ENSOLUM

CLOSURE REPORT

Property:

Trunk C

UL A, S9, T25S, R30E
32.149012° N, 103.881141° W
Eddy County, New Mexico
NMOCD Incident ID: NAPP2329035104

December 13, 2023
Ensolum Project No. 03B1226316

Prepared for:

Enterprise Field Services, LLC
PO Box 4324
Houston, TX 77210

Attn: Thomas Long

Prepared by:

Kelly Lowery
Project Geologist

Heather Holthaus
Senior Project Manager

ENSOLUM

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ENSOLUM

CLOSURE REPORT

Trunk C

Unit A, S9, T25S, R30E
32.149012° N, 103.881141° W
Eddy County, New Mexico
NMOCD Incident ID: NAPP2329035104

Ensolum Project No. 03B1226316

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC (Enterprise)
Site Name:	Trunk C
Location:	UL A, Section 9, Township 25 South, Range 30 East 32.149012° N, 103.881141° W Eddy County, New Mexico
Property:	Bureau of Land Management (BLM)
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On October 9, 2023, Enterprise discovered natural gas and condensate being released from the Trunk C pipeline, with minimal fluids observed on the ground surface. Repair activities began on October 17, 2023, at which time Enterprise determined the release to be reportable per New Mexico EMNRD OCD regulations based on the volume of impacted subsurface soils. Enterprise reported the release to the New Mexico EMNRD OCD via email on October 17, 2023, followed up with a report through the online notice of release (NOR), and was assigned Incident Number NAPP2329035104 on October 26, 2023. During the release, approximately 350 one-thousand cubic feet (MCF) of natural gas was released to the atmosphere, along with 5 barrels (bbls) of condensate released onto the ground surface, with 0 bbls recovered.

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 chemicals 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 gas portion of this release constitutes venting that occurred during an emergency or a malfunction, as authorized by the New Mexico OCD regulations at NMAC 19.15.28.8.A and B(1). This release therefore is not prohibited by NMAC 19.15.29.8.A. Supporting documentation and figures associated with the following bullets are provided in **Appendix B**. One exploratory water well was identified southwest of the Site on the USGS database.

- The Site is not located within 300 feet of a New Mexico ENMRD 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 USGS 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 USGS database there are no freshwater wells 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 not 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 not located within an unstable area, also referred to as high karst.
- The Site is not 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
≤ 50 feet	Chloride	EPA 300.0 or SM4500 Cl B	600 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	100 mg/kg
	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

On October 9, 2023, Enterprise discovered natural gas and condensate being released from Trunk C pipeline. Approximately 350 MCF of natural gas was released to the atmosphere, along with 5 bbls of condensate released onto the ground surface, with 0 bbls recovered. Following submittal of an emergency New Mexico One-Call (NM-811), corrective action activities were commenced by New Mexico Rental Pipeline, LLC (NMR) utilizing a backhoe to excavate soils from the release area.

On October 19, 2023, Ensolum arrived on-Site to collect eight composite soil samples from the excavation floor and sidewalls (FS01, FS02, SW01, and SW02). The excavation floor soil samples were collected at depths of 7 and 27 feet below ground surface (bgs) respectively, and the excavation sidewall soil samples were collected at depths of 0-7 feet (SW01) and 0-5, 5-10, 10-15, 15-20, 20-25 feet (SW02) bgs. In addition, five delineation soil samples were collected outside of the excavation area (North, South, East, Northwest, Southwest) at a depth of 0.25 feet bgs. Additionally, one composite soil stockpile (SP) sample was collected from the excavated soil stockpile. Based on laboratory analytical data, additional excavation activities were necessary.

On October 26, 2023, Ensolum arrived on-Site to resample one composite soil sample from the excavation floor (FS01) and one composite soil sample from the excavation sidewall (SW01). The excavation floor sample was collected at a depth of 7 feet bgs, and the excavation sidewall sample was collected at a depth of 0-7 feet bgs. Additionally, one delineation soil sample was collected outside of the excavation area (South) at a depth of 0.5 feet bgs. Based on laboratory analytical data, additional excavation activities were necessary.

On November 3, 2023, subsequent to completion of additional excavation activities, Ensolum arrived on-Site to collect one composite soil sample from the excavation floor (FS03), and two composite soil samples from the excavation sidewalls (SW03 and SW04). The excavation floor sample was collected at a depth of 12.5 feet bgs and the excavation sidewall samples were collected at depths of 0-4, 4-8, 8-12 feet bgs. Additionally, one delineation soil sample was collected outside of the excavation area (South) at a depth of 1-foot bgs. Based on laboratory analytical data, no additional excavation or remediation activities were necessary.

The composite soil samples were analyzed for benzene, toluene, ethylbenzene, total xylenes (BTEX), total BTEX, total petroleum hydrocarbons (TPH), gasoline range organics (GRO), diesel range organics (DRO), motor oil/lube oil range organics (MRO), and chloride in accordance with the New Mexico EMNRD OCD Closure Criteria for Soils Impacted by a Release (NMOCD Closure Criteria).

The final excavation area measured approximately 27 feet long and 13 feet wide at the maximum extents, with a depth of 7 to 27 feet bgs.

A total of approximately 800 cubic yards of affected soils were excavated from the Site and transported to the Lea Land, LLC facility in Carlsbad, New Mexico. The excavation extent will be backfilled with clean imported fill, contoured to the original surrounding grade, and a BLM approved seed mixture will be sown into the surface area of the backfill for re-vegetation.

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

4.0 SOIL SAMPLING PROGRAM

Ensolum's soil sampling program from October 9, 2023 through November 3, 2023 included the collection of a total of 17 composite soil samples from the excavation floor and sidewalls (FS01 through FS03, and SW01 through SW04), seven delineation soil samples from five locations outside of the excavation area (North, East, South, Northwest, and Southwest), and one composite soil stockpile sample from the excavation soil stockpile (SP) staged on-Site for laboratory analysis.

The composite 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 in Albuquerque, New Mexico, under proper chain-of-custody procedures.

5.0 SOIL LABORATORY ANALYTICAL METHODS

The composite soil samples were analyzed for BTEX using Environmental Protection Agency (EPA) SW-846 Method 8021B, TPH GRO/DRO/MRO using EPA SW-846 Method 8015M/D, and chloride 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 total benzene, total BTEX, TPH GRO/DRO/MRO, and chloride concentrations or laboratory sample detection limits (SDLs) associated with the final composite excavation soil samples (FS01 through FS03, and SW01 through SW04), and the final delineation soil samples (North, East, South, Northwest, and Southwest) for the soils left in place at the Site, and the composite soil stockpile (SP) sample to the NMOCD Closure Criteria.

