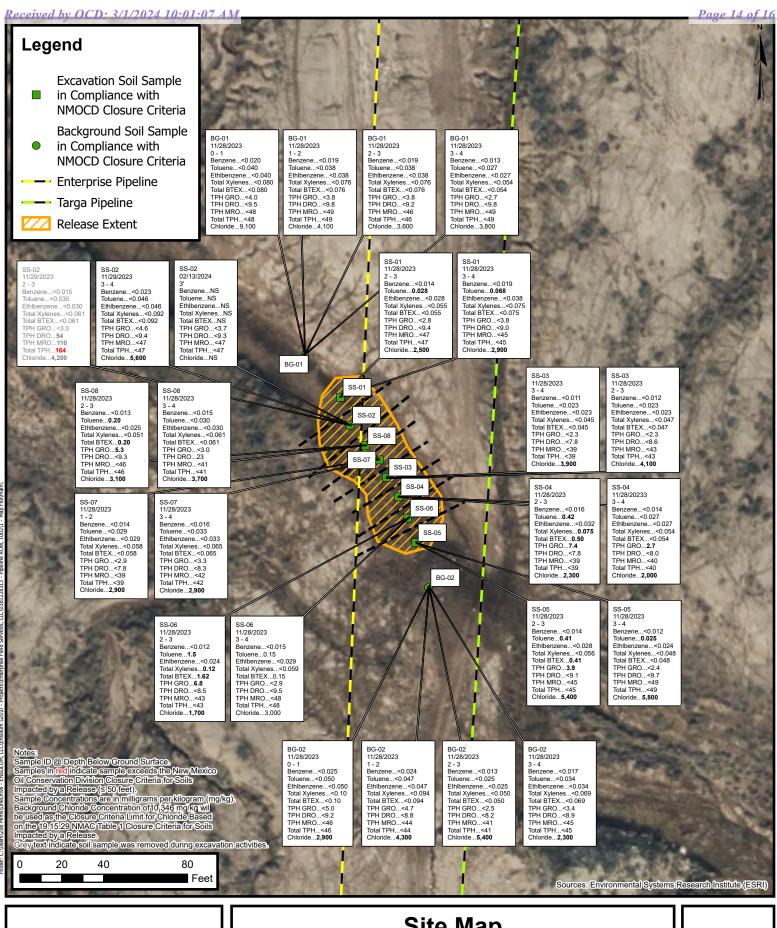
Released to Imaging: 3/1/2024 2:23:08 PM





Site Vicinity Map
Enterprise Field Services, LLC
Pipeline ROW, 1002
Incident Number: nAB1629934570
32.134004, -104.046157
Eddy County, New Mexico

**FIGURE** 2

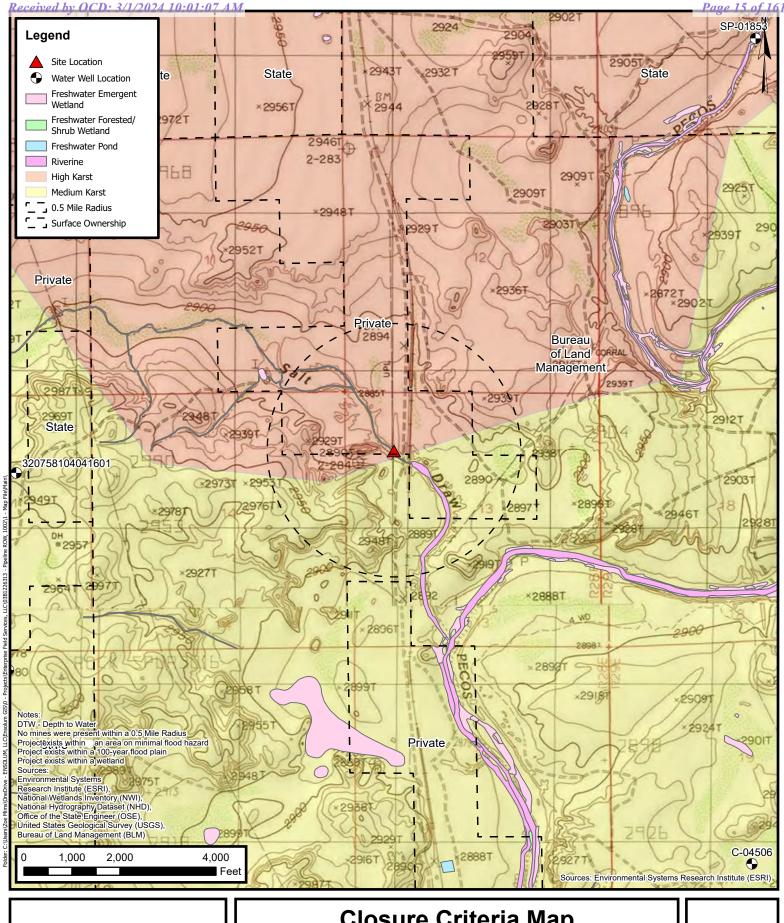




# Site Map

Enterprise Field Services, LLC Pipeline ROW, 1002 Incident Number: nAB1629934570 32.134004, -104.046157 Eddy County, New Mexico

**FIGURE** 3





# **Closure Criteria Map**

Enterprise Field Services, LLC Pipeline ROW, 1002 Incident Number: nAB1629934570 32.134004, -104.046157 Eddy County, New Mexico

**FIGURE** 



**APPENDIX B** 

**Supporting Documentation** 

### **Kelly Lowery**

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>

Sent: Tuesday, November 21, 2023 12:29 PM

To: Long, Thomas; Hamlet, Robert, EMNRD; Maxwell, Ashley, EMNRD

Cc: Kelly Lowery; Velez, Nelson, EMNRD; Stone, Brian; Bratcher, Michael, EMNRD

**Subject:** RE: [EXTERNAL] The Oil Conservation Division (OCD) has rejected the application, Application ID:

240804

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

Hi Thomas,

The OCD has received your notification. Include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thank you,

Shelly

Shelly Wells \* Environmental Specialist-Advanced Environmental Bureau EMNRD-Oil Conservation Division 1220 S. St. Francis Drive|Santa Fe, NM 87505 (505)469-7520|Shelly.Wells@emnrd.nm.govhttp://www.emnrd.state.nm.us/OCD/

From: Long, Thomas <tjlong@eprod.com>
Sent: Tuesday, November 21, 2023 11:06 AM

**To:** Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Maxwell, Ashley, EMNRD <Ashley.Maxwell@emnrd.nm.gov>; Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>

**Cc:** Kelly Lowery <klowery@ensolum.com>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>; Stone, Brian

<bmstone@eprod.com>

Subject: FW: [EXTERNAL] The Oil Conservation Division (OCD) has rejected the application, Application ID: 240804

Robert/Shelly/Ashely,

This email is a notification that Enterprise will be conducting the drilling/probing the Line 1002 release site beginning on Tuesday, November 28, 2023. Enterprise will be collecting closure samples from each soil boring throughout November 28, 2023 and November 29, 2023. Please call or email if you have any questions.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)

505-215-4727 (Cell)

tjlong@eprod.com



From: Long, Thomas

Sent: Tuesday, November 7, 2023 7:18 AM

To: 'Wells, Shelly, EMNRD' <Shelly.Wells@emnrd.nm.gov>; Maxwell, Ashley, EMNRD

<<u>Ashley.Maxwell@emnrd.nm.gov</u>>; Hamlet, Robert, EMNRD <<u>Robert.Hamlet@emnrd.nm.gov</u>>; Velez, Nelson, EMNRD <<u>Nelson.Velez@emnrd.nm.gov</u>>

**Cc:** Stone, Brian < bmstone@eprod.com >; Kelly Lowery < klowery@ensolum.com >; Bratcher, Michael, EMNRD

<mike.bratcher@emnrd.nm.gov>

Subject: RE: [EXTERNAL] The Oil Conservation Division (OCD) has rejected the application, Application ID: 240804

All,

We had to postpone the soil boring installation due to muddy conditions in the wash. It has been rescheduled to begin on November 27, 2023. If you have any questions, please call or email.

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



From: Wells, Shelly, EMNRD < <a href="mailto:Shelly.Wells@emnrd.nm.gov">Shelly.Wells@emnrd.nm.gov</a>>

Sent: Wednesday, November 1, 2023 9:09 AM

To: Long, Thomas <<a href="mailto:tjlong@eprod.com">tjlong@eprod.com</a>; Maxwell, Ashley, EMNRD <<a href="mailto:Ashley.Maxwell@emnrd.nm.gov">Ashley.Maxwell@emnrd.nm.gov</a>; Hamlet, Robert,

EMNRD <Robert.Hamlet@emnrd.nm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>

**Cc:** Stone, Brian < bmstone@eprod.com >; Kelly Lowery < klowery@ensolum.com >; Bratcher, Michael, EMNRD

<mike.bratcher@emnrd.nm.gov>

Subject: RE: [EXTERNAL] The Oil Conservation Division (OCD) has rejected the application, Application ID: 240804

## [Use caution with links/attachments]

Hi Thomas,

The OCD has received your notification. Include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thank you,

Shelly

Shelly Wells \* Environmental Specialist-Advanced Environmental Bureau EMNRD-Oil Conservation Division 1220 S. St. Francis Drive|Santa Fe, NM 87505 (505)469-7520|Shelly.Wells@emnrd.nm.gov http://www.emnrd.state.nm.us/OCD/

From: Long, Thomas < tilong@eprod.com > Sent: Wednesday, November 1, 2023 8:49 AM

To: Maxwell, Ashley, EMNRD < Ashley. Maxwell@emnrd.nm.gov >; Hamlet, Robert, EMNRD

<<u>Robert.Hamlet@emnrd.nm.gov</u>>; Wells, Shelly, EMNRD <<u>Shelly.Wells@emnrd.nm.gov</u>>; Velez, Nelson, EMNRD

<Nelson.Velez@emnrd.nm.gov>

**Cc:** Stone, Brian < bmstone@eprod.com >; Kelly Lowery < klowery@ensolum.com >

Subject: RE: [EXTERNAL] The Oil Conservation Division (OCD) has rejected the application, Application ID: 240804

Ashely,

This email is a notification that Enterprise has scheduled the soil delineation activities utilizing a Geoprobe at the Line 1002 (NMOCD Incident # nAB1629934570) release site on Tuesday, November 7, 2023. Closure sampling activities will be conducted throughout the day. Soil samples will be collected per the attached map and approved variance below. If you have any questions, please call or email.

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



From: Maxwell, Ashley, EMNRD < Ashley. Maxwell@emnrd.nm.gov >

**Sent:** Thursday, August 17, 2023 1:32 PM **To:** Long, Thomas <<u>tilong@eprod.com</u>>

Cc: Stone, Brian < bmstone@eprod.com >; Kelly Lowery < klowery@ensolum.com >

Subject: RE: [EXTERNAL] The Oil Conservation Division (OCD) has rejected the application, Application ID: 240804

[Use caution with links/attachments]

Tom,

Your variance request for alternative sampling every 400 square feet is approved. Please include this correspondence in any future report submissions.

Thanks, Ashley

Ashley Maxwell • Environmental Specialist

Environmental Bureau Projects Group
EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110
505.635.5000 | Ashley.Maxwell@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

From: Long, Thomas <tilong@eprod.com>
Sent: Thursday, August 17, 2023 1:13 PM

To: Maxwell, Ashley, EMNRD < Ashley. Maxwell@emnrd.nm.gov>

Cc: Stone, Brian <br/> stone@eprod.com>; Kelly Lowery <klowery@ensolum.com>

Subject: FW: [EXTERNAL] The Oil Conservation Division (OCD) has rejected the application, Application ID: 240804

Ashely,

Enterprise requests a variance from the 200 square feet sampling requirement cited in 19.15.29.12 (D)(1)(c). Enterprise requests an alternate of 400 square feet and four-point composite aliquots collected utilizing a hand auger from depths from 0-4 feet below ground surface. Please find the attached proposed sample location map for additional details. This will be a total of 32 soil borings across the impacted area. Please acknowledge acceptance of this variance request. If you have any questions, please call or email.

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



From: OCDOnline@state.nm.us < OCDOnline@state.nm.us >

**Sent:** Wednesday, August 16, 2023 2:52 PM **To:** Long, Thomas <<u>tilong@eprod.com</u>>

Subject: [EXTERNAL] The Oil Conservation Division (OCD) has rejected the application, Application ID: 240804

[Use caution with links/attachments]

To whom it may concern (c/o Tom Long for Enterprise Field Services, LLC),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAB1629934570, for the following reasons:

- Impacted soil was mixed and blended for use of backfill without written approval from the OCD.
- Collect confirmation samples compliant with 19.15.29.12 NMAC.
- Submit a closure report via the OCD permitting portal by December 20, 2023.

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 240804.

Please review and make the required correction(s) prior to resubmitting.

If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

Thank you,
Ashley Maxwell
Projects Environmental Specialist - A
505-635-5000
Ashley.Maxwell@emnrd.nm.gov

New Mexico Energy, Minerals and Natural Resources Department 1220 South St. Francis Drive Santa Fe, NM 87505

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.

		95th Upper Tolerance Limit Calculation	
BG-01	=	9,100	
BG-01	]=	4,100	
BG-01	]=	3,600	
BG-01	]=	3,800	
BG-02	]=	2,900	
BG-02	]= ]	4,300	
BG-02	=	5,400	
BG-02	=	2,300	
2098.936806		Standard Deviation	
8		Sample Size (i.e. 12 samples collected within a 1/4 acre area).	
2.815		One-sided tolerance factor	
4437.500		Arithmetic Mean	
10346.007	]=	95% UTL	
UTL = x + kS			
Where:			
.		One-sided tolerance factor	
	S =	Standard Deviation	

Form C-141

<u>District I</u> 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

Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr.

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

					anta F	e, NM 8/3	005			
			Rel	ease Notific	catio	n and Co	orrective A	ction		
						OPERA'		_	al Report 🛛 Final Repor	
Name of Co	mpany E	nterprise Fi	eld Servi	ces LLC		Contact	Alena Mire		ii Report	
		O Box 4324,					Telephone No. 575-628-6802			
Facility Nar		peline ROW,		-, / /			e: Gas Gather			
						racinty ryp	c. dus dumer	ing 1 ipetitie		
Surface Ow	ner <i>Henr</i> j	y McDonald		Mineral C	)wner	NA - Pipe	line	Lease N	Vo. <i>NA</i>	
				LOCA	OITA	N OF REI	LEASE			
Unit Letter	Section	Township	Range	Feet from the	North	n/South Line	Feet from the	East/West Line	County	
D 13 25S 28E 85						South	310	East	Eddy	
			La	ititude: <u>N 32.1.</u>	<u>34004</u>	Longitue	de: <u><i>W-104.046</i></u>	157		
				NAT	URF	OF REL				
Type of Relea	ase Nature	al Gas and Pi	peline Lia				Release: 83 MC	Foas Volume R	decovered: N/A	
			7				on of liquid	Y Ordine I	ecovered. 10/A	
Source of Re	lease Pipe	eline Leak					lour of Occurrenc	e Date and	Hour of Discovery	
							@ 11:15 MST		6 @ 11:15 MST	
Was Immedia	ite Notice C		37 .	1 x		If YES, To				
			Y es	No Not Re	equired	Mike Brate	cher			
By Whom?	Alena Mir						our 10/14/2016			
Was a Watero	course Reac			1		If YES, Volume Impacting the Watercourse.				
		×	Yes 🛚	. No		1 gallon				
If a Watercou										
On October 1	4, 2016, it	was discovere	d that pip	eline liquids were	e releas	ed into Salt D	raw. The NRC ar	id NMOCD were n	otified immediately upon	
discovery 10/	14/2016 @	11:20 MST. S	alt Draw	is an ephemeral s	stream	that has down	cut through thic	k bedded gypsum.	The confluence with the	
Describe Cau				ream of the relea	se poir	it.				
					loak 7	Tha ninalina sa	om out was isolat	ad and blasses January	. Following repair, the section	
of pipe traver	sing the dr	aw will be tak	en out of	service and ahan	doned.	The pipeline se	gmeni was isoiai to the north side o	eu unu biown gowi of the draw is block	i. Following repair, the section ted in and blinded. The	
pipeline to th	e south side	of the draw	will be pig	ged to remove re	sidual	liquids and the	en returned to ser	vice.	eu in unu vitnueu. The	
Describe Area	Affected a	and Cleanup A	ction Tak	en.*						
At the time of	the release	e the draw cor	ıtained ra	inwater; however	r, a nat	ural dirt berm	in the draw cont	ained the water an	d prevented it from flowing	
downstream a	luring the i	release. All pi	ipeline flu	iids and potential	ly affec	cted rainwater	were removed fro	om the draw. Clea	n-up action will follow	
I homoby conti	eld Service	s General Kel	ease Noti	fication, Respons	e and	Remediation F	lan(March 9, 20)	15) and closure rep	ort submitted.	
regulations al	ly that the h	niormation gi	ven above	is true and completely	lete to i	the best of my	knowledge and u	iderstand that purs	uant to NMOCD rules and ases which may endanger	
public health	or the envir	conment The	accentanc	e of a C-141 repo	ert by th	e NMOCD m	rked as "Final Pa	nve actions for rele	ases which may endanger eve the operator of liability	
should their o	perations ha	ave failed to a	dequately	investigate and re	emedia	te contamination	on that nose a thre	epoir does not rene	surface water, human health	
or the environ	ment. In a	ddition, NMO	CD accep	tance of a C-141	report o	loes not relieve	e the operator of r	esponsibility for co	impliance with any other	
federal, state,	or local law	sand/or regu	lations.		1		• <b>F</b> ••••••	-spendidinty for co	impliance with any other	
		1/1-	-/				OIL CONS	SERVATION	DIVISION	
G:	( /	9 =	41						DIVIDIOI V	
Signature:	In	/ C. 7	Cull							
Printed Name	: Jon E.	Fields				Approved by	District Superviso	or:		
I IIIICU IVaille	. Jun E.	i tetus			-					
Title:	Directo	or, Field Envi	ironmenta	ıl		Approval Date	e:	Expiration I	Date:	
E-mail Addre	ss: <u>jefield</u>	s@eprod.com				Conditions of	Approval:		Attached	
	10				1					

Phone: 713-381-6684

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

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 206749

### CONDITIONS

Operator:	OGRID:
ENTERPRISE PRODUCTS OPERATING, LLC	374092
P.O. BOX 4324	Action Number:
HOUSTON, TX 77210	206749
	Action Type:
	[IM-SD] Incident File Support Doc (ENV) (IM-BNF)

#### CONDITIONS

Created By	Condition	Condition Date
amaxwell	Historical document upload.	7/10/2023
amaxwell	Final C-141 accepted for information only.	7/10/2023
amaxwell	Final C-141 did not have a report included with it.	7/10/2023
amaxwell	Submit a closure report via the OCD permitting portal by 9/29/2023.	7/10/2023



**APPENDIX C** 

Photographic Documentation

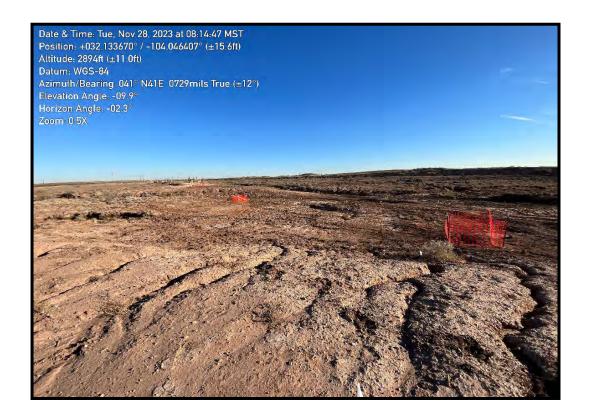
Project: Pipeline ROW, 1002 Entity: Enterprise Field Services, LLC

Project #: 03B1226315





View of former release extent, facing north (11/16/2023).



View of former release extent, facing northeast (11/28/2023).

Project: Pipeline ROW, 1002 Entity: Enterprise Field Services, LLC

Project #: 03B1226315





View of former release extent, facing southwest (11/28/2023).



View of SS-02 during remediation activities, facing southwest (2/13/2024).



APPENDIX D

Table



# TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS

Pipeline ROW, 1002 Enterprise Field Services, LLC Eddy County, New Mexico Ensolum Project No. 03B1226313

						<u> </u>						
Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (GRO+DRO+MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (≤ 50 feet)			10	NE	NE	NE	50	NE	NE	NE	100	600
Background Chloride Delineation Limit (Per NMAC 19.15.29.11 (A) (5) (c))			NE NE									
				E	xcavation Floor	Soil Sample	Analytical Resi	ults				
SS-01	11/28/2023	2 - 3	< 0.014	0.028	<0.028	< 0.055	< 0.055	<2.8	<9.4	<47	<47	2,500
33-01	11/26/2023	3 - 4	< 0.019	0.068	<0.038	< 0.075	< 0.075	<3.8	<9.0	<45	<45	2,900
	11/29/2023	2-3	<0.015	< 0.030	<0.030	< 0.061	< 0.061	<3.0	54	110	164	4,200
SS-02	02/13/2024	3			NS			<3.7	<9.3	<47	<47	NS
	11/29/2023	3 - 4	<0.023	<0.046	<0.046	<0.092	<0.092	<4.6	<9.4	<47	<47	5,600
SS-03	11/28/2023	2 - 3	<0.012	<0.023	<0.023	<0.047	<0.047	<2.3	<8.6	<43	<43	4,100
00 00	11/20/2020	3 - 4	<0.011	<0.023	<0.023	<0.045	<0.045	<2.3	<9.0	<39	3,900	
SS-04	11/28/2023	2 - 3	<0.016	0.42	<0.032	0.075	0.50	7.4	<7.8			2,300
00 01		3 - 4	<0.014	<0.027	<0.027	<0.054	<0.054	<2.7	<8.0			2,000
SS-05	11/28/2023	2 - 3	<0.014	0.41	<0.028	<0.056	0.41	3.9				5,400
		3 - 4	<0.012	0.025	<0.024	<0.048	<0.048	<2.4	<9.7			5,800
SS-06	11/28/2023	2 - 3	<0.012	1.5	<0.024	0.12	1.62	6.8		_		1,700
	=======	3 - 4	<0.015	0.15	<0.029	<0.059	0.15	<2.9		_	_	3,000
SS-07	11/28/2023	1 - 2	<0.014	<0.029	<0.029	<0.058	<0.058	<2.9	<7.8	<39	<39	2,900
		3 - 4	<0.016	<0.033	<0.033	<0.065	<0.065	<3.3	<8.3	<42	<42	2,900
SS-08	11/28/2023	2 - 3	<0.013	0.20	<0.025	<0.051	0.20	5.3	<9.3	<46	<46	3,100
		3 - 4	<0.015	<0.030	<0.030	<0.061	<0.061	<3.0	23	<41	<41	3,700
		1	0.000	2.242	Background Sc					1 40	1 40	- 100
	11/28/2023	0 - 1	<0.020	<0.040	<0.040	<0.080	<0.080	<4.0	<9.5	<48	<48	9,100
BG-01		1 - 2	<0.019	<0.038	<0.038	<0.076	<0.076	<3.8	<9.8	<49	<49	4,100
		2 - 3	<0.019	<0.038	<0.038	<0.076	<0.076	<3.8	<9.2	<46	<46	3,600
		3 - 4	<0.013	<0.027	<0.027	<0.054	<0.054	<2.7	<9.8	<49	<49	3,800
	11/28/2023	0 - 1 1 - 2	<0.025	<0.050	<0.050 <0.047	<0.10	<0.10	<5.0	<9.2	<46	<46	2,900
BG-02		2 - 3	<0.024 <0.013	<0.047 <0.025	<0.047	<0.094 <0.050	<0.094	<4.7	<8.8 <8.2	<44	<44	4,300 5,400
							<0.050	<2.5		<41	<41	
		3 - 4	<0.017	< 0.034	< 0.034	< 0.069	< 0.069	<3.4	<8.9	<45	<45	2,300

Concentrations in **bold** and yellow exceed the New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (≤ 50 feet)

Additional Excavation and/or Re-Sample

bgs - below ground surface

mg/kg - milligrams per kilogram

NA - Not Applicable

NE - Not Established

NS - Not Sampled

BTEX - Benzene, Toluene, Ethylbenzene, and Xylenes

GRO - Gasoline Range Organics

DRO - Diesel Range Organics

MRO - Motor Oil/Lube Oil Range Organics

TPH - Total Petroleum Hydrocarbon



# **APPENDIX E**

Laboratory Analytical Reports & Chain-of-Custody Documentation



Eurofins Environment Testing South Central, LLC 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

December 13, 2023

Kelly Lowery Ensolum LLC 601 Marrenfield #400 Midland, TX 79701 TEL: (214) 733-3165

FAX:

RE: Pipeline ROW 1002 OrderNo.: 2311D82

Dear Kelly Lowery:

Eurofins Environment Testing South Central, LLC received 36 sample(s) on 11/30/2023 for the analyses presented in the following report.

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

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

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

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 12/13/2023

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: BG-01 0-1'

 Project:
 Pipeline ROW 1002
 Collection Date: 11/28/2023 10:28:00 AM

 Lab ID:
 2311D82-001
 Matrix: MEOH (SOIL)
 Received Date: 11/30/2023 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	11/30/2023 6:27:02 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	11/30/2023 6:27:02 PM
Surr: DNOP	95.6	69-147	%Rec	1	11/30/2023 6:27:02 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	11/30/2023 4:57:27 PM
Surr: BFB	94.6	15-244	%Rec	1	11/30/2023 4:57:27 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.020	mg/Kg	1	11/30/2023 4:57:27 PM
Toluene	ND	0.040	mg/Kg	1	11/30/2023 4:57:27 PM
Ethylbenzene	ND	0.040	mg/Kg	1	11/30/2023 4:57:27 PM
Xylenes, Total	ND	0.080	mg/Kg	1	11/30/2023 4:57:27 PM
Surr: 4-Bromofluorobenzene	94.7	39.1-146	%Rec	1	11/30/2023 4:57:27 PM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	9100	590	mg/Kg	200	12/1/2023 8:30:11 AM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 29

Date Reported: 12/13/2023

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: BG-01 1-2'

 Project:
 Pipeline ROW 1002
 Collection Date: 11/28/2023 10:28:00 AM

 Lab ID:
 2311D82-002
 Matrix: MEOH (SOIL)
 Received Date: 11/30/2023 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR				Analyst: <b>SB</b>	
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	11/30/2023 6:51:01 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	11/30/2023 6:51:01 PM
Surr: DNOP	95.8	69-147	%Rec	1	11/30/2023 6:51:01 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	11/30/2023 5:20:56 PM
Surr: BFB	93.2	15-244	%Rec	1	11/30/2023 5:20:56 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.019	mg/Kg	1	11/30/2023 5:20:56 PM
Toluene	ND	0.038	mg/Kg	1	11/30/2023 5:20:56 PM
Ethylbenzene	ND	0.038	mg/Kg	1	11/30/2023 5:20:56 PM
Xylenes, Total	ND	0.076	mg/Kg	1	11/30/2023 5:20:56 PM
Surr: 4-Bromofluorobenzene	94.8	39.1-146	%Rec	1	11/30/2023 5:20:56 PM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	4100	150	mg/Kg	50	12/1/2023 8:42:35 AM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

porting Limit Page 2 of 29

Date Reported: 12/13/2023

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: BG-01 2-3'

 Project:
 Pipeline ROW 1002
 Collection Date: 11/28/2023 10:28:00 AM

 Lab ID:
 2311D82-003
 Matrix: MEOH (SOIL)
 Received Date: 11/30/2023 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR				Analyst: SB	
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	11/30/2023 7:15:02 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	11/30/2023 7:15:02 PM
Surr: DNOP	96.0	69-147	%Rec	1	11/30/2023 7:15:02 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	11/30/2023 5:44:21 PM
Surr: BFB	95.1	15-244	%Rec	1	11/30/2023 5:44:21 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.019	mg/Kg	1	11/30/2023 5:44:21 PM
Toluene	ND	0.038	mg/Kg	1	11/30/2023 5:44:21 PM
Ethylbenzene	ND	0.038	mg/Kg	1	11/30/2023 5:44:21 PM
Xylenes, Total	ND	0.076	mg/Kg	1	11/30/2023 5:44:21 PM
Surr: 4-Bromofluorobenzene	96.1	39.1-146	%Rec	1	11/30/2023 5:44:21 PM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	3600	150	mg/Kg	50	12/1/2023 8:54:59 AM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 29

Date Reported: 12/13/2023

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: BG-01 3-4'

 Project:
 Pipeline ROW 1002
 Collection Date: 11/28/2023 10:28:00 AM

 Lab ID:
 2311D82-004
 Matrix: MEOH (SOIL)
 Received Date: 11/30/2023 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	11/30/2023 7:39:00 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	11/30/2023 7:39:00 PM
Surr: DNOP	98.8	69-147	%Rec	1	11/30/2023 7:39:00 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	2.7	mg/Kg	1	11/30/2023 6:07:46 PM
Surr: BFB	93.5	15-244	%Rec	1	11/30/2023 6:07:46 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.013	mg/Kg	1	11/30/2023 6:07:46 PM
Toluene	ND	0.027	mg/Kg	1	11/30/2023 6:07:46 PM
Ethylbenzene	ND	0.027	mg/Kg	1	11/30/2023 6:07:46 PM
Xylenes, Total	ND	0.054	mg/Kg	1	11/30/2023 6:07:46 PM
Surr: 4-Bromofluorobenzene	94.0	39.1-146	%Rec	1	11/30/2023 6:07:46 PM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	3800	150	mg/Kg	50	12/1/2023 9:07:23 AM

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

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 12/13/2023

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Ensolum LLC Client Sample ID: SS-01 2-3'

**Project:** Pipeline ROW 1002 **Collection Date:** 11/28/2023 11:07:00 AM 2311D82-007 Lab ID: Matrix: MEOH (SOIL) Received Date: 11/30/2023 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	11/30/2023 8:02:57 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	11/30/2023 8:02:57 PM
Surr: DNOP	96.7	69-147	%Rec	1	11/30/2023 8:02:57 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	2.8	mg/Kg	1	11/30/2023 6:31:10 PM
Surr: BFB	121	15-244	%Rec	1	11/30/2023 6:31:10 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.014	mg/Kg	1	11/30/2023 6:31:10 PM
Toluene	0.028	0.028	mg/Kg	1	11/30/2023 6:31:10 PM
Ethylbenzene	ND	0.028	mg/Kg	1	11/30/2023 6:31:10 PM
Xylenes, Total	ND	0.055	mg/Kg	1	11/30/2023 6:31:10 PM
Surr: 4-Bromofluorobenzene	96.2	39.1-146	%Rec	1	11/30/2023 6:31:10 PM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	2500	150	mg/Kg	50	12/1/2023 9:19:48 AM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Above Quantitation Range/Estimated Value Ε
- J Analyte detected below quantitation limits
- Sample pH Not In Range
- RL

Reporting Limit

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Date Reported: 12/13/2023

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: SS-01 3-4'

 Project:
 Pipeline ROW 1002
 Collection Date: 11/28/2023 11:07:00 AM

 Lab ID:
 2311D82-008
 Matrix: MEOH (SOIL)
 Received Date: 11/30/2023 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG		Analyst: SB			
Diesel Range Organics (DRO)	ND	9.0	mg/Kg	1	11/30/2023 8:26:54 PM
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	11/30/2023 8:26:54 PM
Surr: DNOP	94.1	69-147	%Rec	1	11/30/2023 8:26:54 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	11/30/2023 6:54:35 PM
Surr: BFB	103	15-244	%Rec	1	11/30/2023 6:54:35 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.019	mg/Kg	1	11/30/2023 6:54:35 PM
Toluene	0.068	0.038	mg/Kg	1	11/30/2023 6:54:35 PM
Ethylbenzene	ND	0.038	mg/Kg	1	11/30/2023 6:54:35 PM
Xylenes, Total	ND	0.075	mg/Kg	1	11/30/2023 6:54:35 PM
Surr: 4-Bromofluorobenzene	95.8	39.1-146	%Rec	1	11/30/2023 6:54:35 PM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	2900	150	mg/Kg	50	12/1/2023 9:32:12 AM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 12/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: SS-08 2-3'

 Project:
 Pipeline ROW 1002
 Collection Date: 11/28/2023 11:40:00 AM

 Lab ID:
 2311D82-011
 Matrix: MEOH (SOIL)
 Received Date: 11/30/2023 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	11/30/2023 8:50:46 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	11/30/2023 8:50:46 PM
Surr: DNOP	95.6	69-147	%Rec	1	11/30/2023 8:50:46 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	5.3	2.5	mg/Kg	1	11/30/2023 7:17:56 PM
Surr: BFB	204	15-244	%Rec	1	11/30/2023 7:17:56 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.013	mg/Kg	1	11/30/2023 7:17:56 PM
Toluene	0.20	0.025	mg/Kg	1	11/30/2023 7:17:56 PM
Ethylbenzene	ND	0.025	mg/Kg	1	11/30/2023 7:17:56 PM
Xylenes, Total	ND	0.051	mg/Kg	1	11/30/2023 7:17:56 PM
Surr: 4-Bromofluorobenzene	99.6	39.1-146	%Rec	1	11/30/2023 7:17:56 PM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	3100	150	mg/Kg	50	12/1/2023 9:44:37 AM

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

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

 $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$ 

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 12/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: SS-08 3-4'

 Project:
 Pipeline ROW 1002
 Collection Date: 11/28/2023 11:40:00 AM

 Lab ID:
 2311D82-012
 Matrix: MEOH (SOIL)
 Received Date: 11/30/2023 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: SB
Diesel Range Organics (DRO)	23	8.1	mg/Kg	1	11/30/2023 9:14:41 PM
Motor Oil Range Organics (MRO)	ND	41	mg/Kg	1	11/30/2023 9:14:41 PM
Surr: DNOP	97.4	69-147	%Rec	1	11/30/2023 9:14:41 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.0	mg/Kg	1	11/30/2023 11:58:16 PM
Surr: BFB	131	15-244	%Rec	1	11/30/2023 11:58:16 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.015	mg/Kg	1	11/30/2023 11:58:16 PM
Toluene	ND	0.030	mg/Kg	1	11/30/2023 11:58:16 PM
Ethylbenzene	ND	0.030	mg/Kg	1	11/30/2023 11:58:16 PM
Xylenes, Total	ND	0.061	mg/Kg	1	11/30/2023 11:58:16 PM
Surr: 4-Bromofluorobenzene	97.4	39.1-146	%Rec	1	11/30/2023 11:58:16 PM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	3700	150	mg/Kg	50	12/1/2023 10:21:50 AM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 12/13/2023

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: SS-07 1-2'

 Project:
 Pipeline ROW 1002
 Collection Date: 11/28/2023 12:20:00 PM

 Lab ID:
 2311D82-014
 Matrix: MEOH (SOIL)
 Received Date: 11/30/2023 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: SB				
Diesel Range Organics (DRO)	ND	7.8	mg/Kg	1	11/30/2023 10:02:24 PM
Motor Oil Range Organics (MRO)	ND	39	mg/Kg	1	11/30/2023 10:02:24 PM
Surr: DNOP	93.2	69-147	%Rec	1	11/30/2023 10:02:24 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	2.9	mg/Kg	1	12/1/2023 12:21:34 AM
Surr: BFB	100	15-244	%Rec	1	12/1/2023 12:21:34 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.014	mg/Kg	1	12/1/2023 12:21:34 AM
Toluene	ND	0.029	mg/Kg	1	12/1/2023 12:21:34 AM
Ethylbenzene	ND	0.029	mg/Kg	1	12/1/2023 12:21:34 AM
Xylenes, Total	ND	0.058	mg/Kg	1	12/1/2023 12:21:34 AM
Surr: 4-Bromofluorobenzene	95.5	39.1-146	%Rec	1	12/1/2023 12:21:34 AM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	2900	150	mg/Kg	50	12/1/2023 10:34:15 AM

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

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 12/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: SS-07 3-4'

 Project:
 Pipeline ROW 1002
 Collection Date: 11/28/2023 12:20:00 PM

 Lab ID:
 2311D82-016
 Matrix: MEOH (SOIL)
 Received Date: 11/30/2023 8:00:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed		
EPA METHOD 8015M/D: DIESEL RANGE ORG	EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						
Diesel Range Organics (DRO)	ND	8.3	mg/Kg	1	11/30/2023 10:26:12 PM		
Motor Oil Range Organics (MRO)	ND	42	mg/Kg	1	11/30/2023 10:26:12 PM		
Surr: DNOP	94.2	69-147	%Rec	1	11/30/2023 10:26:12 PM		
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP		
Gasoline Range Organics (GRO)	ND	3.3	mg/Kg	1	12/1/2023 12:44:51 AM		
Surr: BFB	93.4	15-244	%Rec	1	12/1/2023 12:44:51 AM		
EPA METHOD 8021B: VOLATILES					Analyst: JJP		
Benzene	ND	0.016	mg/Kg	1	12/1/2023 12:44:51 AM		
Toluene	ND	0.033	mg/Kg	1	12/1/2023 12:44:51 AM		
Ethylbenzene	ND	0.033	mg/Kg	1	12/1/2023 12:44:51 AM		
Xylenes, Total	ND	0.065	mg/Kg	1	12/1/2023 12:44:51 AM		
Surr: 4-Bromofluorobenzene	94.7	39.1-146	%Rec	1	12/1/2023 12:44:51 AM		
EPA METHOD 300.0: ANIONS					Analyst: RBC		
Chloride	2900	150	mg/Kg	50	12/1/2023 10:46:40 AM		

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 12/13/2023

12/1/2023 10:59:04 AM

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: SS-03 2-3'

 Project:
 Pipeline ROW 1002
 Collection Date: 11/28/2023 1:50:00 PM

 Lab ID:
 2311D82-019
 Matrix: MEOH (SOIL)
 Received Date: 11/30/2023 8:00:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) ND 8.6 mg/Kg 1 11/30/2023 10:50:06 PM Motor Oil Range Organics (MRO) ND 43 mg/Kg 1 11/30/2023 10:50:06 PM Surr: DNOP 95.3 69-147 %Rec 1 11/30/2023 10:50:06 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 12/1/2023 1:08:06 AM 2.3 mg/Kg 1 Surr: BFB 95.7 15-244 %Rec 1 12/1/2023 1:08:06 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 12/1/2023 1:08:06 AM 0.012 mg/Kg 1 Toluene ND 0.023 mg/Kg 1 12/1/2023 1:08:06 AM Ethylbenzene ND 0.023 mg/Kg 1 12/1/2023 1:08:06 AM Xylenes, Total ND 0.047 mg/Kg 12/1/2023 1:08:06 AM 1 Surr: 4-Bromofluorobenzene 95.4 39.1-146 %Rec 1 12/1/2023 1:08:06 AM **EPA METHOD 300.0: ANIONS** Analyst: RBC

4100

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

Qualifiers:

Chloride

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits

mg/Kg

50

150

- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 12/13/2023

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: SS-03 3-4'

 Project:
 Pipeline ROW 1002
 Collection Date: 11/28/2023 1:50:00 PM

 Lab ID:
 2311D82-020
 Matrix: MEOH (SOIL)
 Received Date: 11/30/2023 8:00:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) ND 7.8 mg/Kg 1 11/30/2023 11:13:56 PM Motor Oil Range Organics (MRO) ND 39 mg/Kg 1 11/30/2023 11:13:56 PM Surr: DNOP 93.4 69-147 %Rec 1 11/30/2023 11:13:56 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 12/1/2023 1:31:23 AM 2.3 mg/Kg 1 Surr: BFB 95.7 15-244 %Rec 1 12/1/2023 1:31:23 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 12/1/2023 1:31:23 AM 0.011 mg/Kg 1 Toluene ND 0.023 mg/Kg 1 12/1/2023 1:31:23 AM Ethylbenzene ND 0.023 mg/Kg 1 12/1/2023 1:31:23 AM Xylenes, Total ND mg/Kg 12/1/2023 1:31:23 AM 0.045 1 Surr: 4-Bromofluorobenzene 93.2 39.1-146 %Rec 1 12/1/2023 1:31:23 AM **EPA METHOD 300.0: ANIONS** Analyst: RBC mg/Kg Chloride 12/1/2023 11:11:29 AM 3900 150 50

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

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 12/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: SS-06 2-3'

 Project:
 Pipeline ROW 1002
 Collection Date: 11/28/2023 3:06:00 PM

 Lab ID:
 2311D82-023
 Matrix: MEOH (SOIL)
 Received Date: 11/30/2023 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: SB				
Diesel Range Organics (DRO)	ND	8.5	mg/Kg	1	11/30/2023 11:37:41 PM
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	11/30/2023 11:37:41 PM
Surr: DNOP	95.9	69-147	%Rec	1	11/30/2023 11:37:41 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	6.8	2.4	mg/Kg	1	12/1/2023 1:54:34 AM
Surr: BFB	177	15-244	%Rec	1	12/1/2023 1:54:34 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.012	mg/Kg	1	12/1/2023 1:54:34 AM
Toluene	1.5	0.024	mg/Kg	1	12/1/2023 1:54:34 AM
Ethylbenzene	ND	0.024	mg/Kg	1	12/1/2023 1:54:34 AM
Xylenes, Total	0.12	0.049	mg/Kg	1	12/1/2023 1:54:34 AM
Surr: 4-Bromofluorobenzene	95.2	39.1-146	%Rec	1	12/1/2023 1:54:34 AM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	1700	60	mg/Kg	20	12/1/2023 1:53:23 AM

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

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 12/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: SS-06 3-4'

 Project:
 Pipeline ROW 1002
 Collection Date: 11/28/2023 3:06:00 PM

 Lab ID:
 2311D82-024
 Matrix: MEOH (SOIL)
 Received Date: 11/30/2023 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR		Analyst: SB			
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	12/1/2023 12:01:31 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	12/1/2023 12:01:31 AM
Surr: DNOP	96.5	69-147	%Rec	1	12/1/2023 12:01:31 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	2.9	mg/Kg	1	12/1/2023 2:17:48 AM
Surr: BFB	97.7	15-244	%Rec	1	12/1/2023 2:17:48 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.015	mg/Kg	1	12/1/2023 2:17:48 AM
Toluene	0.15	0.029	mg/Kg	1	12/1/2023 2:17:48 AM
Ethylbenzene	ND	0.029	mg/Kg	1	12/1/2023 2:17:48 AM
Xylenes, Total	ND	0.059	mg/Kg	1	12/1/2023 2:17:48 AM
Surr: 4-Bromofluorobenzene	91.8	39.1-146	%Rec	1	12/1/2023 2:17:48 AM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	3000	150	mg/Kg	50	12/1/2023 11:23:54 AM

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

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

 $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$ 

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 12/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: SS-04 2-3'

 Project:
 Pipeline ROW 1002
 Collection Date: 11/28/2023 2:30:00 PM

 Lab ID:
 2311D82-027
 Matrix: MEOH (SOIL)
 Received Date: 11/30/2023 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	7.8	mg/Kg	1	12/1/2023 12:25:19 AM
Motor Oil Range Organics (MRO)	ND	39	mg/Kg	1	12/1/2023 12:25:19 AM
Surr: DNOP	95.6	69-147	%Rec	1	12/1/2023 12:25:19 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	7.4	3.2	mg/Kg	1	12/1/2023 2:41:03 AM
Surr: BFB	216	15-244	%Rec	1	12/1/2023 2:41:03 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.016	mg/Kg	1	12/1/2023 2:41:03 AM
Toluene	0.42	0.032	mg/Kg	1	12/1/2023 2:41:03 AM
Ethylbenzene	ND	0.032	mg/Kg	1	12/1/2023 2:41:03 AM
Xylenes, Total	0.075	0.064	mg/Kg	1	12/1/2023 2:41:03 AM
Surr: 4-Bromofluorobenzene	96.4	39.1-146	%Rec	1	12/1/2023 2:41:03 AM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	2300	60	mg/Kg	20	12/1/2023 2:18:48 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

e pH Not In Range Page 15 of 29

Date Reported: 12/13/2023

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: SS-04 3-4'

 Project:
 Pipeline ROW 1002
 Collection Date: 11/28/2023 2:30:00 PM

 Lab ID:
 2311D82-028
 Matrix: MEOH (SOIL)
 Received Date: 11/30/2023 8:00:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses Analyst: SB **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Diesel Range Organics (DRO) ND 8.0 mg/Kg 1 12/1/2023 12:49:07 AM Motor Oil Range Organics (MRO) ND 40 mg/Kg 1 12/1/2023 12:49:07 AM Surr: DNOP 97.4 69-147 %Rec 1 12/1/2023 12:49:07 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 2.7 12/1/2023 3:04:17 AM mg/Kg 1 Surr: BFB 96.8 15-244 %Rec 1 12/1/2023 3:04:17 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 12/1/2023 3:04:17 AM 0.014 mg/Kg 1 Toluene ND 0.027 mg/Kg 1 12/1/2023 3:04:17 AM Ethylbenzene ND 0.027 mg/Kg 1 12/1/2023 3:04:17 AM Xylenes, Total ND 0.054 mg/Kg 12/1/2023 3:04:17 AM 1 Surr: 4-Bromofluorobenzene 93.7 39.1-146 %Rec 1 12/1/2023 3:04:17 AM **EPA METHOD 300.0: ANIONS** Analyst: RBC mg/Kg Chloride 12/1/2023 2:31:13 PM 2000 60 20

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

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

QL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 12/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: SS-05 2-3'

 Project:
 Pipeline ROW 1002
 Collection Date: 11/28/2023 3:27:00 PM

 Lab ID:
 2311D82-031
 Matrix: MEOH (SOIL)
 Received Date: 11/30/2023 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	12/1/2023 1:12:53 AM
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	12/1/2023 1:12:53 AM
Surr: DNOP	91.1	69-147	%Rec	1	12/1/2023 1:12:53 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	3.9	2.8	mg/Kg	1	12/1/2023 3:27:30 AM
Surr: BFB	159	15-244	%Rec	1	12/1/2023 3:27:30 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.014	mg/Kg	1	12/1/2023 3:27:30 AM
Toluene	0.41	0.028	mg/Kg	1	12/1/2023 3:27:30 AM
Ethylbenzene	ND	0.028	mg/Kg	1	12/1/2023 3:27:30 AM
Xylenes, Total	ND	0.056	mg/Kg	1	12/1/2023 3:27:30 AM
Surr: 4-Bromofluorobenzene	96.6	39.1-146	%Rec	1	12/1/2023 3:27:30 AM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	5400	150	mg/Kg	50	12/4/2023 12:08:59 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

ple pH Not In Range Page 17 of 29

Date Reported: 12/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: SS-05 3-4'

 Project:
 Pipeline ROW 1002
 Collection Date: 11/28/2023 3:27:00 PM

 Lab ID:
 2311D82-032
 Matrix: MEOH (SOIL)
 Received Date: 11/30/2023 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR		Analyst: SB			
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	12/1/2023 1:36:47 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	12/1/2023 1:36:47 AM
Surr: DNOP	95.3	69-147	%Rec	1	12/1/2023 1:36:47 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	2.4	mg/Kg	1	12/1/2023 4:13:59 AM
Surr: BFB	94.2	15-244	%Rec	1	12/1/2023 4:13:59 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.012	mg/Kg	1	12/1/2023 4:13:59 AM
Toluene	0.025	0.024	mg/Kg	1	12/1/2023 4:13:59 AM
Ethylbenzene	ND	0.024	mg/Kg	1	12/1/2023 4:13:59 AM
Xylenes, Total	ND	0.048	mg/Kg	1	12/1/2023 4:13:59 AM
Surr: 4-Bromofluorobenzene	93.3	39.1-146	%Rec	1	12/1/2023 4:13:59 AM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	5800	150	mg/Kg	50	12/4/2023 12:21:23 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 12/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: BG-02 0-1'