- Laboratory analytical results indicate total benzene concentrations for the final composite soil samples collected from the excavation area, the final delineation soil samples, and the final composite soil sample collected from the stockpile staged on-Site do not exceed the laboratory SDLs or the NMOCD Closure Criteria of 10 milligrams per kilogram (mg/kg).

- Laboratory analytical results indicate that total BTEX concentrations for the final composite soil samples collected from the excavation area, the final delineation soil samples, and the final composite soil sample collected from the stockpile staged on-Site do not exceed the laboratory SDLs or the NMOCD Closure Criteria of 50 mg/kg.

- Laboratory analytical results indicate combined TPH GRO/DRO/MRO concentrations for the final composite soil samples collected from the excavation area and the final delineation soil samples do not exceed the laboratory SDLs or the applicable NMOCD Closure Criteria of 100 mg/kg for depth to groundwater ≤50 feet.

- Laboratory analytical results indicate combined TPH GRO/DRO/MRO concentration for the composite soil sample collected from the stockpile staged on-Site exceeds the applicable NMOCD Closure Criteria of 100 mg/kg for depth to groundwater ≤50 feet.

- Laboratory analytical results indicate chloride concentrations for the final composite soil samples collected from the excavation area, the final delineation soil samples, and the final composite soil sample collected from the stockpile staged on-Site do not exceed the laboratory SDLs and/or the NMOCD Closure Criteria of 600 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 final confirmation soil sampling, the excavated soils were removed and taken off-Site for proper disposal. The excavation area will be backfilled with clean fill material, and then contoured to the original surrounding grade. Once the areas are brought back to original grade, a BLM approved seed mixture will be sown into the surface of the backfill for re-vegetation.

8.0 FINDINGS AND RECOMMENDATION

- On October 9, 2023, Enterprise discovered natural gas and condensate being released from Trunk C pipeline. Approximately 350 MCF of natural gas was released to the atmosphere, along with 5 bbls of condensate released onto the ground surface, with 0 bbls recovered.

- Following submittal of an emergency NM-811, corrective action activities were commenced by NMR utilizing a backhoe to excavate soils from the release area.

- Between October 19 and November 3, 2023, Ensolum arrived on-Site to collect four composite soil samples from three locations on the excavation floor (FS01 through FS03) and 13 composite soil samples from the excavation sidewalls (SW01 through SW04). The composite floor samples were collected at depths of 7 feet (FS01), 12.5 feet (FS03), and 27 feet (FS02) bgs and the composite sidewall samples were collected at depths of 0-7 feet (SW01), 0-5, 5-10, 10-15, 15-20, 20-25 feet (SW02), and 0-4, 4-8, and 8-12 feet (SW03 and SW04) bgs. Additionally, seven delineation samples were collected at five locations outside of the excavation area (North, East, South, Northwest, and Northeast) at a depth of 0.25 to 1 feet bgs. In addition, one composite soil stockpile sample was collected from the excavated soil stockpile (SP) staged on-Site.

- The primary objective of the closure activities was to reduce COC concentrations in the on-Site soils to below the applicable NMOCD Closure Criteria for Soils Impacted by a Release using the New Mexico EMNRD OCD's NMAC 19.15.29 *Releases* as guidance.

- The final excavation area measured approximately 27 feet long and 13 feet wide at the maximum extents, with a depth of 7 to 27 feet bgs.

- A total of 17 composite soil samples from the excavation floor and sidewalls (FS01 through FS03, and SW01 through SW04), seven delineation soil samples from locations outside of the excavation area (North, East, South, Northwest, Northeast), and one composite soil stockpile sample from the excavation soil stockpile (SP) staged on-Site were collected for laboratory analysis.

- Based on the laboratory analytical results, the final composite soil samples for the soils left in place at the Site collected from the excavation area and the delineation samples outside of the impacted area did not exhibit total benzene, total BTEX, TPH GRO/DRO/MRO or chloride concentrations above the applicable NMOCD Closure Criteria.

- Based on the laboratory analytical results, the composite soil samples collected from the soil stockpiles staged on-Site did not exhibit benzene, total BTEX, or chloride concentrations above the applicable NMOCD Closure Criteria; however, a concentration of TPH GRO/DRO/MRO was identified above the applicable NMOCD Closure Criteria.

- Subsequent to the results of the composite soil sampling, the soil stockpile staged on-Site was removed and taken off-Site for proper disposal. A total of approximately 800 cubic yards of soils were excavated and transported to the Lea Land, LLC facility in Carlsbad, New Mexico. The excavation area will be backfilled with clean fill material, contoured to the original surrounding grade, and a BLM approved seed mixture will be sown into the surface area of the backfill for re-vegetation.

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 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.