 Project:
 Pipeline ROW 1002
 Collection Date: 11/28/2023 3:30:00 PM

 Lab ID:
 2311D82-033
 Matrix: MEOH (SOIL)
 Received Date: 11/30/2023 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	12/8/2023 12:31:37 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	12/8/2023 12:31:37 PM
Surr: DNOP	95.5	69-147	%Rec	1	12/8/2023 12:31:37 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	12/9/2023 4:00:00 PM
Surr: BFB	93.5	15-244	%Rec	1	12/9/2023 4:00:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.025	mg/Kg	1	12/9/2023 4:00:00 PM
Toluene	ND	0.050	mg/Kg	1	12/9/2023 4:00:00 PM
Ethylbenzene	ND	0.050	mg/Kg	1	12/9/2023 4:00:00 PM
Xylenes, Total	ND	0.10	mg/Kg	1	12/9/2023 4:00:00 PM
Surr: 4-Bromofluorobenzene	96.6	39.1-146	%Rec	1	12/9/2023 4:00:00 PM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	2900	150	mg/Kg	50	12/11/2023 9:48:19 AM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 12/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: BG-02 1-2'

 Project:
 Pipeline ROW 1002
 Collection Date: 11/28/2023 3:30:00 PM

 Lab ID:
 2311D82-034
 Matrix: MEOH (SOIL)
 Received Date: 11/30/2023 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	Analyst: <b>DGH</b>				
Diesel Range Organics (DRO)	ND	8.8	mg/Kg	1	12/8/2023 12:56:18 PM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	12/8/2023 12:56:18 PM
Surr: DNOP	94.9	69-147	%Rec	1	12/8/2023 12:56:18 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	12/9/2023 4:23:16 PM
Surr: BFB	95.4	15-244	%Rec	1	12/9/2023 4:23:16 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	12/9/2023 4:23:16 PM
Toluene	ND	0.047	mg/Kg	1	12/9/2023 4:23:16 PM
Ethylbenzene	ND	0.047	mg/Kg	1	12/9/2023 4:23:16 PM
Xylenes, Total	ND	0.094	mg/Kg	1	12/9/2023 4:23:16 PM
Surr: 4-Bromofluorobenzene	98.5	39.1-146	%Rec	1	12/9/2023 4:23:16 PM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	4300	150	mg/Kg	50	12/11/2023 10:02:58 AM

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

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 12/13/2023

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: BG-02 2-3'

 Project:
 Pipeline ROW 1002
 Collection Date: 11/28/2023 3:30:00 PM

 Lab ID:
 2311D82-035
 Matrix: MEOH (SOIL)
 Received Date: 11/30/2023 8:00:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) ND 8.2 mg/Kg 1 12/1/2023 2:00:33 AM Motor Oil Range Organics (MRO) ND 41 mg/Kg 1 12/1/2023 2:00:33 AM Surr: DNOP 91.8 69-147 %Rec 1 12/1/2023 2:00:33 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 12/1/2023 4:37:15 AM 2.5 mg/Kg 1 Surr: BFB 94.8 15-244 %Rec 1 12/1/2023 4:37:15 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 12/1/2023 4:37:15 AM 0.013 mg/Kg 1 Toluene ND 0.025 mg/Kg 1 12/1/2023 4:37:15 AM Ethylbenzene ND 0.025 mg/Kg 1 12/1/2023 4:37:15 AM Xylenes, Total ND 0.050 mg/Kg 1 12/1/2023 4:37:15 AM Surr: 4-Bromofluorobenzene 92.8 39.1-146 %Rec 1 12/1/2023 4:37:15 AM **EPA METHOD 300.0: ANIONS** Analyst: RBC Chloride mg/Kg 12/5/2023 1:25:47 PM 5400 300 100

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

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 12/13/2023

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: BG-02 3-4'

 Project:
 Pipeline ROW 1002
 Collection Date: 11/28/2023 3:30:00 PM

 Lab ID:
 2311D82-036
 Matrix: MEOH (SOIL)
 Received Date: 11/30/2023 8:00:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses Analyst: SB **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Diesel Range Organics (DRO) ND 8.9 mg/Kg 1 12/1/2023 2:24:21 AM Motor Oil Range Organics (MRO) ND 45 mg/Kg 1 12/1/2023 2:24:21 AM Surr: DNOP 92.8 69-147 %Rec 1 12/1/2023 2:24:21 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 12/1/2023 5:00:23 AM 3.4 mg/Kg 1 Surr: BFB 91.9 15-244 %Rec 1 12/1/2023 5:00:23 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 12/1/2023 5:00:23 AM 0.017 mg/Kg 1 Toluene ND 0.034 mg/Kg 1 12/1/2023 5:00:23 AM Ethylbenzene ND 0.034 mg/Kg 1 12/1/2023 5:00:23 AM Xylenes, Total ND mg/Kg 12/1/2023 5:00:23 AM 0.069 1 Surr: 4-Bromofluorobenzene 92.5 39.1-146 %Rec 1 12/1/2023 5:00:23 AM **EPA METHOD 300.0: ANIONS** Analyst: RBC mg/Kg Chloride 12/1/2023 3:20:52 PM 2300 60 20

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

WO#: 2311D82

13-Dec-23

Client:	Ensolum LLC
Project:	Pipeline ROW 1002

Project:		ine ROW 1002		
Sample ID:	MB-79090	SampType: <b>mblk</b>	TestCode: EPA Method 300.0: Anions	
Client ID:	PBS	Batch ID: <b>79090</b>	RunNo: <b>101524</b>	
Prep Date:	11/30/2023	Analysis Date: 11/30/2023	SeqNo: 3737347 Units: mg/Kg	
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	
Chloride		ND 1.5		
Sample ID:	LCS-79090	SampType: Ics	TestCode: EPA Method 300.0: Anions	
Client ID:	LCSS	Batch ID: <b>79090</b>	RunNo: 101524	
Prep Date:	11/30/2023	Analysis Date: 11/30/2023	SeqNo: 3737348 Units: mg/Kg	
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	
Chloride		15 1.5 15.00	0 97.6 90 110	
Sample ID:	MB-79099	SampType: MBLK	TestCode: EPA Method 300.0: Anions	
Client ID:	PBS	Batch ID: <b>79099</b>	RunNo: 101539	
Prep Date:	12/1/2023	Analysis Date: 12/1/2023	SeqNo: 3739558 Units: mg/Kg	
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	
Chloride		ND 1.5		
Sample ID:	LCS-79099	SampType: LCS	TestCode: EPA Method 300.0: Anions	
Client ID:	LCSS	Batch ID: <b>79099</b>	RunNo: 101539	
Prep Date:	12/1/2023	Analysis Date: 12/1/2023	SeqNo: 3739559 Units: mg/Kg	
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	
Chloride		15 1.5 15.00	0 97.7 90 110	
Sample ID:	LCS-79248	SampType: <b>LCS</b>	TestCode: EPA Method 300.0: Anions	
Client ID:	LCSS	Batch ID: 79248	RunNo: 101711	
Prep Date:	12/8/2023	Analysis Date: 12/8/2023	SeqNo: 3747629 Units: mg/Kg	
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	_
Chloride		14 1.5 15.00	0 91.7 90 110	
Sample ID:	MB-79248	SampType: MBLK	TestCode: EPA Method 300.0: Anions	
Client ID:	PBS	Batch ID: 79248	RunNo: 101711	
Prep Date:	12/8/2023	Analysis Date: 12/8/2023	SeqNo: 3747630 Units: mg/Kg	
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	_
Chloride		ND 1.5		

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Limit

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**Project:** 

### Hall Environmental Analysis Laboratory, Inc.

Pipeline ROW 1002

WO#: 2311D82 13-Dec-23

**Client:** Ensolum LLC

Sample ID: MB-79079 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics PBS Client ID: Batch ID: 79079 RunNo: 101511 Prep Date: 11/30/2023 Analysis Date: 11/30/2023 SeqNo: 3736529 Units: mg/Kg SPK Ref Val %REC %RPD **RPDLimit** Analyte Result PQL SPK value LowLimit HighLimit Qual Diesel Range Organics (DRO) ND 10 Motor Oil Range Organics (MRO) ND 50 Surr: DNOP 9.4 10.00 94.5 69 147 Sample ID: LCS-79079 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics LCSS Client ID: Batch ID: 79079 RunNo: 101511 Prep Date: 11/30/2023 Analysis Date: 11/30/2023 SeqNo: 3736530 Units: mg/Kg Analyte PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 97.6 Diesel Range Organics (DRO) 49 10 50.00 0 61.9 130 Surr: DNOP 5.000 4.6 147 Sample ID: 2311D82-036AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics BG-02 3-4' Client ID: Batch ID: 79079 RunNo: 101511 Prep Date: 11/30/2023 Analysis Date: 12/1/2023 SeqNo: 3736552 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 44 42.81 54.2 8.6 0 103 135 Surr: DNOP 4.2 4.281 98.5 147 69

		,,	_						9	
Client ID: BG-02 3-4'	nt ID: BG-02 3-4' Batch ID: 79079					)1511				
Prep Date: 11/30/2023	Analysis D	ate: <b>12</b>	/1/2023	9	SeqNo: 37	736553	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	8.7	43.25	0	103	54.2	135	1.14	29.2	
Surr: DNOP	4.3		4.325		99.4	69	147	0	0	

TestCode: EPA Method 8015M/D: Diesel Range Organics

Sample ID: <b>MB-79236</b>	TestCode: EPA Method 8015M/D: Diesel Range Organics									
Client ID: PBS	Batch	n ID: <b>79</b> 2	236	F	RunNo: 10	01709				
Prep Date: 12/7/2023	SeqNo: <b>3747413</b>			Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
O DNOD										

31 31 ( 1)		-				
Motor Oil Range Organics (MRO)	ND	50				
Surr: DNOP	11		10.00	111	69	147

SampType: MSD

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded Н
- Not Detected at the Reporting Limit

Sample ID: 2311D82-036AMSD

- POL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

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### Hall Environmental Analysis Laboratory, Inc.

WO#: 2311D82

13-Dec-23

**Client:** Ensolum LLC **Project:** Pipeline ROW 1002

Sample ID: LCS-79236 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: Batch ID: 79236 LCSS RunNo: 101709

SeqNo: 3747414 Prep Date: 12/7/2023 Analysis Date: 12/8/2023 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 55 10 50.00 0 111 61.9 130

Surr: DNOP 5.2 5.000 105 69 147

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Limit

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### Hall Environmental Analysis Laboratory, Inc.

WO#: **2311D82** *13-Dec-23* 

Client: Ensolum LLC
Project: Pipeline ROW 1002

	1	1002									
Sample ID:	2.5ug gro lcs	SampT	ype: <b>LC</b>	s	Tes	tCode: EF	PA Method	8015D: Gaso	line Range		
Client ID:	LCSS	Batch	n ID: GS	101521	F	RunNo: 10	01521				
Prep Date:		Analysis D	)ate: <b>11</b>	/30/2023	5	SeqNo: 37	737022	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	e Organics (GRO)	24 2000	5.0	25.00 1000	0	95.4 197	70 15	130 244			
Sample ID:	2.5ug gro lcs-ii	SampT	ype: <b>LC</b>	S	Tes	tCode: <b>EF</b>	PA Method	8015D: Gaso	line Range		
Client ID:	LCSS	Batch	n ID: GS	S101521	F	RunNo: 10	01521				
Prep Date:		Analysis D	)ate: 11	/30/2023	S	SeqNo: 37	737023	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	22	5.0	25.00	0	89.4	70	130			
Surr: BFB		2000		1000		195	15	244			
Sample ID:	mb	SampT	уре: МЕ	BLK	Tes	tCode: EF	PA Method	8015D: Gaso	line Range	,	_
Client ID:	PBS	Batch	n ID: GS	101521	F	RunNo: 10	01521				
Prep Date:		Analysis D	)ate: 11	/30/2023	5	SeqNo: 37	737024	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	e Organics (GRO)	ND 990	5.0	1000		98.5	15	244			
Sample ID:	mb-ii	SampT	уре: <b>МЕ</b>	BLK	Tes	tCode: EF	PA Method	8015D: Gaso	line Range		
Client ID:	PBS	Batch	n ID: GS	S101521	F	RunNo: 10	01521				
Prep Date:		Analysis D	)ate: 11	/30/2023	5	SeqNo: 37	737025	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	e Organics (GRO)	ND 930	5.0	1000		93.5	15	244			
Sample ID:	2311d82-012ams	SampT	уре: <b>м</b> .	3	Tes	tCode: EF	PA Method	8015D: Gaso	line Range	,	
Client ID:	SS-08 3-4'	Batch	n ID: GS	S101521	F	RunNo: 10	01521				
Prep Date:		Analysis D	)ate: 12	2/1/2023	(	SeqNo: 37	737040	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	17	3.0	15.16	2.983	91.4	70	130			
Surr: BFB		1400		606.4		227	15	244			
Sample ID:	2311d82-012amsd	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID:	SS-08 3-4'	Batch	n ID: GS	S101521	521 RunNo: 101521						

#### Qualifiers:

Prep Date:

Analyte

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

Analysis Date: 12/1/2023

PQL

Result

B Analyte detected in the associated Method Blank

SeqNo: 3737041

LowLimit

Units: mg/Kg

HighLimit

%RPD

E Above Quantitation Range/Estimated Value

%REC

- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

SPK value SPK Ref Val

Page 26 of 29

**RPDLimit** 

Qual

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2311D82** *13-Dec-23* 

Client: Ensolum LLC
Project: Pipeline ROW 1002

Sample ID:	2311d82-012amsd	SampT	Гуре: МЅ	D	Tes	tCode: EF	PA Method	8015D: Gaso	line Range		
Client ID:	SS-08 3-4'	Batch	Batch ID: GSS101521			RunNo: 101521					
Prep Date:		Analysis D	Analysis Date: 12/1/2023			SeqNo: 3737041 Units: mg/Kg			g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range	e Organics (GRO)	17	3.0	15.16	2.983	94.3	70	130	2.56	20	
Surr: BFB		1400		606.4		234	15	244	0	0	
Sample ID:	lcs-79219	SampT	SampType: LCS TestCode: EPA Method 8015D: Gasoline Range								
Client ID:	LCSS	Batch	h ID: <b>792</b>	219	F	RunNo: 10	01707				
Prep Date:	12/7/2023	Analysis D	Date: 12	/9/2023	5	SeqNo: 37	748649	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range	e Organics (GRO)	23	5.0	25.00	0	90.0	70	130			
Surr: BFB		1900		1000		185	15	244			
Sample ID:	mb-79219	SampT	Гуре: МВ	SLK	Tes	tCode: <b>EF</b>	PA Method	8015D: Gaso	line Range	<del></del>	·
Client ID:	PBS	Batck	h ID: <b>792</b>	10		RunNo: 10	1707				

SPK value SPK Ref Val %REC

SeqNo: 3748651

LowLimit

Units: mg/Kg

HighLimit

%RPD

**RPDLimit** 

Qual

Surr: BFB	880	1000	88.4	15	244

Analysis Date: 12/9/2023

PQL

5.0

Result

ND

#### Qualifiers:

Prep Date:

Analyte

12/7/2023

Gasoline Range Organics (GRO)

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

2311D82 13-Dec-23

WO#:

Client: Ensolum LLC
Project: Pipeline ROW 1002

Sample ID: 100ng btex Ics	Samp <sup>-</sup>	Гуре: <b>LC</b>	S	Tes	TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS	Batc	h ID: BS	101521	F	RunNo: 101521					
Prep Date:	Analysis [	Date: <b>11</b>	te: 11/30/2023 SeqNo: 3737059 Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	1.000	0	98.9	70	130			
Toluene	1.0	0.050	1.000	0	99.7	70	130			
Ethylbenzene	0.98	0.050	1.000	0	97.9	70	130			
Xylenes, Total	3.0	0.10	3.000	0	98.7	70	130			
Surr: 4-Bromofluorobenzene	0.98		1.000		97.6	39.1	146			

Sample ID: <b>mb</b>	SampT	уре: <b>МЕ</b>	BLK	Tes	tCode: Ef	PA Method	8021B: Volati	les		
Client ID: PBS	Batch	n ID: BS	101521	F	RunNo: 101521					
Prep Date:	Analysis D	Date: 11	/30/2023	5	SeqNo: <b>3737061</b>		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025		_						
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.97		1.000		96.7	39.1	146			

Sample ID: mb-ii	SampT	уре: МЕ	BLK	Tes	tCode: EF	PA Method	thod 8021B: Volatiles					
Client ID: PBS	Batch ID: BSS101521			RunNo: 101521								
Prep Date:	Analysis Date: 11/30/2023			SeqNo: <b>3737062</b>			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	ND	0.025										
Toluene	ND	0.050										
Ethylbenzene	ND	0.050										
Xylenes, Total	ND	0.10										
Surr: 4-Bromofluorobenzene	0.94		1.000		94.3	39.1	146					

Sample ID: 2311d82-014ams	SampT	ype: MS	;	TestCode: EPA Method 8021B: Volatiles						
Client ID: SS-07 1-2'	Batch	n ID: BS	S101521	F	RunNo: 101521					
Prep Date:	Analysis D	Date: 12	/1/2023	SeqNo: 3737091 Units: mg/Kg				g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.58	0.014	0.5787	0	100	70	130			
Toluene	0.61	0.029	0.5787	0.02888	101	70	130			
Ethylbenzene	0.58	0.029	0.5787	0	99.5	70	130			
Xylenes, Total	1.7	0.058	1.736	0.01753	98.8	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5787		93.6	39.1	146			

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

WO#: **2311D82** *13-Dec-23* 

Client: Ensolum LLC
Project: Pipeline ROW 1002

Sample ID: 2311d82-014ams	d Samp	Туре: МЅ	D	Tes	tCode: EF	PA Method	8021B: Volati	iles		
Client ID: SS-07 1-2'	Bato	h ID: BS	S101521	F	RunNo: 10	01521				
Prep Date:	Analysis I	Date: <b>12</b>	/1/2023	5	SeqNo: 37	737092	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.56	0.014	0.5787	0	97.4	70	130	2.86	20	
Toluene	0.60	0.029	0.5787	0.02888	97.9	70	130	2.69	20	
Ethylbenzene	0.57	0.029	0.5787	0	97.8	70	130	1.77	20	
Xylenes, Total	1.7	0.058	1.736	0.01753	97.0	70	130	1.79	20	
Surr: 4-Bromofluorobenzene	0.54		0.5787		92.7	39.1	146	0	0	

Sample ID: LCS-79219	SampT	ype: <b>LC</b>	s	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: LCSS	Batch	n ID: <b>792</b>	219	F	RunNo: 10	01707				
Prep Date: 12/7/2023	Analysis D	)ate: <b>12</b>	/9/2023	5	SeqNo: 37	748700	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.1	70	130			
Toluene	0.95	0.050	1.000	0	95.1	70	130			
Ethylbenzene	0.94	0.050	1.000	0	94.1	70	130			
Xylenes, Total	2.8	0.10	3.000	0	94.1	70	130			
Surr: 4-Bromofluorobenzene	0.95		1.000		95.4	39.1	146			

Sample ID: <b>mb-79219</b>	SampT	уре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Volati	les		
Client ID: PBS	Batcl	n ID: <b>79</b> 2	219	F	RunNo: 10	01707				
Prep Date: 12/7/2023	Analysis D	Date: 12	2/9/2023	5	SeqNo: 3	748702	Units: mg/K	g		
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	0.94		1.000		94.5	39.1	146			

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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#### **Environment Testin**

Eurofins Environment Testing South Central, LLC 4901 Hawkins NE

Website: www.hallenvironmental.com

Albuquerque. NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Sample Log-In Check List

Released to Imaging: 3/1/2024 2:23:08 PM

Client Name: Ensolum LLC	Work Order Numl	per: 2311D82		RcptNo:	1
Received By: Tracy Casarrubias	11/30/2023 8:00:00	АМ			
Completed By: Tracy Casarrubias	11/30/2023 8:30:06	AM			
Reviewed By: M 11-30-23					
7					
Chain of Custody					
Is Chain of Custody complete?		Yes 🗹	No 🗌	Not Present	
2. How was the sample delivered?		Courier			
<u>Log In</u>					
3. Was an attempt made to cool the sample	es?	Yes 🗹	No 🗌	na 🗆	
4. Were all samples received at a temperatu	ure of >0° C to 6.0°C	Yes 🗹	No 🗌	NA $\square$	
5. Sample(s) in proper container(s)?		Yes 🔽	No 🗆		
Sufficient sample volume for indicated tes	st(s)?	Yes 🗸	No 🗌		
7. Are samples (except VOA and ONG) prop	. ,	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 bro		Yes	No 🔽		
				# of preserved bottles checked	
11. Does paperwork match bottle labels?		Yes 🔽	No 🗌	for pH:	>12 unless noted)
(Note discrepancies on chain of custody)  12. Are matrices correctly identified on Chain	of Custody?	Yes 🗌	No 🗹	Adjusted?	P12 unless notes)
13. Is it clear what analyses were requested?		Yes ✓	No 🗆		
14. Were all holding times able to be met?		Yes 🗹	No 🗆	Checked by:	V11/30/2
(If no, notify customer for authorization.)		103 🖭			17016
Special Handling (if applicable)					
15. Was client notified of all discrepancies w	ith this order?	Yes	No 🗌	NA 🗹	
Person Notified:	Date				
By Whom:	Via:	eMail P	hone 🗌 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		

Received	My OCD	-842Ct	Received Mann - St-2021 18:16:00 The cord	rd	Turn-Around Time:	Time:				I	A		Ž	IRC	ENVIRONMEN PAR OF	E	age 6	2 of 161
Client:	Ensolum, LLC	n, LLC			□ Standard	⊠ Rush	24 hours		П	•	ANAL		YSIS	5	LABORATORY	Z	Ö	۲
					Project Name:	**					www.	allen	ironn	www.hallenvironmental.com	mox			
Mailing	Mailing Address:		601 N. Marienfeld St. Suit	Suite 400	Pro lin	- ROW, 1002	20	•	4901 Hawkins NE	lawkii	ns NE		enbnc	rque, 1	Albuquerque, NM 87109	60		
					Project #:				Tel. 505-345-3975	05-34	5-397	2	Fax 5	05-34	Fax 505-345-4107			
Phone #:	l	214-733-3165										Anal	ysis F	Analysis Request	, -	-		
email o	email or Fax#:	klowery(	klowery@ensolum.com		Project Manager:	ger: Kelly Lowery	owery					OS		(tua	,			
QA/QC Packa	QA/QC Package: Standard		☐ Level 4 (Full Validation)	lidation)							SWIS0	, PO4,		edA\tna				
Accreditation:	itation:	□ Az Coi	☐ Az Compliance	l	Sampler: 🛠	l l					728 7	ON						
□ NEL	AC.	□ Other			1000	X Yes	No morty											
	□ EDD (Type)				# of Coolers:		-								E			
					Cooler I emp(including CF):	(Including CF): 0	+0 12 0 +	_							7			
Š	<u> </u>	Motric	Some Name Name Name	Denth (	Container Type and #	Preservative Tvpe	HEAL No.	\X∃18	08:H9T 9 1808	EDB (V	a sHA9	кскь СЉЕ, І	7) 0978	3) 07S8	DH			
11/2 X/2002	824	S S S S S S S S S S S S S S S S S S S	_	8-1	1 (	100/20	100	7	\×			X						
-			R-01	7-7	-		002	7	V			X						
	1028			2-3			500	X	Y			X						
	1020		10-18	2-4			H00	X	X			X						
	1107		55-01	7-6			<b>\$00</b>								X			
	707		1	7-1			200								×			
	1107		15-01	23			F00	X	×			×					_	
	1107		10-35	3-4			800	X	4.1			X				$\dashv$	_	
	13.40		80-55	1-0			600					$\dashv$		+	×	-	-	
	11 46		1	7-1			010					$\dashv$			×	$\dashv$		
			1	2-3			011	×				X						
>	1		N 00 / N	2-4	<i>&gt;</i>	÷	012	X	メ			×						
Date:	Time:	Relinquished by:		1 1	Received by:	Via:	Date Time	Remarks	arks:	Bill to:	o: Tor	Tom Long	<b>.</b>					
		1/20/14	Kapun Shinade SE	MAK	Wanne	7	18988			E Ha	III. tylo irprise	Field	Email: tjlong@eprod.com Enterprise Field Services,		LC			
Date:	Time:	Relinquish	ned by:		Received by:	Via: COUNCY	Date				. /		100	3				
2007	0061 82/201	000	C. PANANANANANANANANANANANANANANANANANANAN				00:8 \$2/08/11	Payk	Paykey/AFE/NonAF库:	E/Nor	AFE		N5488		M			
	22	14K	スペインアンガ							)	1	1877	4	1000000	an sho no	n legital r	1000	

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

eceived	by OCD	3/1/2 CL	eceiveth OCD: 3/12 C4 18:05 CY Record		Turn-Around Time:	Time:				A	Ē	1	RO	NMER	HALL ENVIRONMENTAL
Client:	Ensolum, LLC	n, LLC			☐ Standard	K Rush	74hours		•	A	ANALYSIS	SI	LAE	LABORATORY	ORY
					Project Name:	ö				www.	www.hallenvironmental.com	ronme	ntal.cc	Ē	
Mailing	Mailing Address:		601 N. Marienfeld St. Sui	Suite 400	Pipeline	ROW, 18,	1882	490	4901 Hawkins NE	ns NE	1	ıquerq	ue, N	Albuquerque, NM 87109	
						(		Tel	Tel. 505-345-3975	5-397	E F	Fax 50	505-345-4107	4107	
Phone #:		214-733-3165			N5B1	226313	3				Analysis		Request		
email or Fax#:	r Fax#:	klowery	klowery@ensolum.com		Project Manager:		Kelly Lowery	(0)		,	os		(Juə		
QA/QC Packa	QA/QC Package: Standard		□ Level 4 (Full Validation)	lidation)				M / O	LCB.	SMIS0	, PO4,		edA\tn		
Accreditation:	itation: AC	□ Az Cor □ Other	☐ Az Compliance ☐ Other	1	Sampler: Son Ice:	5/K , 5/4/M A'Yes	O No marky	:\ TME	2808\26 (1.403	728 10	³° NO	(AO	(Prese		
	□ EDD (Type)				# of Coolers:		5	p(e							
					Cooler Lemp	COOIET   errip(including CF).	10.11	910							
C ote ote	Time	Matrix	Sample Name	Depth Depth	Container Type and #	Preservative Tvpe	7311 D82	)8:H97	8081 F		кскь Сі) ғ,	) 03S8 ) 07S8		polo	
11/29	1220	50;1		7-0	Jar 1	ice/cool	013							Y	
	[220		55-07	7-1			014	4			X				
	2220		55-07	7-3			015							×	
	1220		55-07	4-8			016	X			X				
	1350		55-04,3	7-0			FIO							×	
	1350			7-2			018							×	
_	1350		58-043	2-3			610	7			X				
	1350		55-043	3-4			020	¥			X	1			
	1506		55-06	10			021		$\dashv$				$\perp$	×	
	1506		55-06	7-1			0227					+	$\dashv$	×	
	1506		30-8	2-3			220	¥ 4			×				
<b>→</b>	9051	$\rightarrow$	30 <del>CES</del> -55	3,4	→ →	<i>→</i>	2	X			Y				
Date:	Time:	Ια.	led by:	Meson	Received by:	Via:		Remarks:		o: Ton	Tom Long	20	\$		
		Kaerra	Va Shimada	- 4	MMMM	3	ľ		E E	III. yırdı irprise	Enterprise Field Services, LLC	ou.co.	s, LLC		
Date:	Time:	<u>مر</u>	ed by:		Received by:	Via: Count	=					3			
74D	198	CUM	(Managary)				190 (MMMMM) NGT 883	Paykey/AFE/NonAFE:	FE/NO	AFE:	ed lim et	1697	883 optated on	the analytical reg	port.
	If necessary	, samples sut	bmitted to Hall Environment	al may be subc	contracted to other	accredited laborator	les. This serves as notice or un	possibility. 7	ny sub-co-	ומכוסח	ala wii 55	Many	אמומר ה	נווט מוומון ויייייין	

If necessary, samples submitted to Hall Environmental maybe

Received by OG	P-3/12/24/1	Received by OSD: 3/12/84 18:05:07 Hecord	prd	Turn-Around Time:	nd Time:			1	-	N	TDO	2	Page 64 of 161	64 of 1	191
Client: Enso	Ensolum, LLC			□ Standard	rd 🗹 Rush	24 hours		. «	N	ANALYSIS LABORATORY	M	BOR	ATO	RY	
				Project Name:	me:				www.ha	www.hallenvironmental.com	nental.c	mo			
Mailing Address:		601 N. Marienfeld St. Suite 400	e 400	Procline	BOW	1002	4901	4901 Hawkins NE	ns NE -		Albuquerque, NM 87109	IM 8710	6		
				Project #:			Tel.	505-345-3975	5-3975	Fax	505-345-4107	5-4107			-
Phone #: 21	214-733-3165			03B.1	276313				4	Analysis	Request				
email or Fax#:		klowery@ensolum.com		Project Manager:		Kelly Lowery	(0)			⁵OS	(tne				
QA/QC Package:			7				JM \ (	s.go.	SWIS	' <sup>†</sup> Oc					
Standard	7	Level 4 (rull validation)	lidation)		, , , , ,		SSC		02	ا2، ا	eu				
Accreditation:		pliance		اي	SK SAM		a / c		Z8 1	ON					
I NELAC	- Other			# of Coolors.	163	LINO MOCTO	ЭВС			<sup>;</sup> ЕО					
			A. College	# OI COORE	-		)(d								
				Cooler Ter	Cooler Temp(including CF): 5. (	5.010.125.12	1910					()			
Date Time	Matrix	Sample Name	(F) Depth	Container Type and #	Preservative Type	HEAL NO. 2311 D&Z	X3T8 8:¥19T	8081 F	PAHs RCRA	ල්) E' 85e0 (	) 0728 ) IstoT	70H			
3	50:1	7 30-5C	1-0	Ja. 2		025	>					X			
17.50		5s-034	2-1		,	020						×			
7.20		160-55	2-3			673	X X			K.					
1430		7 & J. 55	7-8			078	X			×					
4277		35-O5	7			620						X			
15217	Ĭ,	50,55	2-1			030						$\Rightarrow$			
1527		55-05	2-5			031	X	7		X					
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If word I WULVIVIVIVIVIVIVIVIVIVIVIVIVIVIVIOR IN Secretary samples submitted to Hall Environmental may be set Contracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Eurofins Environment Testing South Central, LLC 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

December 08, 2023

Kelly Lowery Ensolum LLC 601 Marrenfield #400 Midland, TX 79701 TEL: (214) 733-3165

FAX:

RE: Pipeline ROW 1002 OrderNo.: 2312008

Dear Kelly Lowery:

Eurofins Environment Testing South Central, LLC received 4 sample(s) on 12/1/2023 for the analyses presented in the following report.

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

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

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

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

# Analytical Report Lab Order 2312008

Date Reported: 12/8/2023

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: SS-02 2-3

 Project:
 Pipeline ROW 1002
 Collection Date: 11/29/2023 10:45:00 AM

 Lab ID:
 2312008-003
 Matrix: MEOH (SOIL)
 Received Date: 12/1/2023 7:45:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>PRD</b>
Diesel Range Organics (DRO)	54	9.4	mg/Kg	1	12/2/2023 7:46:01 PM
Motor Oil Range Organics (MRO)	110	47	mg/Kg	1	12/2/2023 7:46:01 PM
Surr: DNOP	113	69-147	%Rec	1	12/2/2023 7:46:01 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.0	mg/Kg	1	12/1/2023 6:17:27 PM
Surr: BFB	94.1	15-244	%Rec	1	12/1/2023 6:17:27 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.015	mg/Kg	1	12/1/2023 6:17:27 PM
Toluene	ND	0.030	mg/Kg	1	12/1/2023 6:17:27 PM
Ethylbenzene	ND	0.030	mg/Kg	1	12/1/2023 6:17:27 PM
Xylenes, Total	ND	0.061	mg/Kg	1	12/1/2023 6:17:27 PM
Surr: 4-Bromofluorobenzene	94.1	39.1-146	%Rec	1	12/1/2023 6:17:27 PM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	4200	150	mg/Kg	50	12/4/2023 11:31:44 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# Analytical Report Lab Order 2312008

Date Reported: 12/8/2023

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: SS-02 3-4

 Project:
 Pipeline ROW 1002
 Collection Date: 11/29/2023 10:45:00 AM

 Lab ID:
 2312008-004
 Matrix: SOIL
 Received Date: 12/1/2023 7:45:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	12/2/2023 12:16:54 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	12/2/2023 12:16:54 AM
Surr: DNOP	72.8	69-147	%Rec	1	12/2/2023 12:16:54 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	12/4/2023 12:27:05 PM
Surr: BFB	89.5	15-244	%Rec	1	12/4/2023 12:27:05 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.023	mg/Kg	1	12/4/2023 12:27:05 PM
Toluene	ND	0.046	mg/Kg	1	12/4/2023 12:27:05 PM
Ethylbenzene	ND	0.046	mg/Kg	1	12/4/2023 12:27:05 PM
Xylenes, Total	ND	0.092	mg/Kg	1	12/4/2023 12:27:05 PM
Surr: 4-Bromofluorobenzene	94.9	39.1-146	%Rec	1	12/4/2023 12:27:05 PM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	5600	150	mg/Kg	50	12/4/2023 11:44:09 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2312008** 

08-Dec-23

Client: Ensolum LLC
Project: Pipeline ROW 1002

Sample ID: MB-79108 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 79108 RunNo: 101545

Prep Date: 12/1/2023 Analysis Date: 12/1/2023 SeqNo: 3738655 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-79108 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 79108 RunNo: 101545

Prep Date: 12/1/2023 Analysis Date: 12/1/2023 SeqNo: 3738656 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 92.6 90 110

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2312008** *08-Dec-23* 

Client: Ensolum LLC
Project: Pipeline ROW 1002

Sample ID: LCS-79098 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 79098 RunNo: 101534 Units: mg/Kg Prep Date: 12/1/2023 Analysis Date: 12/1/2023 SeqNo: 3738244 PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte Result Qual Diesel Range Organics (DRO) 43 10 50.00 n 86.9 61.9 130 Surr: DNOP 3.9 5.000 78.6 69 147

Sample ID: MB-79098 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS Batch ID: 79098 RunNo: 101534

Prep Date: 12/1/2023 Analysis Date: 12/1/2023 SeqNo: 3738246 Units: mg/Kg

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

Diesel Range Organics (DRO) ND 10

Diesel Range Organics (DRO) ND 10
Motor Oil Range Organics (MRO) ND 50

Surr: DNOP 8.2 10.00 81.9 69 147

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2312008** 

08-Dec-23

Client: Ensolum LLC
Project: Pipeline ROW 1002

Sample ID: 2.5ug gro Ics	SampTy	pe: LCS	Te	stCode: <b>EF</b>	PA Method	8015D: Gaso	line Range		
Client ID: LCSS	Batch	ID: <b>GS101533</b>		RunNo: 10	1533				
Prep Date:	Analysis Da	ate: <b>12/1/2023</b>		SeqNo: 37	738198	Units: mg/K	g		
Analyte	Result	PQL SPK v	alue SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0 25	5.00 0	97.2	70	130			
Surr: BFB	2000	1	000	200	15	244			
Sample ID: <b>mb</b>	SampTy	pe: MBLK	Te	stCode: <b>EF</b>	PA Method	8015D: Gaso	line Range		
Client ID: PBS	Batch	ID: <b>GS101533</b>		RunNo: 10	1533				
Prep Date:	Analysis Da	ate: <b>12/1/2023</b>		SeqNo: 37	738199	Units: mg/K	g		
Analyte	Result	PQL SPK v	alue SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0							
Surr: BFB	920	1	000	91.6	15	244			
Sample ID: Ics-79101	SampTy	pe: LCS	Te	stCode: <b>EF</b>	PA Method	8015D: Gaso	line Range		
Client ID: LCSS	Batch	ID: <b>79101</b>		RunNo: 10	1567				
Prep Date: 12/1/2023	Analysis Da	ate: <b>12/4/2023</b>		SeqNo: 37	740056	Units: mg/K	g		
Analyte	Result	PQL SPK v	alue SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0 25	5.00 0	87.1	70	130			
Surr: BFB	1900	1	000	192	15	244			

Sample ID: <b>mb-79101</b>	Samp <sup>-</sup>	Гуре: <b>МЕ</b>	BLK	Tes	tCode: EF	PA Method	8015D: Gasol	ine Range	,	
Client ID: PBS	Batc	h ID: <b>79</b> 1	101	F	RunNo: 10	01567				
Prep Date: 12/1/2023	Analysis [	Date: 12	/4/2023	5	SeqNo: 37	740057	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		93.0	15	244			

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2312008** 

08-Dec-23

Client: Ensolum LLC
Project: Pipeline ROW 1002

Sample ID: 100ng btex lcs	Samp <sup>-</sup>	Гуре: <b>LC</b> :	S	Tes	tCode: EF	PA Method	8021B: Volati	iles		
Client ID: LCSS	Batc	h ID: BS	101533	F	RunNo: 10	01533				
Prep Date:	Analysis [	Date: <b>12</b>	/1/2023	5	SeqNo: 37	738202	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	100	70	130			
Toluene	1.0	0.050	1.000	0	100	70	130			
Ethylbenzene	0.98	0.050	1.000	0	98.3	70	130			
Xylenes, Total	3.0	0.10	3.000	0	98.6	70	130			
Surr: 4-Bromofluorobenzene	0.95		1.000		95.2	39.1	146			

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: <b>BS101533</b>			F	RunNo: 101533						
Prep Date:	Analysis D	ate: <b>12</b>	/1/2023	9	SeqNo: 37	738203	Units: mg/K	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	ND	0.025									
Toluene	ND	0.050									
Ethylbenzene	ND	0.050									
Xylenes, Total	ND	0.10									
Surr: 4-Bromofluorobenzene	0.92		1.000		92.1	39.1	146				

Sample ID: LCS-79101	TestCode: EPA Method 8021B: Volatiles									
Client ID: LCSS	Batch ID: <b>79101</b> Analysis Date: <b>12/4/2023</b>			F	RunNo: 10					
Prep Date: 12/1/2023				5	SeqNo: 37	740090	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	90.5	70	130			
Toluene	0.92	0.050	1.000	0	92.1	70	130			
Ethylbenzene	0.93	0.050	1.000	0	92.6	70	130			
Xylenes, Total	2.8	0.10	3.000	0	92.8	70	130			
Surr: 4-Bromofluorobenzene	0.98		1.000		98.3	39.1	146			

Sample ID: <b>mb-79101</b>	SampType: MBLK			Tes	tCode: EF					
Client ID: PBS	Batch ID: <b>79101</b>			RunNo: 101567						
Prep Date: 12/1/2023	Analysis Date: 12/4/2023			SeqNo: <b>3740092</b>			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.96		1.000		96.1	39.1	146			

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit



## **Environment Testin**

Eurofins Environment Testing South Central, LLC 4901 Hawkins NE

Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Sample Log-In Check List

Released to Imaging: 3/1/2024 2:23:08 PM

	72	*	<u>, , , , , , , , , , , , , , , , , , , </u>	Vebsite: www.	hallenvironmeni	tal.com		4
Client Name:	Ensolum LL	С	Work	Order Numbe	er: 2312008		RcptNo:	1
eceived By:	Juan Rojas	6	12/1/202	23 7:45:00 A	М	Grandy J		
ompleted By:	Desiree Do	minguez	12/1/202	23 8:31:28 A	М	TA		
eviewed By:	JA 12	-1-23						
hain of Cust	ody							
Is Chain of Cu	52 T	ete?			Yes 🗹	No 🗌	Not Present	
How was the s	ample delive	ered?			Courier			
og In								
Was an attemp	ot made to co	ool the sampl	es?		Yes 🗹	No 🗌	NA 🗆	
Were all sampl	es received	at a temperat	ture of >0° C t	o 6.0°C	Yes 🗹	No 🗌	na 🗆	
Sample(s) in p	roper contair	ner(s)?			Yes 🔽	No 🗌		
Sufficient samp	ole volume fo	or indicated te	st(s)?		Yes 🗹	No 🗌		
Are samples (e	xcept VOA a	and ONG) pro	perly preserve	d?	Yes 🗹	No 🗌		
Was preservati	ve added to	bottles?			Yes 🗌	No 🗹	NA 🗆	
. Received at lea	st 1 vial with	ı headspace ·	<1/4" for AQ V	OA?	Yes 🗌	No 🗆	NA 🗹	
). Were any sam	ple containe	rs received b	roken?		Yes 🗌	No 🗹	# of preserved	
l .Does paperwor (Note discrepar					Yes 🗹	No 🗆	bottles checked for pH:	>12 unless noted
Are matrices co					Yes 🗹	No 🗆	Adjusted?	
 Is it clear what			-		Yes <b>☑</b>	No 🗌		
. Were all holdin (If no, notify cu	g times able	to be met?			Yes 🗹	No 🗆	Checked by:50	M 12/1/93
pecial Handli		_					·	
5.Was client not	ified of all dis	screpancies v	vith this order?	•	Yes 🗌	No 🗌	NA 🗹	
Person I	Notified:	-	NAME OF THE PARTY	Date:	-			
By Whor	m: I			Via:	eMail	Phone  Fax	☐ In Person	
Regardir	ng: [							
Client In	structions:							
6. Additional ren	narks:							
7. Cooler Inform		c					,	
Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By	**************************************	
1	2.0	Good	Not Present	Yogi	1		Andrew An	

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

Chain-of-Custody Record

Turn-Around Time:

# ANALYSIS LABORATORY HALL ENVIRONMENTAL

Released to Imaging: 3/1/2024 2:23:08 PM

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Analysis Request Fax 505-345-4107

Total Coliform (Present/Absent)

HOL



Eurofins Environment Testing South Central, LLC 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

February 20, 2024

Kelly Lowery
Ensolum LLC
601 Marrenfield #400
Midland, TX 79701
TEL: (214) 733-3165

FAX:

RE: Pipeline Row 1002 OrderNo.: 2402731

Dear Kelly Lowery:

Eurofins Environment Testing South Central, LLC received 1 sample(s) on 2/15/2024 for the analyses presented in the following report.

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

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

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

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

# Analytical Report Lab Order 2402731

Date Reported: 2/20/2024

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: SS-2

 Project:
 Pipeline Row 1002
 Collection Date: 2/13/2024 9:55:00 AM

 Lab ID:
 2402731-001
 Matrix: MEOH (SOIL)
 Received Date: 2/15/2024 7:50:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: <b>JKU</b>
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	2/15/2024 4:17:29 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	2/15/2024 4:17:29 PM
Surr: DNOP	81.8	61.2-134	%Rec	1	2/15/2024 4:17:29 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	2/15/2024 4:11:37 PM
Surr: BFB	111	15-244	%Rec	1	2/15/2024 4:11:37 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# **QC SUMMARY REPORT**

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2402731** 

20-Feb-24

Client: Ensolum LLC
Project: Pipeline Row 1002

Sample ID: MB-80468	Samp7	Гуре: <b>МЕ</b>	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: PBS	Batch	h ID: <b>80</b> 4	168	F	RunNo: 10	03130				
Prep Date: 2/15/2024	Analysis D	)ate: <b>2/</b>	15/2024	(	SeqNo: 38	313120	Units: mg/K	g		
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	6.6		10.00		66.2	61.2	134			
Sample ID: LCS-80468	SampT	Гуре: <b>LC</b>	s	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: LCSS	Poto	h ID: <b>80</b> 4	100	RunNo: <b>103130</b>						
CHOILED. LOGO	Dalci	11D. <b>00</b> 4	<del>1</del> 68	r	RunNo: <b>1(</b>	03130				
Prep Date: 2/15/2024	Analysis D				RunNo: <b>1(</b> SeqNo: <b>3</b> (		Units: mg/K	g		
				5			Units: mg/K	g %RPD	RPDLimit	Qual
Prep Date: 2/15/2024	Analysis [	Date: <b>2/</b>	15/2024	5	SeqNo: 38	313136	Ū	·	RPDLimit	Qual

Sample ID: 2402731-001AMS	Samp	ype: MS	j	I es	tCode: El	A Method	8015M/D: Die	sel Range	Organics	
Client ID: SS-2	Batch	n ID: <b>80</b> 4	168	F	RunNo: 10	03130				
Prep Date: 2/15/2024	Analysis D	Date: <b>2/</b>	15/2024	5	SeqNo: 38	313140	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	9.5	47.62	0	84.7	43.7	136			
Surr: DNOP	4.2		4.762		87.3	61.2	134			

Sample ID: 2402731-001AM	SD Samp	Type: MS	SD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: SS-2	Bato	h ID: <b>80</b> 4	468	F	RunNo: 10	03130						
Prep Date: 2/15/2024	Analysis I	Date: <b>2/</b>	15/2024	(	SeqNo: 3	313142	Units: mg/K	(g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)	41	9.7	48.54	0	84.7	43.7	136	1.99	31.3			
Surr: DNOP	4.2		4.854		86.3	61.2	134	0	0			

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# **QC SUMMARY REPORT**

### Hall Environmental Analysis Laboratory, Inc.

Analysis Date: 2/16/2024

PQL

3.7

Result

18

1500

WO#: **2402731 20-Feb-24** 

Client: Ensolum LLC
Project: Pipeline Row 1002

Sample ID: 2.5ug gro lcs	SampT	ype: <b>LC</b>	S	Tes	tCode: EF	PA Method	8015D: Gaso	line Range		
Client ID: LCSS	Batch	n ID: GS	103126	F	RunNo: <b>1</b> (	03126				
Prep Date:	Analysis D	Date: <b>2/</b>	15/2024	5	SeqNo: 38	312740	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	98.6	70	130			
Surr: BFB	2000		1000		204	15	244			
Sample ID: mb	SampT	уре: МЕ	BLK	Tes	tCode: <b>EF</b>	PA Method	8015D: Gaso	line Range		
Client ID: PBS	Batch	n ID: GS	103126	F	RunNo: 10	03126				
Prep Date:	Analysis D	)ate: <b>2/</b>	15/2024	8	SeqNo: 38	812741	Units: mg/K	g		
Prep Date: Analyte	Analysis D	oate: <b>2/</b> PQL	<b>15/2024</b> SPK value		SeqNo: <b>38</b> %REC	B12741 LowLimit	Units: mg/K HighLimit	g %RPD	RPDLimit	Qual
	•				•		· ·	•	RPDLimit	Qual
Analyte	Result	PQL			•		· ·	•	RPDLimit	Qual
Analyte Gasoline Range Organics (GRO)	Result ND 970	PQL	SPK value	SPK Ref Val	%REC 96.9	LowLimit 15	HighLimit	%RPD		Qual

Sample ID: <b>2402731-001ams</b> c	I Samp⁻	уре: МЅ	SD.	Tes	tCode: El	PA Method	8015D: Gasol	line Range	!	
Client ID: SS-2	Batc	n ID: GS	103126	F	RunNo: 10	03126				
Prep Date:	Analysis [	Date: 2/	16/2024	5	SeqNo: 3	812744	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	3.7	18.74	0	94.4	70	130	2.47	20	
Surr: BEB	1500		749.6		204	15	244	0	0	

SPK value SPK Ref Val

18.74

749.6

SeqNo: 3812743

LowLimit

70

15

%REC

96.8

206

Units: mg/Kg

130

244

HighLimit

%RPD

**RPDLimit** 

Qual

#### Qualifiers:

Prep Date:

Surr: BFB

Gasoline Range Organics (GRO)

Analyte

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

#### Environment Testin

Eurofins Environment Testing South Central, LLC 4901 Hawkins NE

4901 Hawkins NE Albuquerque, NM 87109 5 245 2075 FAV 505 245 4103

Released to Imaging: 3/1/2024 2:23:08 PM

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com Client Name: **Ensolum LLC** Work Order Number: 2402731 RcptNo: 1 Received By: 2/15/2024 7:50:00 AM Tracy Casarrubias 2/15/2024 8:04:36 AM Completed By: Tracy Casarrubias Reviewed By: **Chain of Custody** Not Present Yes 🗌 No V 1. Is Chain of Custody complete? 2. How was the sample delivered? Courier Log In No NA | Yes V 3. Was an attempt made to cool the samples? NA 🗔 Were all samples received at a temperature of >0° C to 6.0°C Yes 🗌 Samples not frozen Yes 🔽 No 5. Sample(s) in proper container(s)? Sufficient sample volume for indicated test(s)? Yes Yes 🗸 No 7. Are samples (except VOA and ONG) properly preserved? **V** NA 🗌 Yes No 8. Was preservative added to bottles? NA 🔽 Νo Received at least 1 vial with headspace <1/4" for AQ VOA?</li> Yes No 🗸 Yes 10. Were any sample containers received broken? # of preserved bottles checked No 🗌 for pH: Yes 🗸 11. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 12. Are matrices correctly identified on Chain of Custody? Yes No 13. Is it clear what analyses were requested? Yes 🔽 Checked by: No 14. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) Yes No NA 🗹 15. Was client notified of all discrepancies with this order? Person Notified: Date: eMail Phone Fax In Person By Whom: Regarding: Client Instructions: 16. Additional remarks: Client did not relinquish chain of custody Full address is missing on COC- TMC 2/15/24 17. Cooler Information Seal Date Cooler No Temp ºC Condition Seal Intact Seal No Signed By

-0.3

Good

Yes

Yogi

,	nain	-or-cus	Chain-of-Custody Record		I um-Around i ime	ine:				2			A.V.	(	STREET STREET		
Client		Ensolum, LLC			□ Standard	K Rush	24 41			•	ANAL	Z	S	AB	ANALYSTS LABORATORY	RY KY	
					<u> </u>	2	7			>	ww.ha	envir	onmer	www.hallenvironmental.com			
Mailing	Mailing Address:		601 N. Marienfeld St. Suite 400	te 400	Pipeline 1	3		4	4901 Hawkins NE	awkin	NE NE	Albu	quera	Albuquerque, NM 87109	87109		
					Project #:				Tel. 50	5-345	505-345-3975	Η̈́	Fax 505	505-345-4107	107		
Phone #:		214-733-3165			033/22	26313					7	nalys	Analysis Request	quest			
email c	email or Fax#:	klowery@	klowery@ensolum.com		Project Manager		Kelly Lowery	_	1	-	-	ÞΟ	H	(Ju			
QAVQC	QA/QC Package:									Or.	SIV	S '7(		əsq			
□ Standard	ndard		☐ Level 4 (Full Validation)	lidation)							IISU	ОЧ		Α∖Ju			
Accreditation:	itation.	☐ Az Compliance	pliance		Sampler:						179	10 <sup>5</sup> '					
	AC	□ Other		1	On Ice:	Sey ⊅	ON COS					۱ "	(AC				
	□ EDD (Type)				# of Coolers:	_											
					Cooler Temp(Including CF);	1.	0.2-0.10.3										
						Preservative		H:80	81 Pe	M) BC	id sH/ 8 АЯС	В '-1'	V) 08 S) 07	tal Co	1		
Date	Time	Matrix	Sample Name Depth	Depth	#	Type	2402731			_		-					
2-13-2	2-13-24 95-5	Ŋ	55-2	J.	20%	Ice	100	X									
	_/																
		/	/														
					N												
					Y	1											
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						V	3/2										
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Date:	Time;	Relinquished by:	d by:		Received by:	Via:	Date Time	Remarks		Bill to:	Tem	Swo	Rob	err	Dunamer	24	6
					MALALAA	AMOO	414/24 101D			mail	Hong Fire F	@epe	FG.COT	AHI	Email: <del>tjeng@epord.com</del> A H D V A S Ways	and an	<u>, , , , , , , , , , , , , , , , , , , </u>
Date:	Time:	Relinquished by:	l by:		Received by:	Via:cdure					2	2		, LL			
414/24	1900		Church	0			2/15/m 7.50	Payke	Paykey/AFE/NonAFE:	Non	Ü	3	N67883	n			

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.