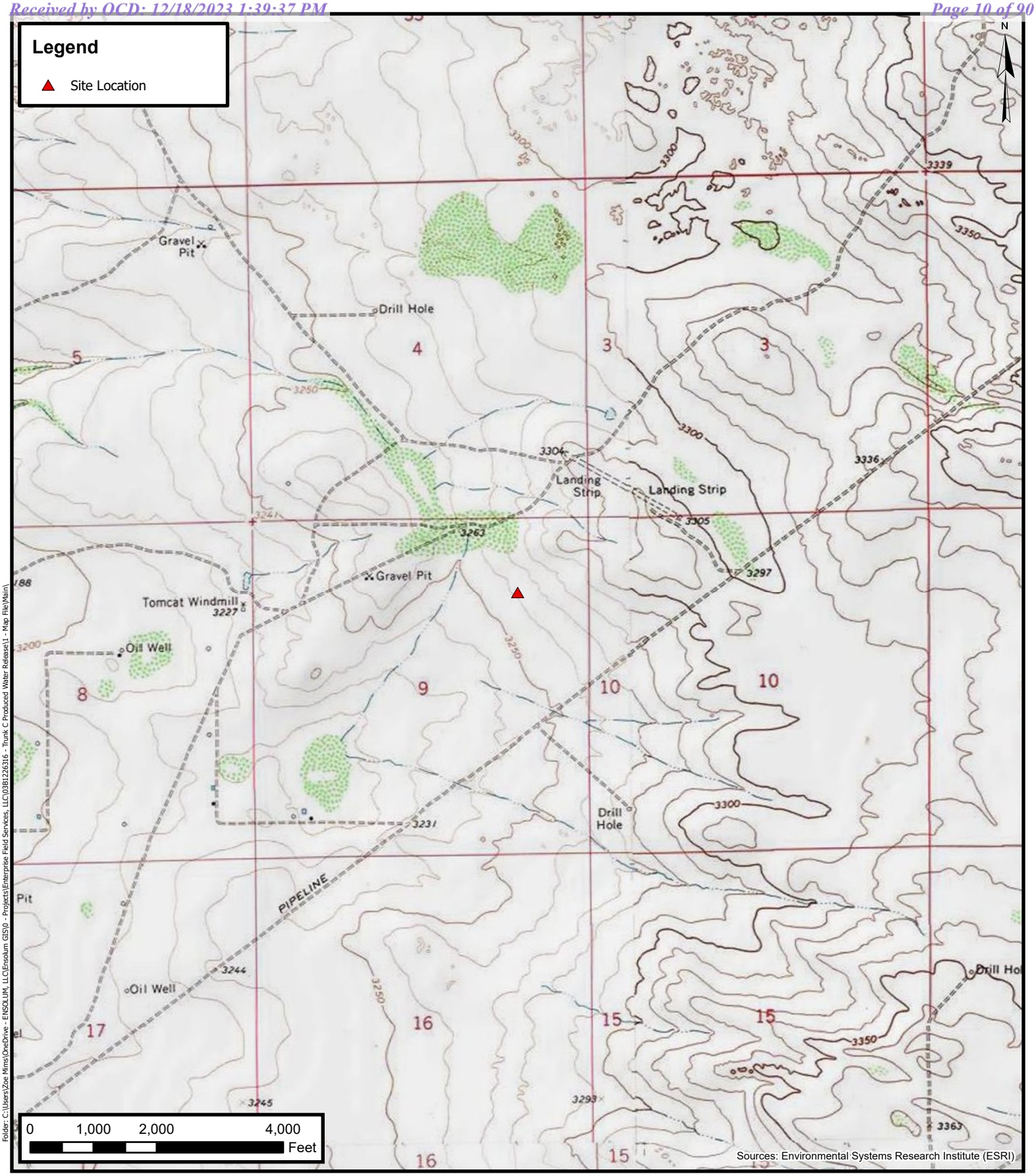
9.3 Reliance

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.

ENSOLUM

APPENDIX A

Figures



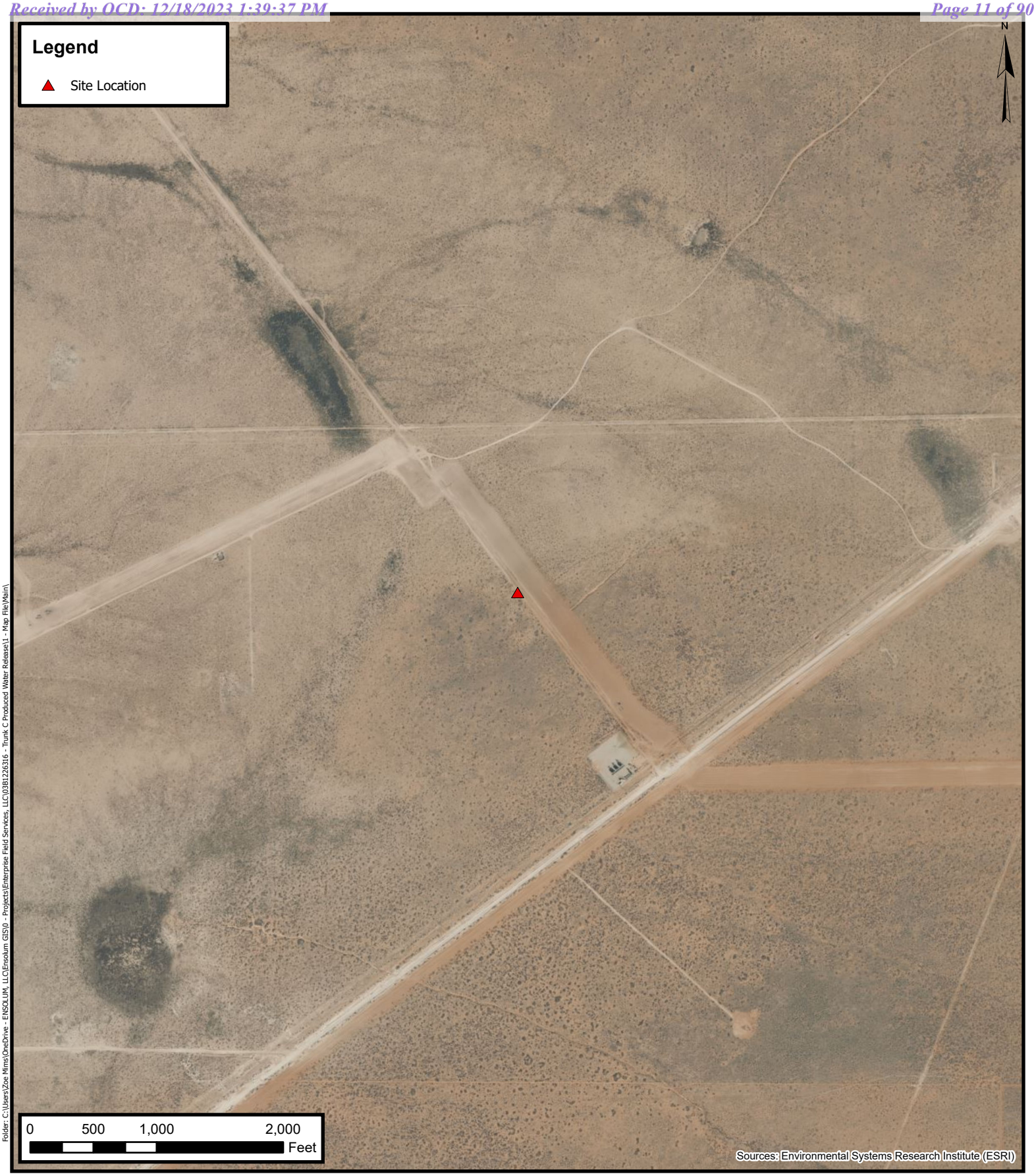
Folder: C:\Users\Zoe Mims\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\Enterprise Field Services, LLC\03B1226316 - Trunk C Produced Water Release\1 - Map File\Main\

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Topographic Map

Enterprise Field Services, LLC
Trunk C
Project Number: 03B1226316 32.149012, -103.881141
Eddy County, New Mexico