**APPENDIX F** 

Previous Report(s)



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# **Closure Report**

Pipeline Right of Way, 1002 Eddy County, New Mexico Reference # fAB1629934423, nAB1629934570

# **Prepared For:**

Enterprise Field Services LLC PO Box 4324 Houston, Texas 77210

# **Prepared By:**

Talon/LPE, Ltd. 2901 State Highway 349 Midland, Texas 79706

November 11, 2016



#### **NMOCD**

1301 W Grand Avenue Artesia, New Mexico 88210

Subject:

**Closure Report** 

Pipeline Right of Way, 1002 Eddy County, New Mexico

Reference # fAB1629934423, nAB1629934570

To Whom It May Concern,

Enterprise Field Services LLC contracted Talon/LPE, Ltd. (Talon/LPE) to complete remediation and closure activities at the above referenced location. The incident description, soil sampling results, remedial actions, and closure request are presented herein.

#### **Site Information**

The Pipeline Right of Way, 1002 is located approximately 10.8 miles southeast of the city of Loving, New Mexico. The legal location for this release is Unit Letter D, Section 13, Township 25 South, and Range 28 East in Eddy County, New Mexico. The latitude and longitude for the site is 32.134004°, -104.046157°. Site maps are presented in Attachment I.

According to the soil survey provided by the United States Department of Agriculture National Resources Conservation Services, the soils in the area are made up of Russler loam with 1 to 3 percent slopes. The referenced soil data is presented in Attachment II. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology consists of eolian and piedmont deposits, Holocene to middle Pleistocene in age.

#### **Groundwater and Site Characterization**

Based on New Mexico Office of the State Engineer Database, the nearest reported groundwater depth is 105 feet below ground surface (bgs) but is located greater than 0.5 miles from the subject site. The FEMA Flood Map Service Center does not locate the site in a 100-year flood plain. See Attachment II for the site characterization data.

If a release occurs within the following areas, the responsible party must treat the release as if it occurred in an area where the groundwater is less than 50 feet bgs in Table I, New Mexico Oil Conservation Division (NMOCD) Rule 19.15.29 NMAC.

<b>Approx</b>	cimate De	epth to Groundwater 10	<mark>5 ft bgs</mark>
Yes	No		
×		Within 300 feet of any continuously flowing watercourse or any other significant watercours	se
	×	Within 200 feet of any lakebed, sinkhole or a playa lake	
	×	Within 300 feet from an occupied permanent residence, school, hospital, institution or chur	rch
	×	Within 500 feet of a spring or a private, domestic fresh water well used by less than five h	households
	~	for domestic or stock watering purposes	
	×	Within 1000 feet of any freshwater well or spring	
	×	Within incorporated municipal boundaries or within a defined municipal freshwater well fie	eld covered
	~	under a municipal ordinance adopted pursuant to Section 3-2703 NMSA 1978	
	×	Within 300 feet of a wetland	
	×	Within the area overlying a subsurface mine	
	×	Within an unstable area	
	×	Within a 100-year floodplain	

With no depth to water source available that meets New Mexico Oil Conservation Division's (NMOCD) criteria within ½ mile of the site and due to the a surface watercourse being within 300 feet of the release, the responsible party must therefore adhere to the cleanup criteria for this site of groundwater less than 50 feet bgs, Table I, NMOCD Rule 19.15.29 NMAC.

Table I - C	losure Criteria for	Soils Impacted by a Release	
Depth below horizontal extents of	Constituent	Method	Limit
release to ground water less than			
10,000 mg/l TDS			
≤ 50 feet	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	100 mg/kg
	втех	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

#### **Incident Description**

On October 14, 2016, approximately 83 thousand cubic feet (MCF) of natural gas and one (1) gallon (gal) of pipeline liquid was lost with zero (0) MCF and gal recovered, resulting in a net loss 83 MCF and one (1) gal of pipeline liquid. The one (1) gal of liquid was released into Salt Draw. Salt Draw is an ephemeral stream that has down cut through thick bedded gypsum.

The confluence with the Pecos River is approximately 0.76 miles downstream of the release point. The release was reported to the NMOCD and was assigned reference # fAB1629934423, nAB1629934570.

Site maps of the release are presented in Attachment I. Initial C-141 spill notification was filed with the NMOCD and is attached in Attachment III.

#### **Remediation Activities**

On October 14, 2016, Talon/LPE personnel removed all liquid hydrocarbons from the impacted surface water in Salt Draw. New Mexico Rentals (NMR) utilized a rubber tired backhoe to build two containment dams with clean material on the northwest and south of the release location to prevent any potential contaminated surface water from spreading.

From October 17, 2016, to October 19, 2016, NMR removed all potentially impacted surface water and the section of the pipe that traverses Salt Draw. The pipeline to the north side of Salt Draw was blocked in and bound.

On October 26, 2016, NMR conducted additional soil remediation activities under the supervision of Talon/LPE. During that time, impacted soil was mixed and blended utilizing excavation equipment. Blending promotes bio-remediation, which attenuates petroleum hydrocarbon concentrations. Blending reduces petroleum hydrocarbon concentrations by volatizing the light-end aromatic compounds, and exposure to oxygen promotes microbial growth in order to bio-remediate the remaining aromatic and aliphatic compounds. On October 31, 2016, excavation equipment was utilized to excavate impacted soil from the affected area. Approximately five (5) cubic yards of impacted soil was stockpiled on site in preparation for disposal to an OCD approved facility.

The final excavation limits were initially determined using a Photoionization Detector (PID). Laboratory analyses of samples collected at the bottom of the excavation were used to confirm when regulatory cleanup levels were achieved.

The final excavation limits measured approximately nine (9) square feet. Photographic Documentation of excavation activities is presented in Attachment IV.

#### **Site Assessment Activities**

Following initial remediation activities, confirmation soil samples were collected on October 19, 2016. Seven (7) confirmation soil samples were collected and designated as (SS-1, SS-2, SS-3, SS-4, SS-5, SS-6, and SS-7) at depths ranging from one (1) ft bgs to two (2) ft bgs. Following further remediation activities one (1) additional confirmation soil sample designated as (SS-5B) was collected at two (2) ft bgs. One (1) final confirmation soil sample designated as (SS-5C) was collected following excavation activities at five (5) ft bgs. The soil samples were collected by Talon/LPE personnel using industry accepted, standard operating procedures.

Talon/LPE personnel collected soil samples for benzene, toluene, ethylbenzene and total xylenes (BTEX, Method EPA 8021B) and total petroleum hydrocarbons (TPH, Method SW8015B Mod), concentrations. The samples were collected in laboratory provided sample containers, immediately placed in an ice-chilled cooler, and transported to Xenco Laboratories in Midland, Texas.

Initial laboratory analytical results indicated that TPH concentrations for all samples collected on October 19, 2016, excluding SS-5 were below the regulatory clean-up levels of 100 mg/kg. Laboratory results for SS-5 indicated TPH concentrations of 792 mg/kg. Laboratory results indicated that BTEX and Benzene concentrations for all soil samples collected on October 19, 2016, were below the regulatory clean-up levels of 50 mg/kg and 10 mg/kg, respectfully. Laboratory analytical results for the soil sample (SS-5B) collected on October 26, 2016, indicated TPH concentrations of 237.4 mg/kg, which is above the regulatory clean-up levels. Laboratory analytical results indicated the TPH concentrations for the soil sample (SS-5C) collected on October 31, 2016, were below the laboratory detectable limits.

Results from the initial sampling event are presented on the following data table and the complete laboratory reports can be found in Attachment V. Sample locations are shown on the attached Figure 3 in Attachment I.

Table I - Site Assessment Analytical Data

Sample ID	Sample Date	BTEX	Benzene	GRO	DRO	Total TPH
	able 1 Closure 9.15.29 NMAC	50 mg/kg	10 mg/kg	DRO + combined =		100 mg/kg
SS-1	10/19/16	ND	ND	ND	ND	ND
SS-2	10/19/16	ND	ND	ND	ND	ND
SS-3	10/19/16	ND	ND	ND	20.0	20.0

Sample ID	Sample Date	BTEX	Benzene	GRO	DRO	Total TPH
SS-4	10/19/16	ND	ND	17.8	69.0	86.8
SS-5	10/19/16	0.00688	ND	<mark>115</mark>	<mark>677</mark>	<mark>792</mark>
SS-5B	10/26/16	0.0455	ND	50.4	187	<b>237.4</b>
SS-5C	10/31/16	ND	ND	ND	ND	ND
SS-6	10/19/16	ND	ND	ND	18.3	18.3
SS-7	10/19/16	ND	ND	ND	20.7	20.7

ND = Analyte Not Detected

All results are reported in milligrams per kilogram (mg/kg)

**Bolded** values are in excess of the NMOCD Remediation Thresholds

#### **Remedial Action Summary**

- A natural gas and pipeline liquid release was reported by Enterprise at the site on October 14, 2016, as a result of a pipeline leak to the 1002 pipeline. Enterprise personnel estimated 83 MCF and one (1) gal of pipeline liquid were released and zero (0) MCF and liquid were recovered.
- Remediation and excavation activities were conducted by Talon/LPE and NMR personnel from October 14, 2016, to October 31, 2016. Excavated material was stockpiled on site in preparation for disposal at an OCD approved facility. The final excavation limits measured approximately nine (9) square feet.
- Pursuant to NMOCD guidance, confirmation soil samples were collected and analyzed for TPH and BTEX to ensure all areas reached NMOCD closure criteria.
- Copies of the Final C-141s are presented in Attachment III.
- Photographic documentation is provided in Attachment IV.

#### Closure

Based on the site assessment and characterization data, remedial actions completed, and confirmation sampling results obtained for this project, on behalf of Enterprise Field Services LLC, we respectfully request that no further actions be required and that closure of this incident be granted.

Should you have any questions or if further information is required, please do not hesitate to contact our office at 210-579-0235.

Respectfully submitted,

Talon/LPE, Ltd.

**Brian Payton** 

**Project Manager** 

Attachments:

Attachment I Site Maps

Attachment II Groundwater and Soil Data, FEMA Flood Map

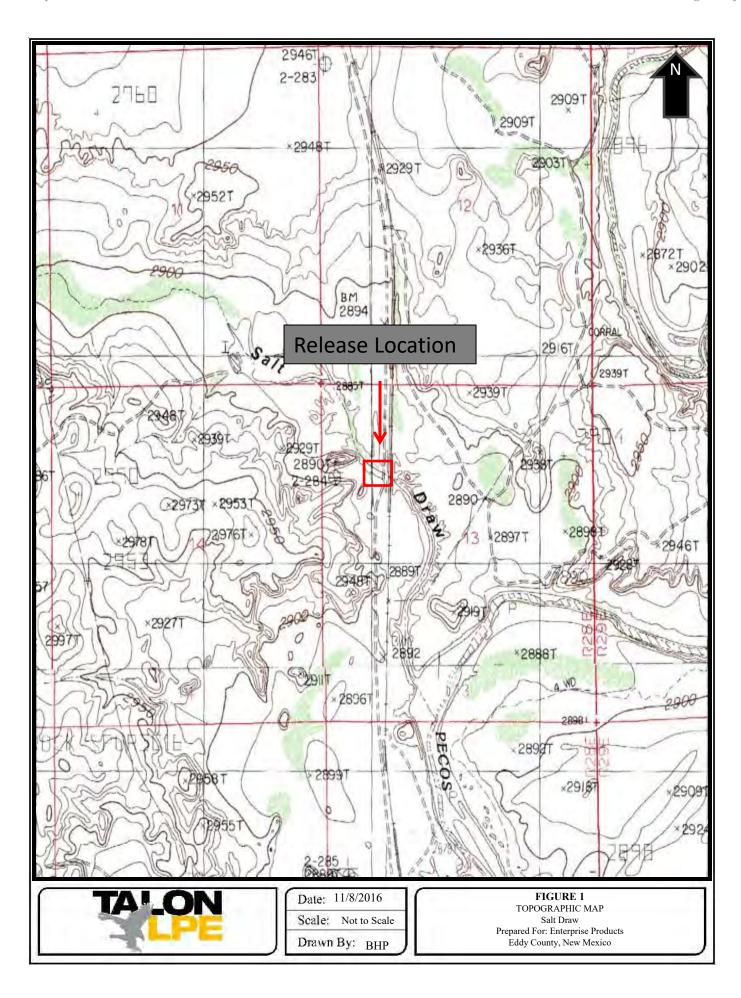
Attachment III C-141 Form

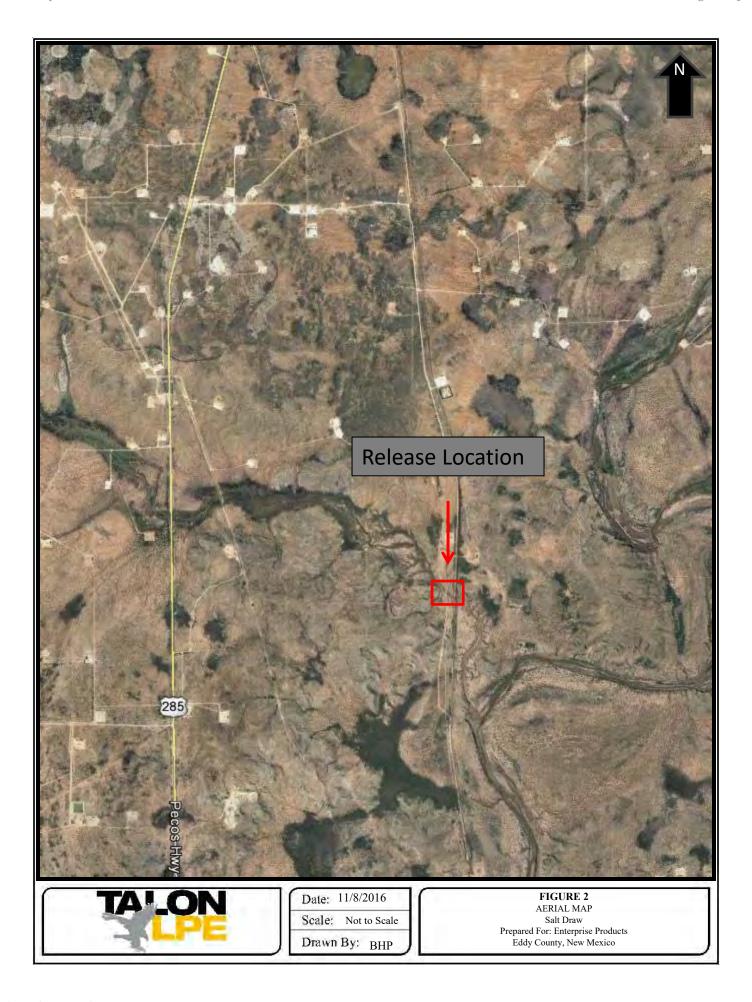
Attachment IV Photographic Documentation
Attachment V Laboratory Analytical Data

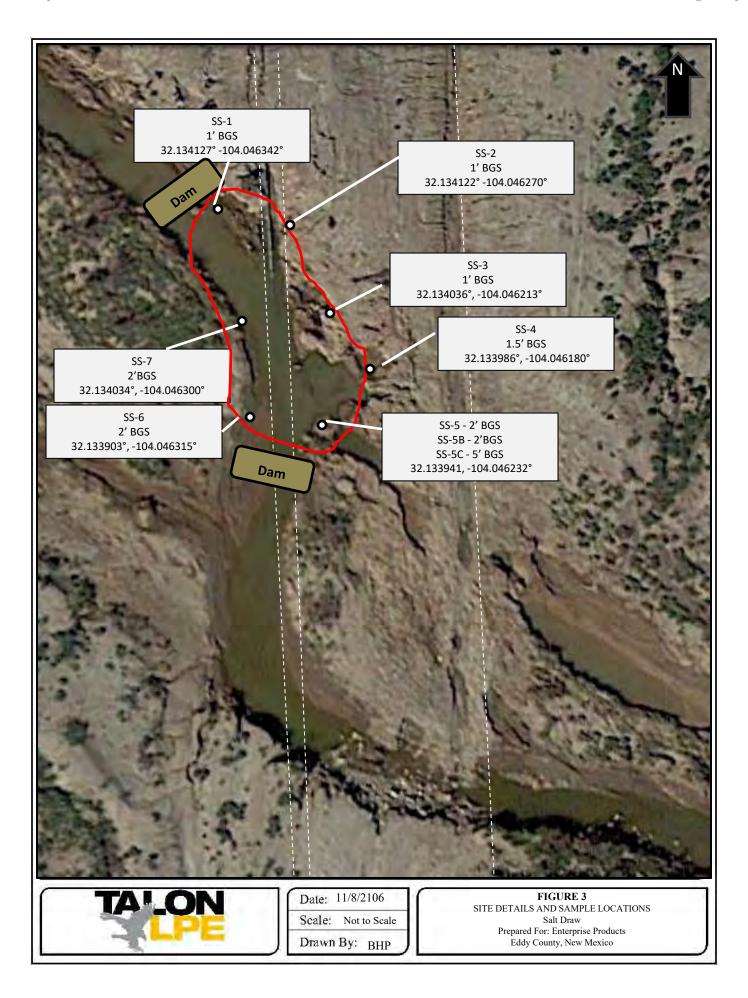


# **ATTACHMENT I**

Site Maps









# **ATTACHMENT II**

Groundwater and Soil Data, FEMA Flood Map



# 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	Code		County	64		4			-	X	Υ		-	epthWaterC	Water Column
C 04660 POD1		CUB	ED	2	1	2	22	25S	28E	587519	3554290	2817	105		
<u>C 01453</u>		С	ED		1	2	26	25S	28E	589096	3552612*	3196	70	40	30
C 04493 POD1		CUB	ED	4	4	4	06	25S	29E	592760	3557765 🌕	3482	57	39	18
<u>C 01522</u>		С	ED			1	22	25S	28E	586843	3554004*	3547	150		
C 01337		С	ED		2	1	30	25S	29E	591926	3552642*	3622	180	30	150
C 01880		С	ED	3	3	2	06	25S	29E	592161	3558605*	3651	85	40	45
C 02518		С	ED		3	4	80	25S	29E	593895	3556300*	3976	462		
C 01411 POD2		С	ED	4	2	4	04	25S	28E	586374	3558036	4291	90	50	40
C 04715 POD1		CUB	ED	3	4	4	34	24S	28E	587786	3559440 🌕	4339	40		
C 02668		С	ED	2	1	2	09	25S	28E	585890	3557525*	4470	150		
C 01411	R	С	ED	4	4	2	04	25S	28E	586289	3558522*	4642	69	35	34
C 04324 POD12		CUB	ED	2	2	2	08	25S	29E	594476	3557627 🌕	4909	65	60	5
C 04503 POD1		CUB	ED	4	3	3	09	25S	29E	594884	3556142	4938			
C 04324 POD8		CUB	ED	4	4	4	05	25S	29E	594442	3557807 🌕	4952	69	65	4
C 04324 POD6		CUB	ED	1	1	1	09	25S	29E	594538	3557657 🌕	4979	62	61	1
C 04324 POD10		CUB	ED	1	1	1	09	25S	29E	594563	3557603 🌕	4980	65	60	5
C 04324 POD11		CUB	ED	1	1	1	09	25S	29E	594576	3557619 🌕	4999	61	61	0

Average Depth to Water: 49 feet
Minimum Depth: 30 feet
Maximum Depth: 65 feet

Record 17

Count:

UTMNAD83 Radius Search (in meters):

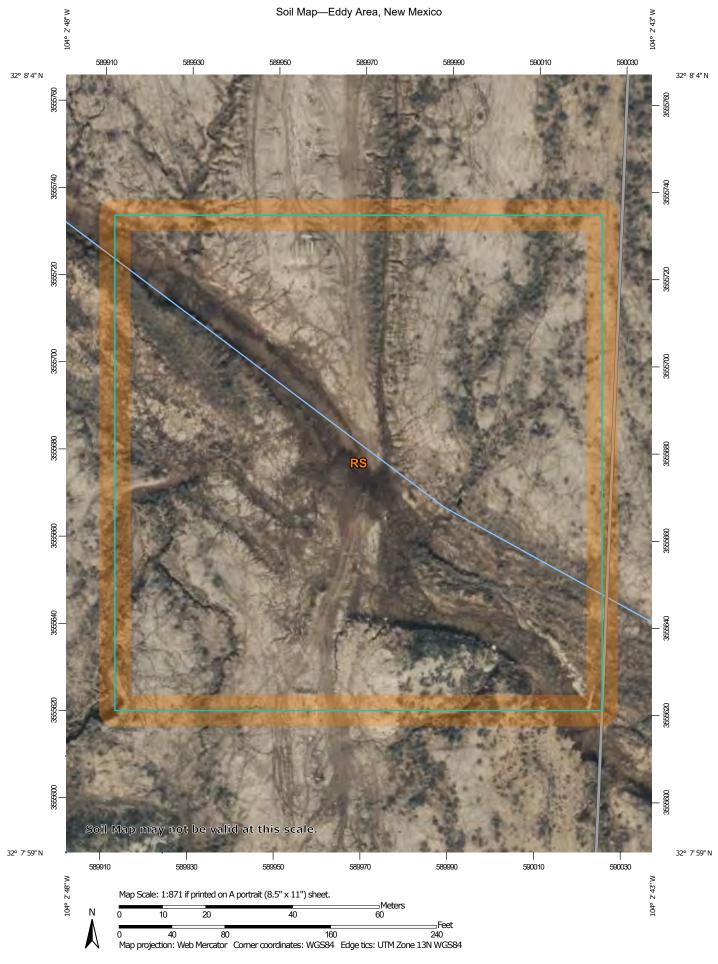
Easting (X): 589965.584 Northing (Y): 3555687.691 Radius: 5000