FIGURE 1

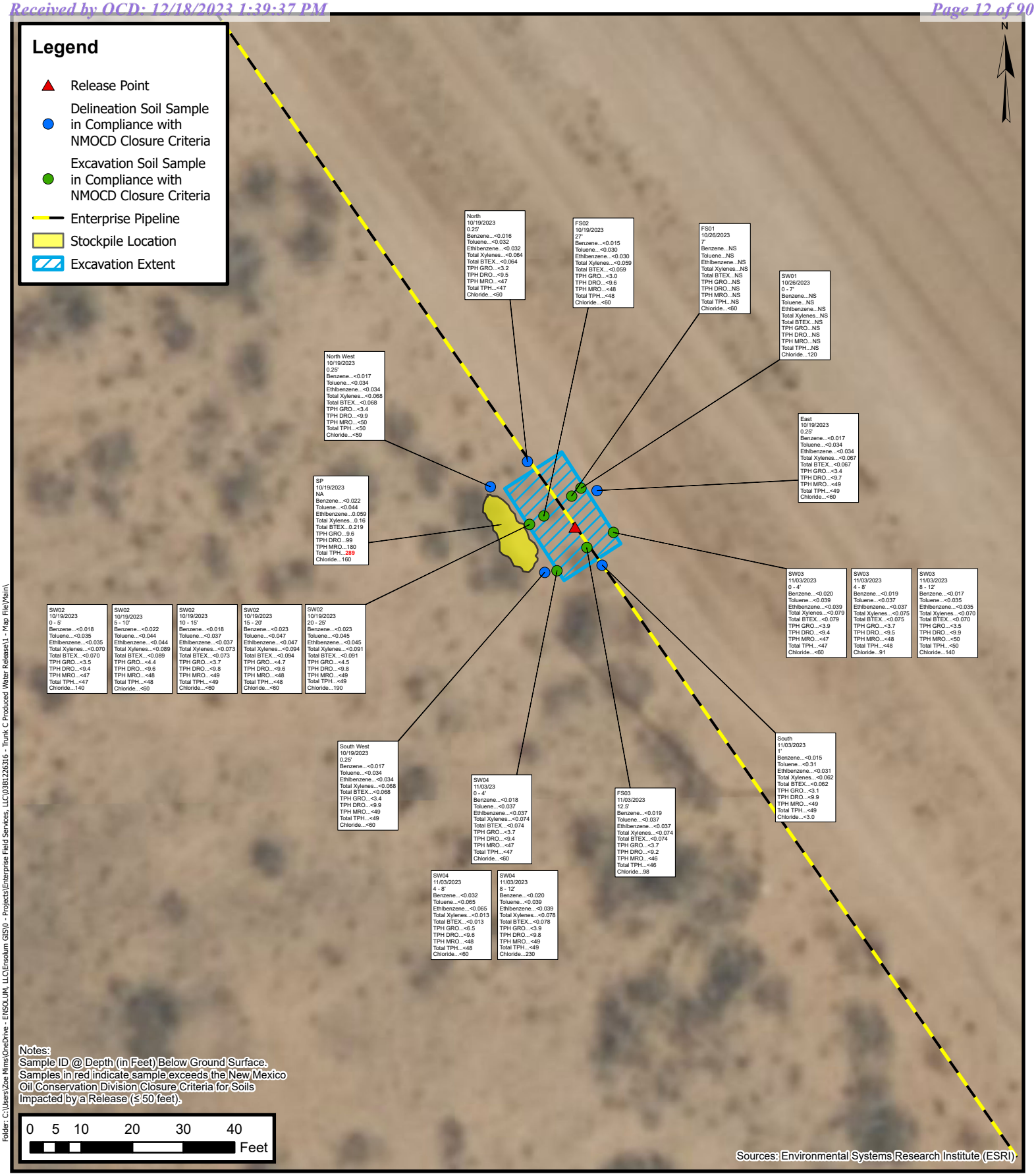


ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Site Vicinity Map

Enterprise Field Services, LLC
Trunk C
Project Number: 03B1226316
32.149012, -103.881141
Eddy County, New Mexico

FIGURE 2



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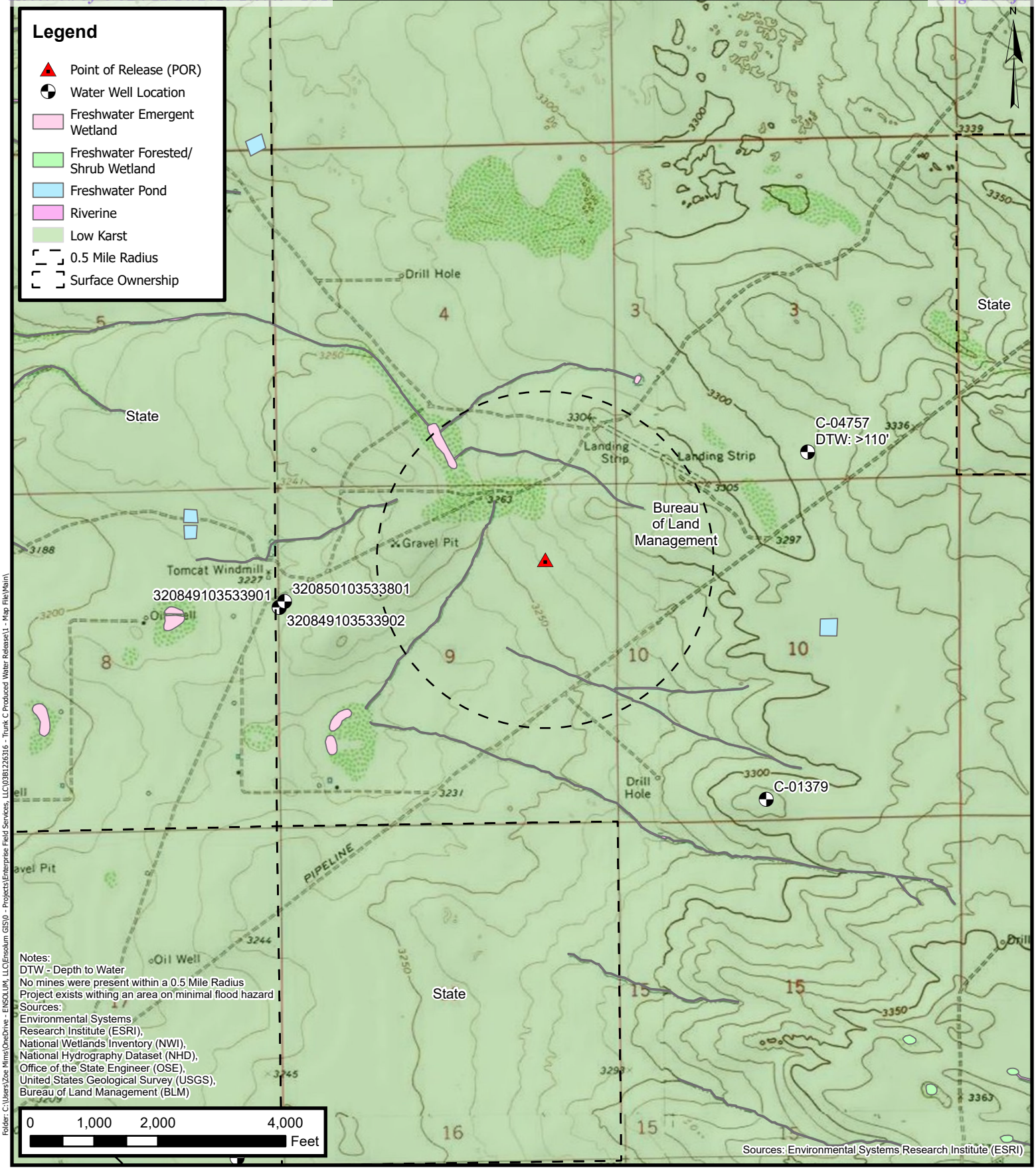
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Excavation Soil Sample Locations