\*UTM location was derived from PLSS - see Help

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

7/12/23 4:18 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER



#### MAP LEGEND

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons



Soil Map Unit Lines



Soil Map Unit Points

#### **Special Point Features**

Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



**Gravelly Spot** 



Landfill



Lava Flow

Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area Stony Spot



Very Stony Spot



Wet Spot Other



Special Line Features

#### Water Features

~

Streams and Canals

#### Transportation



Rails

~

Interstate Highways



US Routes



Major Roads



Local Roads

#### Background



Aerial Photography

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20.000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico Survey Area Data: Version 18, Sep 8, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 12, 2022—Dec 2, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# **Map Unit Legend**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI		
RS	Russler loam, 1 to 3 percent slopes	3.2	100.0%		
Totals for Area of Interest		3.2	100.0%		

#### **Eddy Area, New Mexico**

#### RS—Russler loam, 1 to 3 percent slopes

#### **Map Unit Setting**

National map unit symbol: 1w5j Elevation: 1,250 to 5,300 feet

Mean annual precipitation: 10 to 25 inches Mean annual air temperature: 57 to 70 degrees F

Frost-free period: 200 to 235 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

Russler and similar soils: 97 percent Minor components: 3 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

#### **Description of Russler**

#### Setting

Landform: Plains, alluvial fans

Landform position (three-dimensional): Rise

Down-slope shape: Convex, linear Across-slope shape: Linear Parent material: Alluvium

#### **Typical profile**

H1 - 0 to 11 inches: loam H2 - 11 to 45 inches: clay loam

H3 - 45 to 60 inches: gypsiferous material

#### **Properties and qualities**

Slope: 1 to 3 percent

Depth to restrictive feature: 20 to 60 inches to paralithic bedrock

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately low (0.00 to 0.06 in/hr) Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Gypsum, maximum content: 40 percent

Maximum salinity: Moderately saline to strongly saline (8.0 to 16.0

mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water supply, 0 to 60 inches: Low (about 4.4 inches)

#### Interpretive groups

Land capability classification (irrigated): 3e Land capability classification (nonirrigated): 7e



Hydrologic Soil Group: C

Ecological site: R070BC007NM - Loamy

Hydric soil rating: No

#### **Minor Components**

#### Cottonwood

Percent of map unit: 1 percent

Ecological site: R070BC033NM - Salty Bottomland

Hydric soil rating: No

#### Reeves

Percent of map unit: 1 percent

Ecological site: R070BC007NM - Loamy

Hydric soil rating: No

#### Reagan

Percent of map unit: 1 percent

Ecological site: R070BC007NM - Loamy

Hydric soil rating: No

#### **Data Source Information**

Soil Survey Area: Eddy Area, New Mexico Survey Area Data: Version 18, Sep 8, 2022

# National Flood Hazard Layer FIRMette





SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT Without Base Flood Elevation (BFE) With BFE or Depth Zone AE, AO, AH, VE, AR SPECIAL FLOOD HAZARD AREAS Regulatory Floodway

> 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X **Future Conditions 1% Annual**

Chance Flood Hazard Zone X Area with Reduced Flood Risk due to Levee. See Notes. Zone X Area with Flood Risk due to Levee Zone D

NO SCREEN Area of Minimal Flood Hazard Zone X Effective LOMRs OTHER AREAS Area of Undetermined Flood Hazard Zone D

- - - Channel, Culvert, or Storm Sewer **GENERAL** STRUCTURES | LILLI Levee, Dike, or Floodwall

> 20.2 Cross Sections with 1% Annual Chance 17.5 Water Surface Elevation **Coastal Transect** Base Flood Elevation Line (BFE) Limit of Study Jurisdiction Boundary -- Coastal Transect Baseline **Profile Baseline**

Hydrographic Feature Digital Data Available

OTHER

**FEATURES** 

MAP PANELS

No Digital Data Available

Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/12/2023 at 6:25 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.





# **ATTACHMENT III**

C-141 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, Aziec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

#### State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Polongo Notification and Commeting Anti-												
Release Notification and Corrective Action												
Nome of Co	Name of Company Enterprise Field Services LLC					OPERA'			Initi	al Report		Final Repo
INAILE OF CO		<del></del>				Contact Alena Miro						
Facility Na		O Box 4324,		, 1X //210	-+	Telephone No. 575-628-6802 Facility Type: Gas Gathering Pipeline						
Pacifity Mai	пе ги	peline ROW,	1002			Facility 1 yp	e: Gas Gather	ring Pıp	eline			
Surface Ow	ner <i>Henr</i> y	y McDonald		Mineral C	)wner	NA - Pipe	NA - Pipeline			Lease No. NA		
LOCATION OF RELEASE												
						/South Line						
D 13 25S 28E 85 S					South	South 310 East Eddy						
			La	titude: <u>N 32,1,</u>	<u>34004</u>	Longitue	de: <u><i>W-104.046</i></u>	<u> 5157</u>				
NATURE OF RELEASE												
Type of Rele	ase Natura	ıl Gas and Pi	peline Liq				Volume of Release: 83 MCF gas   Volume Recovered: N/A					
C CD	-	·				and 1 gallo	on of liquid					
Source of Re	ease <i>Pipe</i>	line Leak							Date and Hour of Discovery			
Was Immedia	to Notice G	Sizzan 9		<del></del>			[6 @ 11:15 ]	MST				
TT GO LILLIANS	1101100		Yes 🗖	No Not Re	emired	If YES, To Whom? Mike Bratcher						
By Whom?	Alena Mir				Marrac							
Was a Water						Date and Hour 10/14/2016 @ 11:27 MST  If YES, Volume Impacting the Watercourse.						
TT GO G TT GEORGE	Onioc isono		Yes 🛭	No		11 1 E.S., Volume impacting the watercourse.  1 gallon						
						1 gunon						
If a Watercourse was Impacted, Describe Fully.*  On October 14, 2016, it was discovered that pipeline liquids were released into Salt Draw. The NRC and NMOCD were notified immediately upon discovery 10/14/2016 @ 11:20 MST. Salt Draw is an ephemeral stream that has down cut through thick bedded gypsum. The confluence with the Pecos River is approximately 0.76 miles downstream of the release point.  Describe Cause of Problem and Remedial Action Taken.*  Natural gas and pipeline liquids were released due to a pipeline leak. The pipeline segment was isolated and blown down. Following repair, the section of pipe traversing the draw will be taken out of service and abandoned. The pipeline to the north side of the draw is blocked in and blinded. The pipeline to the south side of the draw will be pigged to remove residual liquids and then returned to service.  Describe Area Affected and Cleanup Action Taken.*  At the time of the release the draw contained rainwater; however, a natural dirt berm in the draw contained the water and prevented it from flowing									th the section The			
downstream during the release. All pipeline fluids and potentially affected rainwater were removed from the draw. Clean-up action will follow Enterprise Field Services General Release Notification, Response and Remediation Plan(March 9, 2015) and closure report submitted.											low	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.												
	//	10-1	1.,			OIL CONSERVATION DIVISION						
Signature:	She	- Lun	4									
Printed Name: Jon E. Fields					Approved by District Supervisor:							
Title:	Directo	r, Field Envi	ronmental	1		Approval Date	pproval Date: Expiration Date:					
E-mail Addres	s: <u>jefields</u>	@eprod.com			·   (	Conditions of	Approval:			Attached	П	
Date: 10/21/216 Phone: 713-381-6684												

\* Attach Additional Sheets If Necessary



# **ATTACHMENT IV**

Photographic Documentation





Photograph No. 1 **Description:** 

Northwest. View of impacted surface water.



Photograph No. 2 **Description:** 

Southeast. View of soil impacted by Natural Gas liquid release on the bank of the Salt Draw.



Photograph No. 3 Description:

Southwest. View of the northwest containment dam



Photograph No. 4 Description:

Southwest. View of the southeast containment dam.





Photograph No. 5 **Description:** 

Northwest. Mixing and blending activities.



Photograph No. 6 **Description:** 

North. View of excavation activities.



Photograph No. 7 Description:

Southwest. Stockpile of excavated soil prior to disposal.



Photograph No. 8 Description:

Southwest. Site following all remediation and excavation activities.



# **ATTACHMENT V**

Laboratory Analytical Data

# **Analytical Report 539006**

for Talon/LPE Co.

Project Manager: Melissa Gilliland
Enterprise Salt Draw
700348.346.02
21-OCT-16

Collected By: Client





#### 1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215), Arizona (AZ0765), Florida (E871002), Louisiana (03054) Oklahoma (9218)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295) Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)

Xenco-San Antonio: Texas (T104704534)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757) Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)



# **Table of Contents**

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MS / MSD Recoveries	15
Chain of Custody	16
Sample Receipt Conformance Report	17





21-OCT-16

Project Manager: Melissa Gilliland

Talon/LPE Co.

2901 S State Highway 349 Midland, TX 79706

Reference: XENCO Report No(s): 539006

**Enterprise Salt Draw** 

Project Address: Eddy Co TX

### Melissa Gilliland:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 539006. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 539006 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Mus Hoah

Kelsey Brooks

Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

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# **Sample Cross Reference 539006**



### Talon/LPE Co., Midland, TX

Enterprise Salt Draw

Sample Id	Matrix	<b>Date Collected</b>	Sample Depth	Lab Sample Id
SS-1	S	10-19-16 11:30		539006-001
SS-2	S	10-19-16 11:40		539006-002
SS-3	S	10-19-16 11:50		539006-003
SS-4	S	10-19-16 12:00		539006-004
SS-5	S	10-19-16 12:10		539006-005
SS-6	S	10-19-16 12:20		539006-006
SS-7	S	10-19-16 12:30		539006-007



### **CASE NARRATIVE**



Client Name: Talon/LPE Co.
Project Name: Enterprise Salt Draw

 Project ID:
 700348.346.02
 Report Date:
 21-OCT-16

 Work Order Number(s):
 539006
 Date Received:
 10/20/2016

### Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3002490 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



**Project Location:** 

# Certificate of Analysis Summary 539006

Talon/LPE Co., Midland, TX

**Project Name: Enterprise Salt Draw** 



Project Id: 700348.346.02 Contact: Melissa Gilliland

Eddy Co TX

**Date Received in Lab:** Thu Oct-20-16 02:45 pm

**Report Date:** 21-OCT-16 **Project Manager:** Kelsey Brooks

	Lab Id:	539006-00	)1	539006-0	002	539006-0	003	539006-	004	539006-0	005	539006-	006
Arealusia Donavostad	Field Id:	SS-1		SS-2		SS-3		SS-4		SS-5		SS-6	,
Analysis Requested	Depth:												
	Matrix:	SOIL		SOIL		SOIL	,	SOIL	,	SOIL	,	SOIL	_
	Sampled:	Oct-19-16 1	1:30	Oct-19-16	11:40	Oct-19-16	11:50	Oct-19-16	12:00	Oct-19-16	12:10	Oct-19-16	12:20
BTEX by EPA 8021B Extracted:		Oct-20-16 1	8:30	Oct-20-16	8:30	Oct-20-16	18:30	Oct-20-16	18:30	Oct-20-16	18:30	Oct-20-16	18:30
Analyzed:		Oct-21-16 1	2:51	Oct-21-16	3:07	Oct-21-16	14:44	Oct-21-16	13:39	Oct-21-16	13:56	Oct-21-16	15:52
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene	ne		0.00150	ND	0.00149	ND	0.00150	ND	0.00149	ND	0.00149	ND	0.00150
Toluene		ND	0.00200	ND	0.00199	ND	0.00200	ND	0.00198	ND	0.00199	ND	0.00200
Ethylbenzene		ND	0.00200	ND	0.00199	ND	0.00200	ND	0.00198	ND	0.00199	ND	0.00200
m,p-Xylenes		ND	0.00200	ND	0.00199	ND	0.00200	ND	0.00198	0.00688	0.00199	ND	0.00200
o-Xylene		ND	0.00299	ND	0.00299	ND	0.00300	ND	0.00298	ND	0.00299	ND	0.00300
Total Xylenes		ND	0.00200	ND	0.00199	ND	0.00200	ND	0.00198	0.00688	0.00199	ND	0.00200
Total BTEX		ND	0.00150	ND	0.00149	ND	0.00150	ND	0.00149	0.00688	0.00149	ND	0.00150
TPH By SW8015B Mod	Extracted:	Oct-21-16 1	0:00	Oct-21-16	0:00	Oct-21-16	10:00	Oct-21-16	10:00	Oct-21-16	10:00	Oct-21-16	10:00
	Analyzed:	Oct-21-16 1	2:10	Oct-21-16	2:39	Oct-21-16	13:12	Oct-21-16	13:41	Oct-21-16	14:08	Oct-21-16	14:37
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	15.0	ND	15.0	ND	15.0	17.8	15.0	115	14.9	ND	15.0
C10-C28 Diesel Range Hydrocarbons		ND	15.0	ND	15.0	20.0	15.0	69.0	15.0	677	14.9	18.3	15.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Kelsey Brooks
Project Manager



700348.346.02

Eddy Co TX

Melissa Gilliland

**Project Id:** 

**Project Location:** 

**Contact:** 

# Certificate of Analysis Summary 539006

Talon/LPE Co., Midland, TX

**Project Name: Enterprise Salt Draw** 



**Date Received in Lab:** Thu Oct-20-16 02:45 pm

Report Date: 21-OCT-16 Project Manager: Kelsey Brooks

	Lab Id:	539006-007			
Analysis Requested	Field Id:	SS-7			
Analysis Requesieu	Depth:				
	Matrix:	SOIL			
	Sampled:	Oct-19-16 12:30			
BTEX by EPA 8021B	Extracted:	Oct-20-16 18:30			
	Analyzed:	Oct-21-16 14:29			
	Units/RL:	mg/kg RL			
Benzene		ND 0.00149			
Toluene		ND 0.00199			
Ethylbenzene		ND 0.00199			
m,p-Xylenes		ND 0.00199			
o-Xylene		ND 0.00298			
Total Xylenes		ND 0.00199			
Total BTEX		ND 0.00149			
TPH By SW8015B Mod	Extracted:	Oct-21-16 10:00			
	Analyzed:	Oct-21-16 15:07			
	Units/RL:	mg/kg RL			
C6-C10 Gasoline Range Hydrocarbons	·	ND 15.0			
C10-C28 Diesel Range Hydrocarbons		20.7 15.0			

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Knis Roah Kelsey Brooks Project Manager



## **Flagging Criteria**



- Page 115 of 161
- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- **K** Sample analyzed outside of recommended hold time.
- **JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- \*\* Surrogate recovered outside laboratory control limit.
- BRL Below Reporting Limit.
- **RL** Reporting Limit

MDL Method Detection Limit	SDL Sample Detection Limit	LOD Limit of Detection

PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation

**DL** Method Detection Limit

NC Non-Calculable

- + NELAC certification not offered for this compound.
- \* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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4147 Greenbriar Dr, Stafford, TX 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd , Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
1211 W Florida Ave, Midland, TX 79701	(432) 563-1800	(432) 563-1713
2525 W. Huntington Dr Suite 102 Tempe A7 85282	(602) 437 0330	



Batch: 1

**Project Name: Enterprise Salt Draw** 

Work Orders: 539006,

**Sample:** 539006-001 / SMP

**Project ID:** 700348.346.02 Matrix: Soil

**Lab Batch #:** 3002491

Units:	mg/kg	<b>Date Analyzed:</b> 10/21/16 12:10	SU	RROGATE RE	ECOVERY S	STUDY	
	TPH :	By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooct	ane		111	99.8	111	70-135	
o-Terphenyl			60.5	49.9	121	70-135	

**Lab Batch #:** 3002491

Sample: 539006-002 / SMP

Batch: 1 Matrix: Soil

**Units:** 

mg/kg

**Date Analyzed:** 10/21/16 12:39

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes			[D]				
1-Chlorooctane	105	99.7	105	70-135			
o-Terphenyl	56.1	49.9	112	70-135			

**Lab Batch #:** 3002490

Sample: 539006-001 / SMP

Batch: 1 Matrix: Soil

**Units:** 

mg/kg

Date Analyzed: 10/21/16 12:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0325	0.0300	108	80-120	

**Lab Batch #:** 3002490

Sample: 539006-002 / SMP

Batch:

Matrix: Soil

Units:	mg/kg	<b>Date Analyzed:</b> 10/21/16 13:07	SU	RROGATE RE	ECOVERY S	STUDY	
	ВТЕ	X by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluoro	benzene	•	0.0287	0.0300	96	80-120	
4-Bromofluo	robenzene		0.0330	0.0300	110	80-120	

Lab Batch #: 3002491

Sample: 539006-003 / SMP

Batch:

Matrix: Soil

Units:	mg/kg	<b>Date Analyzed:</b> 10/21/16 13:12	SURROGATE RECOVERY STUDY						
	TPH 1	By SW8015B Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1-Chlorooct	ane		102	99.7	102	70-135			
o-Terphenyl	[		54.7	49.9	110	70-135			

<sup>\*</sup> Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

<sup>\*\*\*</sup> Poor recoveries due to dilution



**Project Name: Enterprise Salt Draw** 

Work Orders: 539006,

--- - /1- --

Sample: 539006-004 / SMP

**Project ID:** 700348.346.02

**Lab Batch #:** 3002490

TT... \*4 ...

o-Terphenyl

Matrix: Soil Batch: 1

Units: mg/kg	<b>Date Analyzed:</b> 10/21/16 13:39	SU	RROGATE RE	ECOVERY S	STUDY	
F	STEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
	Analytes			[ط]		
1,4-Difluorobenzene		0.0277	0.0300	92	80-120	
4-Bromofluorobenzene		0.0352	0.0300	117	80-120	

**Lab Batch #:** 3002491 Sample: 539006-004 / SMP Batch: 1

Matrix: Soil

50.0

Units: mg/kg Date Analyzed: 10/21/16 13:41 SURROGATE RECOVERY STUDY							
TPH By SW8015B Mod		Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
		Analytes			[D]		
1-Chlorooct	tane		105	99.9	105	70-135	

55.7

Lab Batch #: 3002490 Sample: 539006-005 / SMP Batch: Matrix: Soil

**Units:** mg/kg **Date Analyzed:** 10/21/16 13:56 SURROGATE RECOVERY STUDY

111

70-135

BTEX by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0244	0.0300	81	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

**Lab Batch #:** 3002491 **Sample:** 539006-005 / SMP Batch: 1 Matrix: Soil

Units:	mg/kg	<b>Date Analyzed:</b> 10/21/16 14:08	SURROGATE RECOVERY STUDY						
	TPH 1	By SW8015B Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1-Chlorooc	ctane		111	99.6	111	70-135			
o-Terpheny	yl		58.5	49.8	117	70-135			

Batch: Lab Batch #: 3002490 **Sample:** 539006-007 / SMP Matrix: Soil

Units:	mg/kg	<b>Date Analyzed:</b> 10/21/16 14:29	SURROGATE RECOVERY STUDY						
	ВТЕ	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
		Analytes			[D]				
1,4-Difluor	robenzene		0.0262	0.0300	87	80-120			
4-Bromofluorobenzene			0.0320	0.0300	107	80-120			

<sup>\*</sup> Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

<sup>\*\*\*</sup> Poor recoveries due to dilution



**Project Name: Enterprise Salt Draw** 

Work Orders: 539006,

**Project ID:** 700348.346.02

**Lab Batch #:** 3002491

**Sample:** 539006-006 / SMP

Matrix: Soil Batch:

0.0300

93

80-120

Units:	Units: mg/kg Date Analyzed: 10/21/16 14:37 SURROGATE RECOVERY STUDY							
	ТРН Е	By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
		Analytes			[D]			
1-Chlorooctane			106	99.9	106	70-135		
o-Terphenyl			56.5	50.0	113	70-135		

**Lab Batch #:** 3002490 Sample: 539006-003 / SMP Batch: 1 Matrix: Soil

**Units:** mg/kg **Date Analyzed:** 10/21/16 14:44 SURROGATE RECOVERY STUDY **Amount** True Control BTEX by EPA 8021B Found Limits Amount Recovery Flags [A] [B] %R %R [D] **Analytes** 1,4-Difluorobenzene 0.0275 0.0300 92 80-120 4-Bromofluorobenzene

0.0279

Lab Batch #: 3002491 Sample: 539006-007 / SMP Batch: Matrix: Soil

**Units:** mg/kg Date Analyzed: 10/21/16 15:07 SURROGATE RECOVERY STUDY

TPH By SW8015B Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.9	105	70-135	
o-Terphenyl	56.3	50.0	113	70-135	

**Lab Batch #:** 3002490 **Sample:** 539006-006 / SMP Matrix: Soil

Units:	mg/kg Date Analyzed: 10/21/16 15:52 SURROGATE RECOVERY STUDY							
	ВТЕ	X by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
		Anarytes			[-]			
1,4-Difluor	robenzene		0.0281	0.0300	94	80-120		
4-Bromoflu	uorobenzene		0.0288	0.0300	96	80-120		

Lab Batch #: 3002491 **Sample:** 715247-1-BLK / BLK Batch: Matrix: Solid

Units:	mg/kg	<b>Date Analyzed:</b> 10/21/16 10:45	SURROGATE RECOVERY STUDY					
	TPH 1	By SW8015B Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooct	ane		111	100	111	70-135		
o-Terphenyl			59.3	50.0	119	70-135		

<sup>\*</sup> Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

<sup>\*\*\*</sup> Poor recoveries due to dilution



**Project Name: Enterprise Salt Draw** 

Work Orders: 539006,

**Sample:** 715230-1-BLK / BLK

**Project ID:** 700348.346.02

**Lab Batch #:** 3002490

Matrix: Solid Batch: 1

<b>Units:</b> mg/kg <b>Date Analyzed:</b> 10/21/16 15:35	SU	SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes			[D]				
1,4-Difluorobenzene	0.0287	0.0300	96	80-120			
4-Bromofluorobenzene	0.0294	0.0300	98	80-120			

**Lab Batch #:** 3002490 **Sample:** 715230-1-BKS / BKS Matrix: Solid

Units:	mg/kg	<b>Date Analyzed:</b> 10/20/16 18:53	SURROGATE RECOVERY STUDY					
	ВТЕ	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
		Analytes			[D]			
1,4-Difluor	obenzene		0.0296	0.0300	99	80-120		
4-Bromofluorobenzene			0.0302	0.0300	101	80-120		

**Sample:** 715247-1-BKS / BKS **Lab Batch #:** 3002491 Batch: 1 Matrix: Solid

**Units:** mg/kg Date Analyzed: 10/21/16 11:12 SURROGATE RECOVERY STUDY

TPH By SW8015B Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	100	117	70-135	
o-Terphenyl	55.4	50.0	111	70-135	

**Lab Batch #:** 3002490 **Sample:** 715230-1-BSD / BSD Batch: 1 Matrix: Solid

Units:	mg/kg	<b>Date Analyzed:</b> 10/20/16 19:09	SURROGATE RECOVERY STUDY						
	ВТЕ	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
		Analytes			[D]				
1,4-Difluor	robenzene		0.0296	0.0300	99	80-120			
4-Bromofluorobenzene			0.0316	0.0300	105	80-120			

Lab Batch #: 3002491 **Sample:** 715247-1-BSD / BSD Batch: Matrix: Solid

Units:	mg/kg	<b>Date Analyzed:</b> 10/21/16 11:42	SURROGATE RECOVERY STUDY							
	TPH 1	By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1-Chlorooct	ane		119	100	119	70-135				
o-Terphenyl	1		55.4	50.0	111	70-135				

<sup>\*</sup> Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

<sup>\*\*\*</sup> Poor recoveries due to dilution



**Project Name: Enterprise Salt Draw** 

**Work Orders:** 539006, **Project ID:** 700348.346.02

Lab Batch #: 3002490 Sample: 538987-008 S / MS Batch: 1 Matrix: Soil

Units:	mg/kg	<b>Date Analyzed:</b> 10/20/16 19:28	SURROGATE RECOVERY STUDY							
	ВТЕ	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
		Analytes			[D]					
1,4-Difluor	obenzene		0.0311	0.0300	104	80-120				
4-Bromoflu	orobenzene		0.0336	0.0300	112	80-120				

<b>Units:</b> mg/kg <b>Date Analyzed:</b> 10/20/16 19:44	SU SU	SURROGATE RECOVERY STUDY							
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
Analytes			[D]						
1,4-Difluorobenzene	0.0293	0.0300	98	80-120					
4-Bromofluorobenzene	0.0321	0.0300	107	80-120					

Surrogate Recovery [D] = 100 \* A / B

<sup>\*</sup> Surrogate outside of Laboratory QC limits

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

<sup>\*\*\*</sup> Poor recoveries due to dilution



### **BS / BSD Recoveries**



**Project Name: Enterprise Salt Draw** 

Work Order #: 539006 Project ID: 700348.346.02

**Analyst:** PJB **Date Prepared:** 10/20/2016 **Date Analyzed:** 10/20/2016

**Lab Batch ID:** 3002490 **Sample:** 715230-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[B]	[C]	[D]	[E]	Result [F]	[G]				
Benzene	< 0.00150	0.100	0.0898	90	0.100	0.0914	91	2	70-130	35	
Toluene	< 0.00200	0.100	0.0924	92	0.100	0.0940	94	2	70-130	35	
Ethylbenzene	< 0.00200	0.100	0.0952	95	0.100	0.0978	98	3	71-129	35	
m,p-Xylenes	< 0.00200	0.200	0.194	97	0.200	0.200	100	3	70-135	35	
o-Xylene	< 0.00300	0.100	0.0962	96	0.100	0.0990	99	3	71-133	35	

**Analyst:** ARM **Date Prepared:** 10/21/2016 **Date Analyzed:** 10/21/2016

Lab Batch ID: 3002491 Sample: 715247-1-BKS Batch #: 1 Matrix: Solid

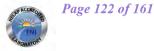
Units: mg/kg BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B Mod	Blank Sample Result	Spike Added	Blank Spike	Blank Spike	Spike Added	Blank Spike	Blk. Spk Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	[A]	[B]	Result [C]	%R [D]	[E]	Duplicate Result [F]	%R [G]	%	%R	%RPD	
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	937	94	1000	981	98	5	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	944	94	1000	989	99	5	70-135	35	

Relative Percent Difference RPD = 200\*|(C-F)/(C+F)|Blank Spike Recovery [D] = 100\*(C)/[B]Blank Spike Duplicate Recovery [G] = 100\*(F)/[E]All results are based on MDL and Validated for QC Purposes



### Form 3 - MS / MSD Recoveries



**Project Name: Enterprise Salt Draw** 

539006 Work Order #:

**Project ID:** 700348.346.02

Lab Batch ID:

3002490

**QC- Sample ID:** 538987-008 S

Batch #:

Matrix: Soil

**Date Analyzed:** 

10/20/2016

**Date Prepared:** 10/20/2016

Analyst: PJB

**Reporting Units:** 

mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	Parent Sample	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample	•	RPD	Control Limits	Control Limits	Flag
Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Benzene	< 0.00150	0.100	0.0813	81	0.0994	0.0837	84	3	70-130	35	
Toluene	0.0147	0.100	0.0929	78	0.0994	0.0990	85	6	70-130	35	
Ethylbenzene	0.0165	0.100	0.0864	70	0.0994	0.0974	81	12	71-129	35	X
m,p-Xylenes	0.0565	0.200	0.199	71	0.199	0.220	82	10	70-135	35	
o-Xylene	0.0234	0.100	0.106	83	0.0994	0.113	90	6	71-133	35	

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Stafford, Texas (281-240-4200)	0	Odesea, Texas (432-563-1800)	Lakeiand, Florida (863-646-8526)
Dallas, Texas (214-902-0300)	2	Norcross, Georgia (770-449-8800)	J) Tampa, Florida (813-620-2000)
Service Center - San Antonio, Texas (210-509-3334)	www.xenco.com	Xenco Quote # Xe	Xenco Job * 539000
		Analytical information	n Matrix Codes
Client / Reporting Information	Project Information 700348,346.02		
Company Name / Branch: O. L.	Project Name-Number:		A= Air S = SoivSed/Solid
Company Address:	\		GW =Ground Water
10 1900 1 X	rady Co NMI		P = Product
-	Invoice To:	- -	SW ≈ Surface water SL = Studge
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2 Day EMERGENCY Contract TAT	Level 3 (CLP Forms) UST / RG -411		
3 Day EMERGENCY	TRRP Checklist		
TAT Starts Day received by Lab, if received by 3:00 pm			FEO-EX/UPS: Tracking ●
	W EACH TIME SAMPLES CHANGE F		
Relinquished by Sampler:	Date Time: Received By MAK 10/72011 1445	Date Time:	Received By: 2
Relinquished by:	red By:	Date Time:	Received By:
Relinquished by:	Date Time: Received By: Custody Seal #	Preserved where applicable	On to Temp: JR 1D:R-8
5 Notice: Signature of this document and relinquishment of samples constitutes a	S Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of service y	ns XENCO's standard terms and condition	nles prev



## **XENCO Laboratories** Prelogin/Nonconformance Report- Sample Log-In



Client: Talon/LPE Co.

Date/ Time Received: 10/20/2016 02:45:00 PM

Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient

Work Order #: 539006

Temperature Measuring device used: R8

Work Order #: 539006	•	J
	Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?		5.4
#2 *Shipping container in good condition	?	N/A
#3 *Samples received on ice?		Yes
#4 *Custody Seal present on shipping co	ontainer/ cooler?	N/A
#5 *Custody Seals intact on shipping co	ntainer/ cooler?	N/A
#6 Custody Seals intact on sample bottle	es?	N/A
#7 *Custody Seals Signed and dated?		N/A
#8 *Chain of Custody present?		Yes
#9 Sample instructions complete on Cha	nin of Custody?	Yes
#10 Any missing/extra samples?		No
#11 Chain of Custody signed when reline	quished/ received?	Yes
#12 Chain of Custody agrees with samp	le label(s)?	Yes
#13 Container label(s) legible and intact	?	Yes
#14 Sample matrix/ properties agree with	h Chain of Custody?	Yes
#15 Samples in proper container/ bottle?	?	Yes
#16 Samples properly preserved?		Yes
#17 Sample container(s) intact?		Yes
#18 Sufficient sample amount for indicat	• •	Yes
#19 All samples received within hold tim	e?	Yes
#20 Subcontract of sample(s)?		N/A
#21 VOC samples have zero headspace		N/A
#22 <2 for all samples preserved with HI samples for the analysis of HEM or HEM		N/A
analysts. #23 >10 for all samples preserved with N	NaAsO2+NaOH, ZnAc+NaOH?	N/A
* Must be completed for after-hours de	elivery of samples prior to placing in	the refrigerator
Analyst:	PH Device/Lot#:	
	N. a. v. a.	
Checklist completed by:	Jessica Kramer  Jessica Kramer	Date: 10/20/2016
Checklist reviewed by:	Kelsey Brooks	Date: 10/20/2016
	Noise, Brooks	

# **Analytical Report 539292**

for Talon/LPE Co.

Project Manager: Melissa Gilliland Enterprise Salt Draw

27-OCT-16

Collected By: Client





### 1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215), Arizona (AZ0765), Florida (E871002), Louisiana (03054) Oklahoma (9218)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295) Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)

Xenco-San Antonio: Texas (T104704534)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757) Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)



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MS / MSD Recoveries	12
Chain of Custody	13
Sample Receipt Conformance Report	14





27-OCT-16

Project Manager: Melissa Gilliland

Talon/LPE Co.

2901 S State Highway 349 Midland, TX 79706

Reference: XENCO Report No(s): 539292

**Enterprise Salt Draw** 

Project Address: Eddy Co TX

### Melissa Gilliland:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 539292. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 539292 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

**Kelsey Brooks** 

Knus Roah

Project Manager

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# **Sample Cross Reference 539292**



### Talon/LPE Co., Midland, TX

Enterprise Salt Draw

Sample Id	Matrix	<b>Date Collected</b>	Sample Depth	Lab Sample Id
SS-5B	S	10-26-16 09:30		539292-001



### **CASE NARRATIVE**



Client Name: Talon/LPE Co.
Project Name: Enterprise Salt Draw

Project ID: Report Date: 27-OCT-16
Work Order Number(s): 539292 Date Received: 10/26/2016

### Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3002738 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



# Certificate of Analysis Summary 539292

Talon/LPE Co., Midland, TX

**Project Name: Enterprise Salt Draw** 



Project Id: Contact:

Melissa Gilliland

**Project Location:** Eddy Co TX

**Date Received in Lab:** Wed Oct-26-16 04:10 pm

**Report Date:** 27-OCT-16 **Project Manager:** Kelsey Brooks

	Lab Id:	539292-	001			
Analysis Requested	Field Id:	SS-5I	3			
Anaiysis Kequesieu	Depth:					
Matrix:		SOIL	_			
	Sampled:	Oct-26-16	09:30			
BTEX by EPA 8021B	BTEX by EPA 8021B Extracted: Oct-26-		16:30			
	Analyzed:	Oct-26-16	21:09			
	Units/RL:	mg/kg	RL			
Benzene		ND	0.00150			
Toluene		0.00699	0.00200			
Ethylbenzene		0.00411	0.00200			
m,p-Xylenes		0.0205	0.00200			
o-Xylene		0.0139	0.00299			
Total Xylenes		0.0344	0.00200			
Total BTEX		0.0455	0.00150			
TPH By SW8015B Mod	Extracted:	Oct-26-16	17:00			
	Analyzed:	Oct-27-16	02:54			
	Units/RL:	mg/kg	RL			
C6-C10 Gasoline Range Hydrocarbons		50.4	15.0			
C10-C28 Diesel Range Hydrocarbons		187	15.0			

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Kelsey Brooks
Project Manager



## Flagging Criteria



Page 131 of 161

- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K Sample analyzed outside of recommended hold time.
- **JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- \*\* Surrogate recovered outside laboratory control limit.
- BRL Below Reporting Limit.
- **RL** Reporting Limit

MDL Method Detection Limit	SDL Sample Detection Limit	LOD Limit of Detection

PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation

**DL** Method Detection Limit

NC Non-Calculable

- + NELAC certification not offered for this compound.
- \* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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(210) 509-3334	(210) 509-3335
(432) 563-1800	(432) 563-1713
(602) 437-0330	
	(281) 240-4200 (214) 902 0300 (210) 509-3334 (432) 563-1800



**Project Name: Enterprise Salt Draw** 

Work Orders: 539292,

**Sample:** 539292-001 / SMP

Project ID:

Lab Batch #: 3002738 Sample: 5

Batch: 1 Matrix: Soil

<b>Units:</b> mg/kg	<b>Date Analyzed:</b> 10/26/16 21:09	SU	RROGATE RE	ECOVERY S	STUDY	
ВТ	EX by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	Timily tes	0.0285	0.0300	95	80-120	
4-Bromofluorobenzene		0.0258	0.0300	86	80-120	

Units: mg/kg Date Analyzed: 10/27/16 02:54 SURROGATE RECOVERY STUDY

TPH By SW8015B Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	99.8	123	70-135	
o-Terphenyl	64.4	49.9	129	70-135	

Lab Batch #: 3002738 Sample: 715411-1-BLK / BLK Batch: 1 Matrix: Solid

Units: mg/kg Date Analyzed: 10/26/16 14:20 SURROGATE RECOVERY STUDY

BTEX by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 3002771 Sample: 715414-1-BLK / BLK Batch: 1 Matrix: Solid

Units:	mg/kg	<b>Date Analyzed:</b> 10/27/16 01:41	SURROGATE RECOVERY STUDY				
	TPH 1	By SW8015B Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooc	ctane		122	100	122	70-135	
o-Terpheny	yl		64.6	50.0	129	70-135	

Lab Batch #: 3002738 Sample: 715411-1-BKS / BKS Batch: 1 Matrix: Solid

Units:	mg/kg	<b>Date Analyzed:</b> 10/26/16 13:00	SU	RROGATE RE	ECOVERY S	STUDY	
	ВТЕ	X by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobe	enzene	Time y ees	0.0346	0.0300	115	80-120	
4-Bromofluoro	obenzene		0.0317	0.0300	106	80-120	

<sup>\*</sup> Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

<sup>\*\*\*</sup> Poor recoveries due to dilution



**Project Name: Enterprise Salt Draw** 

Work Orders: 539292,

**Sample:** 715414-1-BKS / BKS

**Project ID:** 

SURROGATE RECOVERY STUDY

Matrix: Solid Batch:

0.0300

105

80-120

**Lab Batch #:** 3002771 Units: mg/kg

4-Bromofluorobenzene

**Date Analyzed:** 10/27/16 02:06

	SCHROGITE RECOVERED					
TPH By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
Analytes			[D]			
1-Chlorooctane	123	100	123	70-135		
o-Terphenyl	59.2	50.0	118	70-135		

**Lab Batch #:** 3002738 **Sample:** 715411-1-BSD / BSD Batch: 1 Matrix: Solid

**Units:** mg/kg **Date Analyzed:** 10/26/16 13:16 SURROGATE RECOVERY STUDY **Amount** True Control BTEX by EPA 8021B Found Limits Amount Flags Recovery [A] [B] %R %R [D] **Analytes** 1,4-Difluorobenzene 0.0328 0.0300 109 80-120

0.0315

**Lab Batch #:** 3002771 **Sample:** 715414-1-BSD / BSD Batch: Matrix: Solid

**Units:** mg/kg **Date Analyzed:** 10/27/16 02:31 SURROGATE RECOVERY STUDY

TPH By SW8015B Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	124	100	124	70-135	
o-Terphenyl	57.4	50.0	115	70-135	

**Lab Batch #:** 3002738 Sample: 539255-001 S / MS Batch: Matrix: Soil

Units:	mg/kg	<b>Date Analyzed:</b> 10/26/16 13:32	SURROGATE RECOVERY STUDY				
	ВТЕ	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1,4-Difluor	robenzene		0.0335	0.0300	112	80-120	
4-Bromoflu	uorobenzene		0.0319	0.0300	106	80-120	

Lab Batch #: 3002771 **Sample:** 539292-001 S / MS Batch: Matrix: Soil

Units:	mg/kg	<b>Date Analyzed:</b> 10/27/16 03:20	SURROGATE RECOVERY STUDY					
	TPH 1	By SW8015B Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooc	ctane	rinary us	128	99.8	128	70-135		
o-Terpheny	yl		61.1	49.9	122	70-135		

<sup>\*</sup> Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

<sup>\*\*\*</sup> Poor recoveries due to dilution



**Project Name: Enterprise Salt Draw** 

Work Orders: 539292,

**Project ID: Lab Batch #:** 3002738 **Sample:** 539255-001 SD / MSD Matrix: Soil Batch: 1 Units: mg/kg **Date Analyzed:** 10/26/16 13:48 SUPPOCATE RECOVERY STUDY

mg ng Dute imaigzeur 10/20/10 13.10	SURROGATE RECOVERT STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
Analytes			[D]			
1,4-Difluorobenzene	0.0347	0.0300	116	80-120		
4-Bromofluorobenzene	0.0296	0.0300	99	80-120		

**Lab Batch #:** 3002771 **Sample:** 539292-001 SD / MSD Batch: 1 Matrix: Soil

Units:	mg/kg	<b>Date Analyzed:</b> 10/27/16 03:45	SURROGATE RECOVERY STUDY							
	ТРН В	y SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags			
		Analytes			[D]					
1-Chlorooct	ane		123	100	123	70-135				
o-Terpheny	1		61.7	50.0	123	70-135				

Surrogate Recovery [D] = 100 \* A / B

<sup>\*</sup> Surrogate outside of Laboratory QC limits

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

<sup>\*\*\*</sup> Poor recoveries due to dilution



### **BS / BSD Recoveries**



**Project Name: Enterprise Salt Draw** 

Work Order #: 539292 Project ID:

**Analyst:** PJB **Date Prepared:** 10/26/2016 **Date Analyzed:** 10/26/2016

Units: mg/kg BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Benzene	< 0.00150	0.100	0.101	101	0.100	0.0983	98	3	70-130	35	
Toluene	< 0.00200	0.100	0.103	103	0.100	0.100	100	3	70-130	35	
Ethylbenzene	< 0.00200	0.100	0.102	102	0.100	0.0981	98	4	71-129	35	
m,p-Xylenes	< 0.00200	0.200	0.204	102	0.200	0.195	98	5	70-135	35	
o-Xylene	< 0.00300	0.100	0.102	102	0.100	0.0969	97	5	71-133	35	

Analyst: ARM Date Prepared: 10/26/2016 Date Analyzed: 10/27/2016

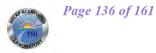
Units: mg/kg BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B Mod	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[D]	[C]	[D]	[E]	Kesun [F]	[0]				
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	985	99	1000	1010	101	3	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	974	97	1000	998	100	2	70-135	35	

Relative Percent Difference RPD = 200\*|(C-F)/(C+F)|Blank Spike Recovery [D] = 100\*(C)/[B]Blank Spike Duplicate Recovery [G] = 100\*(F)/[E]All results are based on MDL and Validated for QC Purposes



### Form 3 - MS / MSD Recoveries



**Project Name: Enterprise Salt Draw** 

**Work Order #:** 539292

539292 3002738

**QC- Sample ID:** 539255-001 S

Batch #:

Matrix: Soil

**Project ID:** 

Lab Batch ID: Date Analyzed:

10/26/2016

**Date Prepared:** 10/26/2016

Analyst: PJB

**Reporting Units:** 

mg/kg

Allaryst. 13D

### MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD	Control Limits %R	Control Limits %RPD	Flag
Analytes	[A]	[B]	[-]	[D]	[E]	[-]	[G]	, ,	, , , , ,	,,,	
Benzene	< 0.00149	0.0994	0.0929	93	0.0990	0.0927	94	0	70-130	35	
Toluene	< 0.00199	0.0994	0.0911	92	0.0990	0.0917	93	1	70-130	35	
Ethylbenzene	< 0.00199	0.0994	0.0869	87	0.0990	0.0858	87	1	71-129	35	
m,p-Xylenes	< 0.00199	0.199	0.172	86	0.198	0.169	85	2	70-135	35	
o-Xylene	< 0.00298	0.0994	0.0858	86	0.0990	0.0836	84	3	71-133	35	

Lab Batch ID:

3002771

**QC- Sample ID:** 539292-001 S

Batch #:

Matrix: Soil

Date Analyzed:

10/27/2016

**Date Prepared:** 10/26/2016

Analyst: ARM

**Reporting Units:** 1

mg/kg

### MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B Mod	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes	[A]	[B]	[0]	[D]	[E]	Result [1]	[G]	70	/ <b>UK</b>	/VKI D	
C6-C10 Gasoline Range Hydrocarbons	50.4	998	1060	101	1000	1090	104	3	70-135	35	
C10-C28 Diesel Range Hydrocarbons	187	998	1190	101	1000	1140	95	4	70-135	35	

Matrix Spike Percent Recovery [D] = 100\*(C-A)/B Relative Percent Difference RPD = 200\*|(C-F)/(C+F)| Matrix Spike Duplicate Percent Recovery [G] = 100\*(F-A)/E



# CHAIN OF CUSTODY

Stafford, Texas (281-240-4200)		Odessa, Texas (432-563-1800)	-1800) Lakeland, Florida (863-646-8526)
Dallac, Texas (214-902-0300)		Norcross, Georgia (770-449-8800)	
Service Center - San Antonio, Texas (210-509-3334)	www.xenco.com	Xenco Quoto #	Xenco Job & DXIJJJ
		Analytical Information	formation Matrix Codes
	Project Name/Number:		A= Air
Configuration (PY	Enterprise Sch	T Cray	S = Soil/Sed/Soild GW =Ground Water
Company Address	TO AM	-0	DW ≈ Drinking Water P ≈ Product
Phone	Invoice To:	) - C	SW = Surface water SL = Sludge
maililared talon percon	Con Arrandina	R	WW= Waste Water W = Wipe
Project Conjustical (SSK (S1)) \ KOO		G	0 = 0
Samplers's Non Conton		<b>X</b>	. WW= Waste Water
	Collector	スタインハ	
No. Field ID / Point of Collection		H2SO4 NaOH NaHSO4 MEOH	Field Comments
OC-TR	1026 ACO	1	
ω			
4			
O.			
6			
7			
8			
Ø			
10 Tunanand Tina (Business days)	Data Deliverable Information	56	Notes:
Same Day TAT	Lavel II Std QC	Lavel IV (Full Data Pkg /raw data)	
Next Day EMERGENCY 7 Day TAT	Level III Std GC+ Forms	TRRP Level IV	
2 Day EMERGENCY Contract TAT	Level 3 (CLP Forms).	UST / RQ -411	
3 Day EMERGENCY	TRRP Checklist		
TAT Starts Day received by Lab, if received by 3:00 pm			FED-EX/UPS: Tracking #
Bakkguis(Red D) Sampler:	SAMPLE CUSTODY MUST BE DOCUMENTED BELDY EACH TIME SAMPLES CHANGE TO	Balinquished By: Date Time:	Received By:
Relinquished by:	Received	Relinquished By: Date Time:	Received By:
3 Relinquished by:	Date Time: Received By:	Custody Seal # Preserved where app	picable On lee Temp: IR ID:R-8
5 Notice: Signature of this document and relinquishment of samples constitutes a	valid purchase order from client company to XENCO Laboratories and its a	ifiliates, subcontractors and assigns XENCO's standard terms an	5 Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subconfractors and assigns XENCO's standard terms and conditions of service villess prev CP:+ 0.1 Corrected Temp:



# **XENCO Laboratories** Prelogin/Nonconformance Report- Sample Log-In



Client: Talon/LPE Co.

Work Order #: 539292

Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient

Date/ Time Received: 10/26/2016 04:10:00 PM

Temperature Measuring device used: R8

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	4.5	
#2 *Shipping container in good condition?	N/A	
#3 *Samples received on ice?	Yes	
#4 *Custody Seal present on shipping container/ cooler?	N/A	
#5 *Custody Seals intact on shipping container/ cooler?	N/A	
#6 Custody Seals intact on sample bottles?	N/A	
#7 *Custody Seals Signed and dated?	N/A	
#8 *Chain of Custody present?	Yes	
#9 Sample instructions complete on Chain of Custody?	Yes	
#10 Any missing/extra samples?	No	
#11 Chain of Custody signed when relinquished/ received?	Yes	
#12 Chain of Custody agrees with sample label(s)?	Yes	
#13 Container label(s) legible and intact?	Yes	
#14 Sample matrix/ properties agree with Chain of Custody?	Yes	
#15 Samples in proper container/ bottle?	Yes	
#16 Samples properly preserved?	Yes	
#17 Sample container(s) intact?	Yes	
#18 Sufficient sample amount for indicated test(s)?	Yes	
#19 All samples received within hold time?	Yes	
#20 Subcontract of sample(s)?	N/A	
#21 VOC samples have zero headspace (less than 1/4 inch bubble)?	N/A	
#22 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	N/A	
#23 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	N/A	

* Must be complete	d for after-hours de	elivery of samples prior to place	cing in the refrigerator
Analyst:		PH Device/Lot#:	
Check	dist completed by:	Jessica Kramer	Date: 10/26/2016
Chec	klist reviewed by:	Kelsey Brooks	Date: 10/26/2016

# **Analytical Report 539507**

for Talon/LPE Co.

Project Manager: Melissa Gilliland Enterprise Salt Draw

01-NOV-16

Collected By: Client





### 1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215), Arizona (AZ0765), Florida (E871002), Louisiana (03054) Oklahoma (9218)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295) Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)

Xenco-San Antonio: Texas (T104704534)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757) Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)



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01-NOV-16

Project Manager: Melissa Gilliland

Talon/LPE Co.