Enterprise Field Services, LLC
Trunk C
Project Number: 03B1226316
32.149012, -103.881141
Eddy County, New Mexico

FIGURE 3



Folder: C:\Users\Zoe Mims\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\Enterprise Field Services, LLC\03B1226316 - Trunk C Produced Water Release\1 - Map File\Main\

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Closure Criteria Map

Enterprise Field Services, LLC
Trunk C
Project Number: 03B1226316
32.149012, -103.881141
Eddy County, New Mexico

FIGURE 4

ENSOLUM

APPENDIX B

Supporting Documentation

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	NAPP2329035104
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: **Enterprise Field Services, LLC**	OGRID: **241602**
Contact Name: **Thomas Long**	Contact Telephone: **505-599-2286**
Contact email:**tjlong@eprod.com**	Incident # *(assigned by OCD)* **nAPP2329035104**
Contact mailing address: **614 Reilly Ave, Farmington, NM 87401**	

Location of Release Source

Latitude **32.149012** Longitude **-103.881141** *NAD 83 in decimal degrees to 5 decimal places)*

Site Name: **Trunk C**	Site Type **Natural Gas Gathering Pipeline**
Date Release Discovered: **10/17/2023**	Serial # *(if applicable)* **N/A**

Unit Letter	Section	Township	Range	County
A	**9**	**25S**	**30E**	**Eddy**

Surface Owner: State ☐ Federal ☐ Tribal ☒ Private (*Name:* ***Enterprise Field Services, LLC***)

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☒ Condensate	Volume Released (bbls): **Estimated 5 barrels**	Volume Recovered (bbls): **None**
☐ Natural Gas	Volume Released (Mcf): **350 MCF**	Volume Recovered (Mcf):
☐ Other (describe) Fire	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: On October 9, 2023, Enterprise has a release of natural gas and condensate form the Truck C pipeline. No washes were affected. No fires nor injuries occurred. The pipeline was isolated, depressurized, locked and tagged out. Approximately three barrels of liquids were observed on the ground surface. Repairs and remediation began on October 17, 2023 at which time Enterprise determined the release reportable per NMOCD regulation due to the volume of impacted subsurface soil. A third party corrective action report will be submitted with the "Final C-141."

	NAPP2329035104

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

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.

☒ The impacted area has been secured to protect human health and the environment.

☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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.

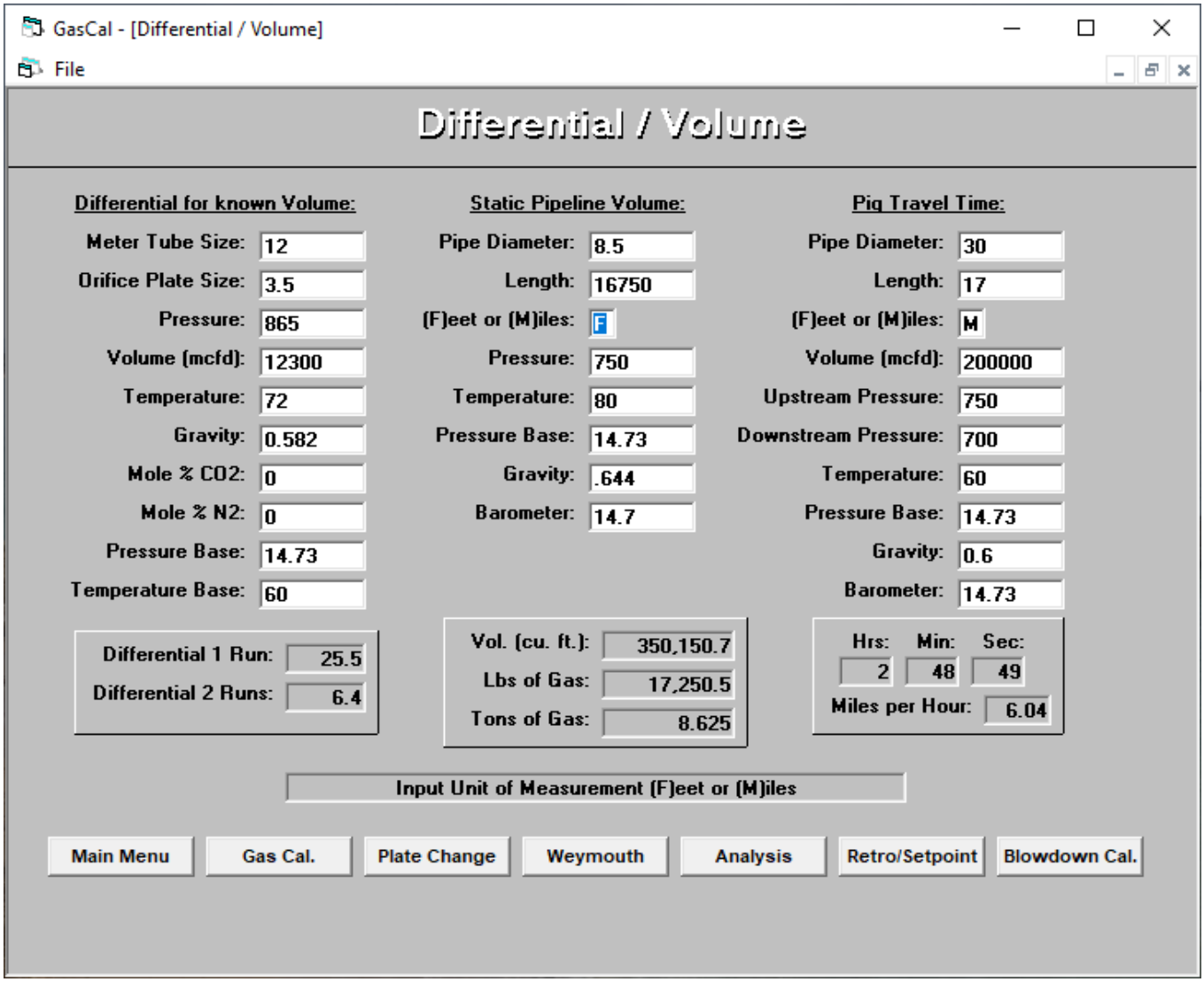
Printed Name: Thomas J. Long Title: Senior Environmental Scientist

Signature: Thomas Long Date: 10-26-2023

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

OCD Only

Received by: Shelly Wells Date: 10/26/2023


GasCal - [Differential / Volume]
File
Differential / Volume
Differential for known Volume:
Meter Tube Size: 12
Orifice Plate Size: 3.5
Pressure: 865
Volume (mcfd): 12300
Temperature: 72
Gravity: 0.582
Mole % CO2: 0
Mole % N2: 0
Pressure Base: 14.73
Temperature Base: 60
Differential 1 Run: 25.5
Differential 2 Runs: 6.4
Static Pipeline Volume:
Pipe Diameter: 8.5
Length: 16750
(F)eet or (M)iles: F
Pressure: 750
Temperature: 80
Pressure Base: 14.73
Gravity: .644
Barometer: 14.7
Vol. (cu. ft.): 350,150.7
Lbs of Gas: 17,250.5
Tons of Gas: 8.625
Pig Travel Time:
Pipe Diameter: 30
Length: 17
(F)eet or (M)iles: M
Volume (mcfd): 200000
Upstream Pressure: 750
Downstream Pressure: 700
Temperature: 60
Pressure Base: 14.73
Gravity: 0.6
Barometer: 14.73
Hrs: 2
Min: 48
Sec: 49
Miles per Hour: 6.04
Input Unit of Measurement (F)eet or (M)iles
Main Menu
Gas Cal.
Plate Change
Weymouth
Analysis
Retro/Setpoint
Blowdown Cal.

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

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

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 279706
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	10/26/2023

Kelly Lowery

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Tuesday, October 17, 2023 11:37 AM
To: Long, Thomas; Hamlet, Robert, EMNRD; Bratcher, Michael, EMNRD; Shelly Taylor (sjtaylor@blm.gov)
Cc: Kelly Lowery; Stone, Brian; Velez, Nelson, EMNRD
Subject: RE: [EXTERNAL] Trunk C - UL A Section 8 T22N R29E; 32.149012, -10388141; NMOCD Incident #NAPP2329035104

[**EXTERNAL EMAIL**]

Good morning 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 <tjlong@eprod.com>
Sent: Tuesday, October 17, 2023 10:01 AM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Shelly Taylor (sjtaylor@blm.gov) <sjtaylor@blm.gov>
Cc: Kelly Lowery <klowery@ensolum.com>; Stone, Brian <bmstone@eprod.com>
Subject: [EXTERNAL] Trunk C - UL A Section 8 T22N R29E; 32.149012, -10388141; NMOCD Incident #NAPP2329035104

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

All,

This email is a notification that Enterprise has a release of natural gas and natural gas liquids on the Trunk C pipeline on October 9, 2023. No washes were affected. No fires nor injuries occurred. The pipeline was isolated, depressurized, locked and tagged out. Minimal liquids were observed on the ground surface. Enterprise began remediation today and determined the release report per NMOCD regulation due to the volume of impacted subsurface soil.

This email also serves as a notification that Enterprise will be collecting closure samples for laboratory analysis on Thursday, October 19, 2023 at 10:00 a.m.

If you have any questions, please call or email.

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

Kelly Lowery

From: Taylor, Shelly J <sjtaylor@blm.gov>
Sent: Wednesday, October 25, 2023 11:18 AM
To: Long, Thomas; Hamlet, Robert, EMNRD; Wells, Shelly, EMNRD; Bratcher, Michael, EMNRD
Cc: Kelly Lowery; Stone, Brian
Subject: Re: [EXTERNAL] Trunk C - UL A Section 8 T22N R29E; 32.149012, -10388141; NMOCD Incident #NAPP2329035104

[**EXTERNAL EMAIL**]
BLM accepts your variance request.

Sincerely,

Shelly J Taylor
Environmental Protection Specialist
Realty - Compliance

Bureau of Land Management/Carlsbad Field Office

620 E. Greene St

Carlsbad, NM 88220

Direct 575.234.5706

Mobile 575.200.0614

sjtaylor@blm.gov

Spill/Release email: **BLM_NM_CFO_REALTY_SPILL@BLM.GOV**

From: Long, Thomas <tjlong@eprod.com>
Sent: Wednesday, October 25, 2023 10:08 AM
To: Taylor, Shelly J <sjtaylor@blm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Cc: Kelly Lowery <klowery@ensolum.com>; Stone, Brian <bmstone@eprod.com>

Subject: RE: [EXTERNAL] Trunk C - UL A Section 8 T22N R29E; 32.149012, -10388141; NMOCD Incident #NAPP2329035104

Shelly/Shelly/Robert,

This email is notification and a variance request. Enterprise is requesting a variance for required 48-hour notification per 19.15.29.12D (1a) NMAC. Enterprise would like to collect closure samples on Thursday, October 26, 2023 at 10:00 a.m.

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

Enterprise Products

From: Taylor, Shelly J <sjtaylor@blm.gov>
Sent: Monday, October 23, 2023 3:32 PM
To: Long, Thomas <tjlong@eprod.com>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Cc: Kelly Lowery <klowery@ensolum.com>; Stone, Brian <bmstone@eprod.com>
Subject: Re: [EXTERNAL] Trunk C - UL A Section 8 T22N R29E; 32.149012, -10388141; NMOCD Incident #NAPP2329035104

[Use caution with links/attachments]
When submitting release notifications to the BLM, please include GPS coordinates for the point of release and KMZ of impacted area. Thanks!

Sincerely,

Shelly J Taylor
Environmental Protection Specialist
Realty - Compliance

Bureau of Land Management/Carlsbad Field Office
620 E. Greene St
Carlsbad, NM 88220
Direct 575.234.5706
Mobile 575.499.6831
sjtaylor@blm.gov

Spill/Release email: **BLM_NM_CFO_REALTY_SPILL@BLM.GOV**

From: Long, Thomas <tjlong@eprod.com>
Sent: Tuesday, October 17, 2023 10:00 AM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Taylor, Shelly J <sjtaylor@blm.gov>
Cc: Kelly Lowery <klowery@ensolum.com>; Stone, Brian <bmstone@eprod.com>
Subject: [EXTERNAL] Trunk C - UL A Section 8 T22N R29E; 32.149012, -10388141; NMOCD Incident #NAPP2329035104

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

All,

This email is a notification that Enterprise has a release of natural gas and natural gas liquids on the Trunk C pipeline on October 9, 2023. No washes were affected. No fires nor injuries occurred. The pipeline was isolated, depressurized, locked and tagged out. Minimal liquids were observed on the ground surface. Enterprise began remediation today and determined the release report per NMOCD regulation due to the volume of impacted subsurface soil.

This email also serves as a notification that Enterprise will be collecting closure samples for laboratory analysis on Thursday, October 19, 2023 at 10:00 a.m.