2901 S State Highway 349 Midland, TX 79706

Reference: XENCO Report No(s): 539507

**Enterprise Salt Draw** 

Project Address: Eddy Co NM

### Melissa Gilliland:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 539507. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 539507 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

**Kelsey Brooks** 

Knus Koah

Project Manager

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# **Sample Cross Reference 539507**



### Talon/LPE Co., Midland, TX

Enterprise Salt Draw

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS-5C	S	10-31-16 10:00	- 5 ft	539507-001

Version: 1.%



### **CASE NARRATIVE**



Client Name: Talon/LPE Co.
Project Name: Enterprise Salt Draw

Project ID: Report Date: 01-NOV-16
Work Order Number(s): 539507
Date Received: 10/31/2016

### Sample receipt non conformances and comments:

Brian called 11/01/16 @ 813 to add BTEX

### Sample receipt non conformances and comments per sample:

None

### Analytical non conformances and comments:

Batch: LBA-3003040 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



# **Certificate of Analysis Summary 539507**

Talon/LPE Co., Midland, TX

**Project Name: Enterprise Salt Draw** 



**Project Id:** 

**Project Location:** 

Contact: Melissa Gilliland

Eddy Co NM

**Date Received in Lab:** Mon Oct-31-16 03:25 pm **Report Date:** 01-NOV-16

Project Manager: Kelsey Brooks

	Lab Id:	539507-001			
Analysis Paguested	Field Id:	SS-5C			
Analysis Requested	Depth:	5 ft			
	Matrix: SOIL				
	Sampled:	Oct-31-16 10:00			
BTEX by EPA 8021B	Extracted:	Oct-31-16 18:00			
	Analyzed:	Nov-01-16 11:24			
	Units/RL:	mg/kg RL			
Benzene		ND 0.00150			
Toluene		ND 0.00200			
Ethylbenzene		ND 0.00200			
m,p-Xylenes		ND 0.00200			
o-Xylene		ND 0.00299			
Total Xylenes		ND 0.00200			
Total BTEX		ND 0.00150			
TPH By SW8015B Mod	Extracted:	Oct-31-16 16:00			
	Analyzed:	Nov-01-16 09:51			
	Units/RL:	mg/kg RL			
C6-C10 Gasoline Range Hydrocarbons		ND 15.0		_	
C10-C28 Diesel Range Hydrocarbons		ND 15.0			

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent beest judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Version: 1.%

Kelsey Brooks Project Manager

Knis Roah



# **Flagging Criteria**



- Page 145 of 161
- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- **K** Sample analyzed outside of recommended hold time.
- **JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- \*\* Surrogate recovered outside laboratory control limit.
- BRL Below Reporting Limit.
- **RL** Reporting Limit

MDL Method Detection Limit	SDL Sample Detection Limit	LOD Limit of Detection

PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation

**DL** Method Detection Limit

NC Non-Calculable

- + NELAC certification not offered for this compound.
- \* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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9701 Harry Hines Blvd , Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
1211 W Florida Ave, Midland, TX 79701	(432) 563-1800	(432) 563-1713
2525 W. Huntington Dr Suite 102 Tempe A7 85282	(602) 437 0330	

80-120



# Form 2 - Surrogate Recoveries

**Project Name: Enterprise Salt Draw** 

Work Orders: 539507,

**Project ID:** 

**Lab Batch #:** 3003034 Matrix: Soil **Sample:** 539507-001 / SMP Batch:

Units:	mg/kg	<b>Date Analyzed:</b> 11/01/16 09:51	SU	SURROGATE RECOVERY STUDY				
	TPH By SW8015B Mod			True Amount [B]	Recovery %R	Control Limits %R	Flags	
		Analytes	[A]		[D]			
1-Chlorooct	ane		120	99.8	120	70-135		
o-Terphenyl			63.5	49.9	127	70-135		

**Lab Batch #:** 3003040 Sample: 539507-001 / SMP Batch: Matrix: Soil

**Units:** mg/kg Date Analyzed: 11/01/16 11:24 SURROGATE RECOVERY STUDY **Amount** True Control BTEX by EPA 8021B Found Limits Amount Recovery Flags [A] [B] %R %R [D] **Analytes** 1,4-Difluorobenzene 0.0293 0.0300 98 80-120 4-Bromofluorobenzene 0.0312 0.0300 104

**Lab Batch #:** 3003040 Sample: 715592-1-BLK / BLK Batch: Matrix: Solid

**Units:** mg/kg Date Analyzed: 10/31/16 16:29 SURROGATE RECOVERY STUDY

BTEX by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0282	0.0300	94	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

**Sample:** 715582-1-BLK / BLK **Lab Batch #:** 3003034 Batch: Matrix: Solid

Units:	mg/kg	<b>Date Analyzed:</b> 10/31/16 23:28	SURROGATE RECOVERY STUDY					
	TPH I	By SW8015B Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooc	ctane	<del>-</del>	120	100	120	70-135		
o-Terpheny	yl		61.8	50.0	124	70-135		

Lab Batch #: 3003040 **Sample:** 715592-1-BKS / BKS Batch: Matrix: Solid

Units:	mg/kg	<b>Date Analyzed:</b> 10/31/16 14:13	SU	RROGATE RE	ECOVERY S	STUDY	
	ВТЕ	X by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobe	enzene		0.0291	0.0300	97	80-120	
4-Bromofluoro	4-Bromofluorobenzene			0.0300	103	80-120	

<sup>\*</sup> Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 \* A / B

All results are based on MDL and validated for QC purposes.

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

<sup>\*\*\*</sup> Poor recoveries due to dilution



# Form 2 - Surrogate Recoveries

**Project Name: Enterprise Salt Draw** 

Work Orders: 539507,

**Sample:** 715582-1-BKS / BKS

**Project ID:** 

**Lab Batch #:** 3003034 Matrix: Solid Batch: Units: mø/kø **Date Analyzed:** 10/31/16 23:53 SUDDOCATE DECOVEDY STUDY

omes. Ingreg Date Analyzed. 10/31/10/25.55	50	KKUGATE KI	LCOVERY	STUDY	
TPH By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes			[D]		
1-Chlorooctane	128	100	128	70-135	
o-Terphenyl	63.3	50.0	127	70-135	

**Lab Batch #:** 3003040 **Sample:** 715592-1-BSD / BSD Batch: Matrix: Solid

**Units:** mg/kg Date Analyzed: 10/31/16 14:29 SURROGATE RECOVERY STUDY **Amount** True Control BTEX by EPA 8021B Found Limits Amount Recovery Flags [A] [B] %R %R [D] **Analytes** 1,4-Difluorobenzene 0.0267 0.0300 89 80-120 4-Bromofluorobenzene 0.0274 0.0300 91 80-120

Sample: 715582-1-BSD / BSD Lab Batch #: 3003034 Matrix: Solid Batch:

**Units:** mg/kg Date Analyzed: 11/01/16 00:17 SURROGATE RECOVERY STUDY

TPH By SW8015B Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	100	112	70-135	
o-Terphenyl	63.7	50.0	127	70-135	

**Lab Batch #:** 3003040 **Sample:** 539437-013 S / MS Batch: Matrix: Soil

Units:	mg/kg	<b>Date Analyzed:</b> 10/31/16 15:30	SURROGATE RECOVERY STUDY					
	вте	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
		Analytes			[D]			
1,4-Difluor	robenzene		0.0273	0.0300	91	80-120		
4-Bromoflu	uorobenzene		0.0276	0.0300	92	80-120		

Lab Batch #: 3003034 **Sample:** 539437-001 S / MS Batch: Matrix: Soil

Units:	mg/kg	<b>Date Analyzed:</b> 11/01/16 01:06	SURROGATE RECOVERY STUDY				
	TPH 1	By SW8015B Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooct	ane		126	99.9	126	70-135	
o-Terphenyl			62.0	50.0	124	70-135	

<sup>\*</sup> Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 \* A / B

All results are based on MDL and validated for QC purposes.

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

<sup>\*\*\*</sup> Poor recoveries due to dilution



# Form 2 - Surrogate Recoveries

**Project Name: Enterprise Salt Draw** 

 Work Orders: 539507,
 Project ID:

 Lab Batch #: 3003040
 Sample: 539437-013 SD / MSD
 Batch: 1 Matrix: Soil

**Units:** Date Analyzed: 10/31/16 15:47 mg/kg SURROGATE RECOVERY STUDY Amount True Control BTEX by EPA 8021B Found Amount Limits Recovery Flags [A] [B] %R %R [**D**] **Analytes** 1,4-Difluorobenzene 0.0300 0.0300 100 80-120 4-Bromofluorobenzene 80-120 0.0346 0.0300 115

 Lab Batch #: 3003034
 Sample: 539437-001 SD / MSD
 Batch: 1
 Matrix: Soil

Units:	mg/kg	<b>Date Analyzed:</b> 11/01/16 01:31	SU	RROGATE RI	ECOVERY S	STUDY	
	TPH I	By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1-Chlorooc	ctane		124	99.7	124	70-135	
o-Terpheny	yl		64.0	49.9	128	70-135	

Surrogate Recovery [D] = 100 \* A / B

All results are based on MDL and validated for QC purposes.

Version: 1.%

<sup>\*</sup> Surrogate outside of Laboratory QC limits

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

<sup>\*\*\*</sup> Poor recoveries due to dilution



### **BS / BSD Recoveries**



**Project Name: Enterprise Salt Draw** 

Work Order #: 539507 Project ID:

**Analyst:** PJB **Date Prepared:** 11/01/2016 **Date Analyzed:** 10/31/2016

Lab Batch ID: 3003040Sample: 715592-1-BKSBatch #: 1Matrix: Solid

Units: mg/kg BLANK /BLANK SPIKE / BLANK SPIKE DUPL	JCATE RECOVERY STUDY
--	----------------------

BTEX by EPA 8021B  Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	< 0.00150	0.100	0.102	102	0.100	0.0897	90	13	70-130	35	
Toluene	< 0.00200	0.100	0.102	102	0.100	0.0882	88	15	70-130	35	
Ethylbenzene	< 0.00200	0.100	0.106	106	0.100	0.0934	93	13	71-129	35	
m,p-Xylenes	< 0.00200	0.200	0.217	109	0.200	0.191	96	13	70-135	35	
o-Xylene	< 0.00300	0.100	0.107	107	0.100	0.0944	94	13	71-133	35	

**Analyst:** ARM **Date Prepared:** 10/31/2016 **Date Analyzed:** 10/31/2016

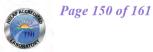
Units: mg/kg BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B Mod  Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	951	95	1000	983	98	3	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	969	97	1000	991	99	2	70-135	35	

Relative Percent Difference RPD = 200\*|(C-F)/(C+F)|Blank Spike Recovery [D] = 100\*(C)/[B]Blank Spike Duplicate Recovery [G] = 100\*(F)/[E]All results are based on MDL and Validated for QC Purposes



## Form 3 - MS / MSD Recoveries



**Project Name: Enterprise Salt Draw** 

Work Order #:

539507 3003040

**QC- Sample ID:** 539437-013 S

Batch #:

Matrix: Soil

**Project ID:** 

Lab Batch ID: Date Analyzed:

10/31/2016

**Date Prepared:** 10/31/2016

Analyst: PJB

**Reporting Units:** 

mg/kg

#### MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD	Control Limits %R	Control Limits %RPD	Flag
Analytes	[A]	[B]		[D]	[E]	Kesuit [F]	[G]	70	/0K	70KI D	
Benzene	< 0.00150	0.0998	0.0852	85	0.0994	0.0930	94	9	70-130	35	
Toluene	< 0.00200	0.0998	0.0845	85	0.0994	0.0956	96	12	70-130	35	
Ethylbenzene	< 0.00200	0.0998	0.0883	88	0.0994	0.0984	99	11	71-129	35	
m,p-Xylenes	< 0.00200	0.200	0.181	91	0.199	0.207	104	13	70-135	35	
o-Xylene	< 0.00299	0.0998	0.0888	89	0.0994	0.106	107	18	71-133	35	

Lab Batch ID:

3003034

**QC- Sample ID:** 539437-001 S

Batch #:

Matrix: Soil

Date Analyzed:

11/01/2016

**Date Prepared:** 10/31/2016

Analyst: ARM

**Reporting Units:** 

mg/kg

#### MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	999	962	96	997	996	100	3	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	999	980	98	997	1020	102	4	70-135	35	

Matrix Spike Percent Recovery [D] = 100\*(C-A)/B Relative Percent Difference RPD = 200\*|(C-F)/(C+F)| Matrix Spike Duplicate Percent Recovery [G] = 100\*(F-A)/E



# CHAIN OF CUSTODY

Odessa, Texas (432-563-1800)

Lakeland, Florida (863-646-8526)

Project Conw lotice; Signature of this document and relinquishment of samples constitues a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of sen Sampters's Nan Company Address Company Name / Branch: Next Day EMERGENCY Same Day TAT Relinquished by: 3 Day EMERGENCY mailly and atalonge com Service Center - San Antonio, Texas (210-509-3334) Dallas, Texas (214-902-0300) 2 Day EMERGENCY TAT Starts Day received by Lab, if received by 3:00 pm Client / Reporting Information Turneround Time ( Business days) Field ID / Point of Collection クイト) 2 SH 女 ☐7 Day TAT Contract TAT 5 Day TAT Date Time: Date Time: Sample Project Location PO Number: 000 1000 to therpe isc Name/Number: Received By: TRRP Checklist Level 3 (CLP Forme) Level III Std QC+ Form Level II Std QC Project Information EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY CO Metal Data Deliverable Information www.хөпсо.com bottle: HCI NaOH/Zn UST/RG-411 Level IV (Full Data Pkg /raw data) Custody Seal # TRRP Level IV H2SO4 3) NaOH NaHSO4 ngv€ 15 TPI GRO Norcross, Georgia (770-449-8800) Preserved where applicable Date Time: Date Time: FED-EX / UPS: Tracking # Received By: Tampa, Florida (813-620-2000) Temp: IR ID:R-8 Field Comments DW = Drinking Water S = Soil/Sed/Solid SL ≖ Sludge WW∞ Waste Water P = Product Corr Factor WW≍ Waste Water ₩ = Wipe SW = Surface water GW =Ground Water Matrix Codes

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Corrected Temp5 . 3



# **XENCO Laboratories** Prelogin/Nonconformance Report- Sample Log-In



Client: Talon/LPE Co.

Date/ Time Received: 10/31/2016 03:25:00 PM

Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient

Work Order #: 539507

Temperature Measuring device used: R8

Work Order #. 555507		
	Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?		5.3
#2 *Shipping container in good condition	?	N/A
#3 *Samples received on ice?	Yes	
#4 *Custody Seal present on shipping co	ontainer/ cooler?	N/A
#5 *Custody Seals intact on shipping cor	ntainer/ cooler?	N/A
#6 Custody Seals intact on sample bottle	es?	N/A
#7 *Custody Seals Signed and dated?		N/A
#8 *Chain of Custody present?		Yes
#9 Sample instructions complete on Cha	in of Custody?	Yes
#10 Any missing/extra samples?		No
#11 Chain of Custody signed when reline	quished/ received?	Yes
#12 Chain of Custody agrees with sample	le label(s)?	Yes
#13 Container label(s) legible and intact	?	Yes
#14 Sample matrix/ properties agree with	n Chain of Custody?	Yes
#15 Samples in proper container/ bottle?		Yes
#16 Samples properly preserved?		Yes
#17 Sample container(s) intact?	Yes	
#18 Sufficient sample amount for indicat	Yes	
#19 All samples received within hold time	e?	Yes
#20 Subcontract of sample(s)?		N/A
#21 VOC samples have zero headspace	e (less than 1/4 inch bubble)?	N/A
#22 <2 for all samples preserved with His samples for the analysis of HEM or HEM-		N/A
analysts. #23 >10 for all samples preserved with N	NaAsO2+NaOH, ZnAc+NaOH?	N/A
* Must be completed for after-hours de	livery of samples prior to placing in	the refrigerator
	g	
Analyst:	PH Device/Lot#:	
Checklist completed by:	Jessica Kramer	Date: 10/31/2016
Checklist reviewed by:	Kelsey Brooks	Date: 11/01/2016

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

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**

QUESTIONS

Action 319301

#### **QUESTIONS**

Operator:	OGRID:
Enterprise Field Services, LLC	241602
PO Box 4324	Action Number:
Houston, TX 77210	319301
	Action Type:
	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

#### QUESTIONS

Prerequisites	
Incident ID (n#)	nAB1629934570
Incident Name	NAB1629934570 PIPELINE ROW, 1002 @ 0
Incident Type	Natural Gas Release
Incident Status	Reclamation Report Received
Incident Facility	[fAB1629934423] Pipeline ROW, 1002

Location of Release Source				
Please answer all the questions in this group.				
Site Name	PIPELINE ROW, 1002			
Date Release Discovered	10/14/2016			
Surface Owner	Private			

ncident Details				
Please answer all the questions in this group.				
Incident Type	Natural Gas Release			
Did this release result in a fire or is the result of a fire	No			
Did this release result in any injuries	No			
Has this release reached or does it have a reasonable probability of reaching a watercourse	No			
Has this release endangered or does it have a reasonable probability of endangering public health	No			
Has this release substantially damaged or will it substantially damage property or the environment	No			
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No			

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for	or the volumes provided should be attached to the follow-up C-141 submission.
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure   Pipeline (Any)   Produced Water   Released: 1 BBL   Recovered: 0 BBL   Lost: 1 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Cause: Equipment Failure   Pipeline (Any)   [OBSOLETE] Natural Gas (Methane)   Released: 83 MCF   Recovered: 0 MCF   Lost: 83 MCF.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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<u>District IV</u> 1220 S. St Francis Dr., Santa Fe, NM 87505

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

QUESTIONS, Page 2

Action 319301

Phone:(505) 476-3470 Fax:(505) 476-3462	
QUEST	10NS (continued)
Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID:
QUESTIONS	[C-141] Nedamation Report C-141 (C-141-V-Redamation)
Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	Yes, according to supplied volumes this will be treated as a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.	e. gas only) are to be submitted on the C-129 form.
Initial Response	
The responsible party must undertake the following actions immediately unless they could create a	safety hazard that would result in injury.
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.
	ilation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative o eted or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of evaluation in the follow-up C-141 submission.
to report and/or file certain release notifications and perform corrective actions for rele the OCD does not relieve the operator of liability should their operations have failed to	knowledge and understand that pursuant to OCD rules and regulations all operators are required asses which may endanger public health or the environment. The acceptance of a C-141 report by adequately investigate and remediate contamination that pose a threat to groundwater, surface rt does not relieve the operator of responsibility for compliance with any other federal, state, or
I hereby agree and sign off to the above statement	Name: Thomas Long Title: Sr Field Environmental Scientist

Email: tjlong@eprod.com Date: 03/01/2024

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 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** 

QUESTIONS, Page 3

Action 319301

#### **QUESTIONS** (continued)

Operator:	OGRID:
Enterprise Field Services, LLC	241602
PO Box 4324	Action Number:
Houston, TX 77210	319301
	Action Type:
	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

#### QUESTIONS

Site Characterization		
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Less than or equal 25 (ft.)	
What method was used to determine the depth to ground water	NM OSE iWaters Database Search	
Did this release impact groundwater or surface water	No	
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:		
A continuously flowing watercourse or any other significant watercourse	Between 200 and 300 (ft.)	
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 200 and 300 (ft.)	
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)	
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 500 and 1000 (ft.)	
Any other fresh water well or spring	Between 500 and 1000 (ft.)	
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 1 and 5 (mi.)	
A wetland	Between 300 and 500 (ft.)	
A subsurface mine	Between 1 and 5 (mi.)	
An (non-karst) unstable area	Between ½ and 1 (mi.)	
Categorize the risk of this well / site being in a karst geology	Low	
A 100-year floodplain	Zero feet, overlying, or within area	
Did the release impact areas not on an exploration, development, production, or storage site	No	

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
Yes		
nination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.		
Yes		
No		
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)		
5800		
47		
13		
0.1		
0.1		
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.		
11/28/2023		
11/28/2023		
02/13/2024		
3000		
35		
3000		
35		
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.		
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significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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

QUESTIONS, Page 4

Action 319301

#### **QUESTIONS** (continued)

Operator:	OGRID:
Enterprise Field Services, LLC	241602
PO Box 4324	Action Number:
Houston, TX 77210	319301
	Action Type:
	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

#### QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	LEA LAND LANDFILL [fEEM0112342028]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

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.

I hereby agree and sign off to the above statement

Name: Thomas Long

Title: Sr Field Environmental Scientist

Email: tjlong@eprod.com Date: 03/01/2024

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

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**

QUESTIONS, Page 5

Action 319301

**QUESTIONS** (continued)

Operator:	OGRID:
Enterprise Field Services, LLC	241602
PO Box 4324	Action Number:
Houston, TX 77210	319301
	Action Type:
	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

#### QUESTIONS

#### Deferral Requests Only Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation. Requesting a deferral of the remediation closure due date with the approval of this No submission

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

QUESTIONS, Page 6

Action 319301

QUESTIONS	(continued)

Operator:	OGRID:
Enterprise Field Services, LLC	241602
PO Box 4324	Action Number:
Houston, TX 77210	319301
	Action Type:
	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

#### QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	313012
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	02/13/2024
What was the (estimated) number of samples that were to be gathered	5
What was the sampling surface area in square feet	250

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	3000
What was the total volume (cubic yards) remediated	35
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	3000
What was the total volume (in cubic yards) reclaimed	35
Summarize any additional remediation activities not included by answers (above)	Still require the final photograph after backfill activities.

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 (in .pdf format) 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.

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.

I hereby agree and sign off to the above statement

I hereby agree and sign off to the above statement

Title: Sr Field Environmental Scientist
Email: tjlong@eprod.com
Date: 03/01/2024

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

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** 

QUESTIONS, Page 7

Action 319301

QUES	TIONS (continued)
Operator: Enterprise Field Services, LLC	OGRID: 241602
PO Box 4324 Houston, TX 77210	Action Number: 319301
	Action Type:  [C-141] Reclamation Report C-141 (C-141-v-Reclamation)
QUESTIONS	
Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	3000
What was the total volume of replacement material (in cubic yards) for this site	35
	of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable material
Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseeding commence(d)	06/01/2045
Summarize any additional reclamation activities not included by answers (above)	None

The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseeding plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13

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

Name: Thomas Long Title: Sr Field Environmental Scientist I hereby agree and sign off to the above statement Email: tjlong@eprod.com Date: 03/01/2024

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720 District III

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

QUESTIONS, Page 8

Action 319301

**QUESTIONS** (continued)

Operator:	OGRID:
Enterprise Field Services, LLC	241602
PO Box 4324	Action Number:
Houston, TX 77210	319301
	Action Type:
	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

#### QUESTIONS

Revegetation Report	
Only answer the questions in this group if all surface restoration, reclamation and re-vegetation obligations have been satisfied.	
Requesting a restoration complete approval with this submission	No
Per Paragraph (4) of Subsection (D) of 19.15.29.13 NMAC for any major or minor release containing liquids, the responsible party must notify the division when reclamation and re-vegetation are complete.	

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

CONDITIONS

Action 319301

#### **CONDITIONS**

Operator:	OGRID:
Enterprise Field Services, LLC	241602
PO Box 4324	Action Number:
Houston, TX 77210	319301
	Action Type:
	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

#### CONDITIONS

Created By	Condition	Condition Date
amaxwell	Reclamation approved.	3/1/2024
amaxwell	All revegetation activities will need to be documented and included in the revegetation report. The revegetation report will need to include: An executive summary of the revegetation activities including: Seed mix, Method of seeding, dates of when the release area was reseeded, information pertinent to inspections, information about any amendments added to the soil, information on how the vegetative cover established meets the life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds per 19.15.29.13 D.(3) NMAC, and any additional information; a scaled Site Map including area that was revegetated in square feet; and pictures of the revegetated areas during reseeding activities, inspections, and final pictures when revegetation is achieved.	3/1/2024
amaxwell	OR Per 19.15.29.13 E. NMAC, if a reclamation and revegetation report has been submitted to the surface owner, it may be used if the requirements of the surface owner provide equal or better protection of freshwater, human health, and the environment. A copy of the approval of the reclamation and revegetation report from the surface owner and a copy of the approved reclamation and revegetation report will need to be submitted to the OCD via the Permitting website.	3/1/2024