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Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

Enterprise Products

Kelly Lowery

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Wednesday, October 25, 2023 11:19 AM
To: Long, Thomas; Taylor, Shelly J; Hamlet, Robert, EMNRD; Bratcher, Michael, EMNRD
Cc: Kelly Lowery; Stone, Brian; Velez, Nelson, EMNRD
Subject: RE: [EXTERNAL] Trunk C - UL A Section 8 T22N R29E; 32.149012, -10388141; NMOCD Incident #NAPP2329035104

[**EXTERNAL EMAIL**]

Hi Thomas,

Yes, a variance is approved for this occasion. In the future, "a showing of good cause" should be provided with any variance request per 19.15.29.12(D)1(a) NMAC. 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 <tjlong@eprod.com>
Sent: Wednesday, October 25, 2023 10:09 AM
To: Taylor, Shelly J <sjtaylor@blm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Cc: Kelly Lowery <klowery@ensolum.com>; Stone, Brian <bmstone@eprod.com>
Subject: RE: [EXTERNAL] Trunk C - UL A Section 8 T22N R29E; 32.149012, -10388141; NMOCD Incident #NAPP2329035104

Shelly/Shelly/Robert,

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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: Taylor, Shelly J <sjtaylor@blm.gov>
Sent: Monday, October 23, 2023 3:32 PM
To: Long, Thomas <tjlong@eprod.com>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Cc: Kelly Lowery <klowery@ensolum.com>; Stone, Brian <bmstone@eprod.com>
Subject: Re: [EXTERNAL] Trunk C - UL A Section 8 T22N R29E; 32.149012, -10388141; NMOCD Incident #NAPP2329035104

[Use caution with links/attachments]
When submitting release notifications to the BLM, please include GPS coordinates for the point of release and KMZ of impacted area. Thanks!

Sincerely,

Shelly J Taylor

Environmental Protection Specialist

Realty - Compliance

Bureau of Land Management/Carlsbad Field Office
620 E. Greene St
Carlsbad, NM 88220
Direct 575.234.5706
Mobile 575.499.6831
sjtaylor@blm.gov

Spill/Release email: **BLM_NM_CFO_REALTY_SPILL@BLM.GOV**

From: Long, Thomas <tjlong@eprod.com>
Sent: Tuesday, October 17, 2023 10:00 AM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Taylor, Shelly J <sjtaylor@blm.gov>

Cc: Kelly Lowery <klowery@ensolum.com>; Stone, Brian <bmstone@eprod.com>
Subject: [EXTERNAL] Trunk C - UL A Section 8 T22N R29E; 32.149012, -10388141; NMOCD Incident #NAPP2329035104

All,

This email is a notification that Enterprise has a release of natural gas and natural gas liquids on the Trunk C pipeline on October 9, 2023. No washes were affected. No fires nor injuries occurred. The pipeline was isolated, depressurized, locked and tagged out. Minimal liquids were observed on the ground surface. Enterprise began remediation today and determined the release report per NMOCD regulation due to the volume of impacted subsurface soil.

This email also serves as a notification that Enterprise will be collecting closure samples for laboratory analysis on Thursday, October 19, 2023 at 10:00 a.m.

If you have any questions, please call or email.

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

Enterprise Products

Kelly Lowery

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Tuesday, October 31, 2023 10:40 AM
To: Long, Thomas; Hamlet, Robert, EMNRD; Taylor, Shelly J
Cc: Kelly Lowery; Stone, Brian; Bratcher, Michael, EMNRD; Velez, Nelson, EMNRD
Subject: RE: [EXTERNAL] Trunk C - UL A Section 8 T22N R29E; 32.149012, -10388141; NMOCD Incident #NAPP2329035104

[**EXTERNAL EMAIL**]

Good morning 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 <tjlong@eprod.com>
Sent: Tuesday, October 31, 2023 9:37 AM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Taylor, Shelly J <sjtaylor@blm.gov>
Cc: Kelly Lowery <klowery@ensolum.com>; Stone, Brian <bmstone@eprod.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>; Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Trunk C - UL A Section 8 T22N R29E; 32.149012, -10388141; NMOCD Incident #NAPP2329035104

Robert/Shelly,

This email is notification that Enterprise will be collecting closure samples on Friday, November 3, 2023 at 10:00 a.m. at the Truck C release site. If you have any questions, please call or email.

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

tjlong@eprod.com

Enterprise Products

From: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Sent: Wednesday, October 25, 2023 2:41 PM
To: Long, Thomas <tjlong@eprod.com>; Taylor, Shelly J <sjtaylor@blm.gov>
Cc: Kelly Lowery <klowery@ensolum.com>; Stone, Brian <bmstone@eprod.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>; Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Trunk C - UL A Section 8 T22N R29E; 32.149012, -10388141; NMOCD Incident #NAPP2329035104

[Use caution with links/attachments]
Thomas,

Unfortunately, you are making a habit of this. Please, make sure your sampling schedule is a little better thought out in the future. This will be the final variance approval for requesting a variation from the 48 hour notification requirement. Please don't let this happen again, proceed with the sample collection. Please include this e-mail correspondence in the remediation and/or closure report.

Robert Hamlet • Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
506 W. Texas Ave.| Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Long, Thomas <tjlong@eprod.com>
Sent: Wednesday, October 25, 2023 10:09 AM
To: Taylor, Shelly J <sjtaylor@blm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Cc: Kelly Lowery <klowery@ensolum.com>; Stone, Brian <bmstone@eprod.com>
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tjlong@eprod.com

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To: Long, Thomas <tjlong@eprod.com>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Cc: Kelly Lowery <klowery@ensolum.com>; Stone, Brian <bmstone@eprod.com>
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Sincerely,

Shelly J Taylor

Environmental Protection Specialist

Realty - Compliance

Bureau of Land Management/Carlsbad Field Office
620 E. Greene St
Carlsbad, NM 88220
Direct 575.234.5706
Mobile 575.499.6831
sjtaylor@blm.gov

Spill/Release email: **BLM_NM_CFO_REALTY_SPILL@BLM.GOV**

From: Long, Thomas <tjlong@eprod.com>
Sent: Tuesday, October 17, 2023 10:00 AM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Taylor, Shelly J <sjtaylor@blm.gov>
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Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

ENSOLUM

New Mexico Site Characterization

REFERENCE	SITE INFORMATION		COMMENTS
C-141	Site Name:	Trunk C Produced Water Release	
C-141	Cordinates:	32.149012, -103.881141	
C-141	Incident Number:	Not Reportable; PIR: 108797	
C-141	Land Owner:	BLM	
NMOCD O&G Map	Site Elevation (ft):	3,261	

CLOSEST SIGNIFICANT WATER SOURCE

NMOCD O&G Map	Type:	Riverine	
	Distance (ft):	1,106	
	Direction:	West	

SITE RECEPTORS

C-141	NO	Did this release impact groundwater or surface water?	No
NMOCD O&G Map	NO	≤ 200 ft of any lakebed, sinkhole, or playa lake?	> 5 miles
NMOCD O&G Map	NO	≤ 300 ft of a continuously flowing watercourse or any other significant watercourse?	1,106 to the West
FEMA map	NO	≤ 300 ft of an occupied permanent residence, school, hospital, institution, or church?	> 5 miles
Wetlands map	NO	≤ 300 ft of a wetland?	1,692 ft to the NW
USGS map	NO	≤ 500 ft of a spring or a private water well used by < 5 houses for domestic or stock watering?	> 5 miles
USGS map	NO	≤ 1000 ft of any other fresh water well or spring?	4,240 ft to the SW
FEMA map	NO	in a 100-year floodplain?	No
NMOCD O&G Map	NO	overlying unstable geology (HIGH KARST)?	No
NMOCD O&G Map	LOW	karst potential	Low
NMOCD O&G Map	NO	water well within half a mile from Site with data ≤ 25 years?	4,240 ft to the SW

DTW INFORMATION

Cross reference USGS Map, NMOCD Map, and NMOSE Database

Closest USGS Well		Closest NM OSE Well	
CLOSER		~~FALSE~~	
Name:	320849103533902	Name:	C01379
Distance from Site (ft):	4,240	Distance from Site (ft):	5,104
Direction from Site:	southwest	Direction from Site:	southeast
Elevation:	3,230	Elevation:	3,311
DTW (ft):	326.53	DTW (ft):	Dry Hole
Total Depth (ft):	500	Total Depth (ft):	400
Coordinates:	32.1471, -103.8946	Coordinates:	32.138589, -103.87007
31 feet lower in elevation than the Site		50 feet higher in elevation than the Site	

ESTIMATED DTW @ SITE:
>100'

320849103533902 last measured on 1/28/1998. Drilled in 1949.

NMOCD TABLE 1 CLOSURE CRITERIA

TPH: 100 mg/kg Chlorides: 600 mg/kg

FALSE

U.S. Fish and Wildlife Service

National Wetlands Inventory

Trunk C Produced Water Release

October 16, 2023

Wetlands

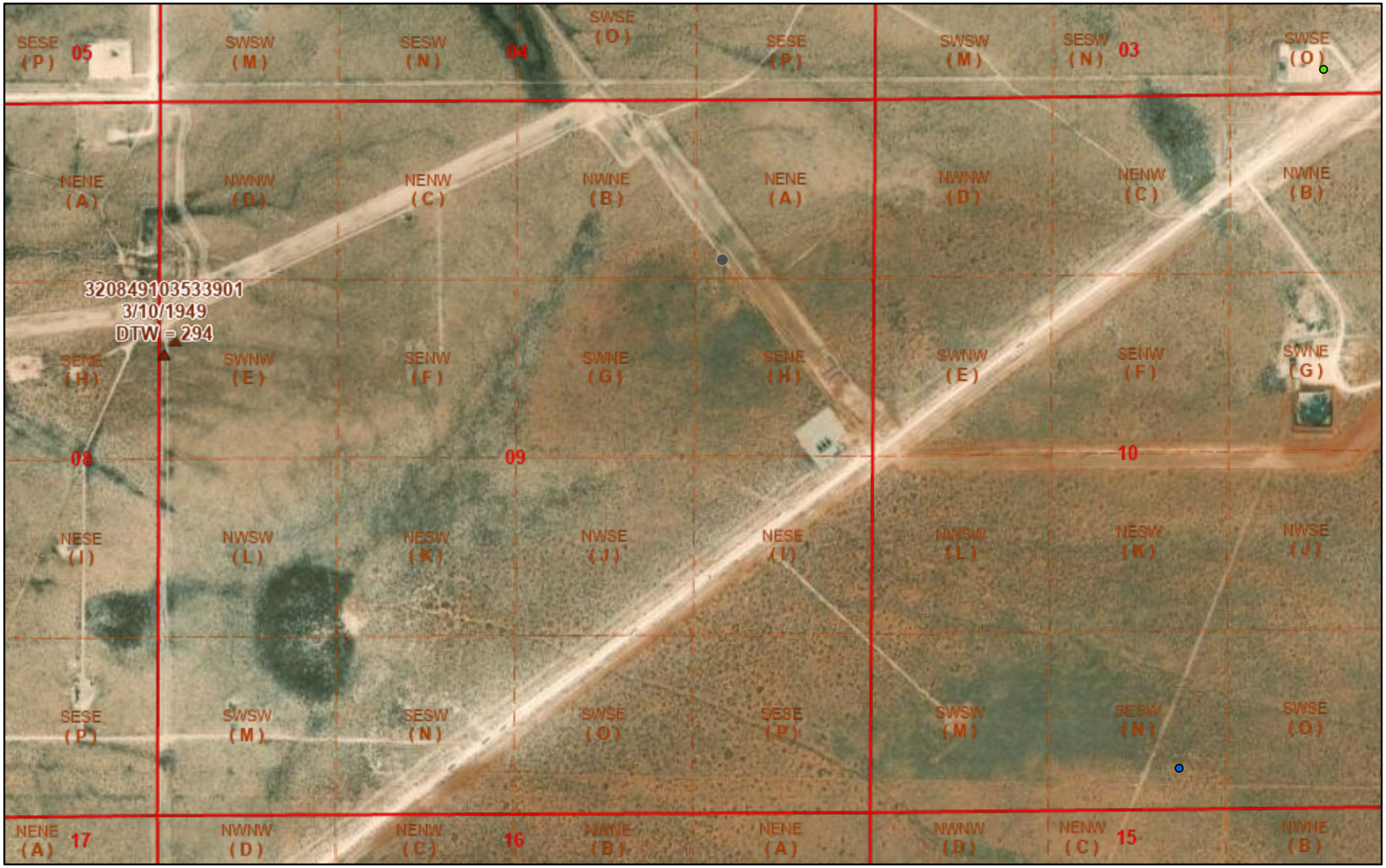
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

agency_cd	site_no	station_nm	dec_lat_va	dec_long_va	dec_coord_datum_cd	state_cd	county_cd	Altitude_ft	alt_datum_cd	well_depth_va	gw_count_nu	lev_dt	lev_va
USGS	320849103533902	25S.30E.08.242221A	32.147068	-103.89465	NAD83	35	15	3230	NAVD88	500	2	1/28/1998	326.53

OCD Well Locations



10/16/2023, 5:22:15 PM

OSE Water PODs

Active

Pending

USGS Historical GW Wells

PLSS Second Division

PLSS First Division

1:14,623

0 0.1 0.2 0.4 mi

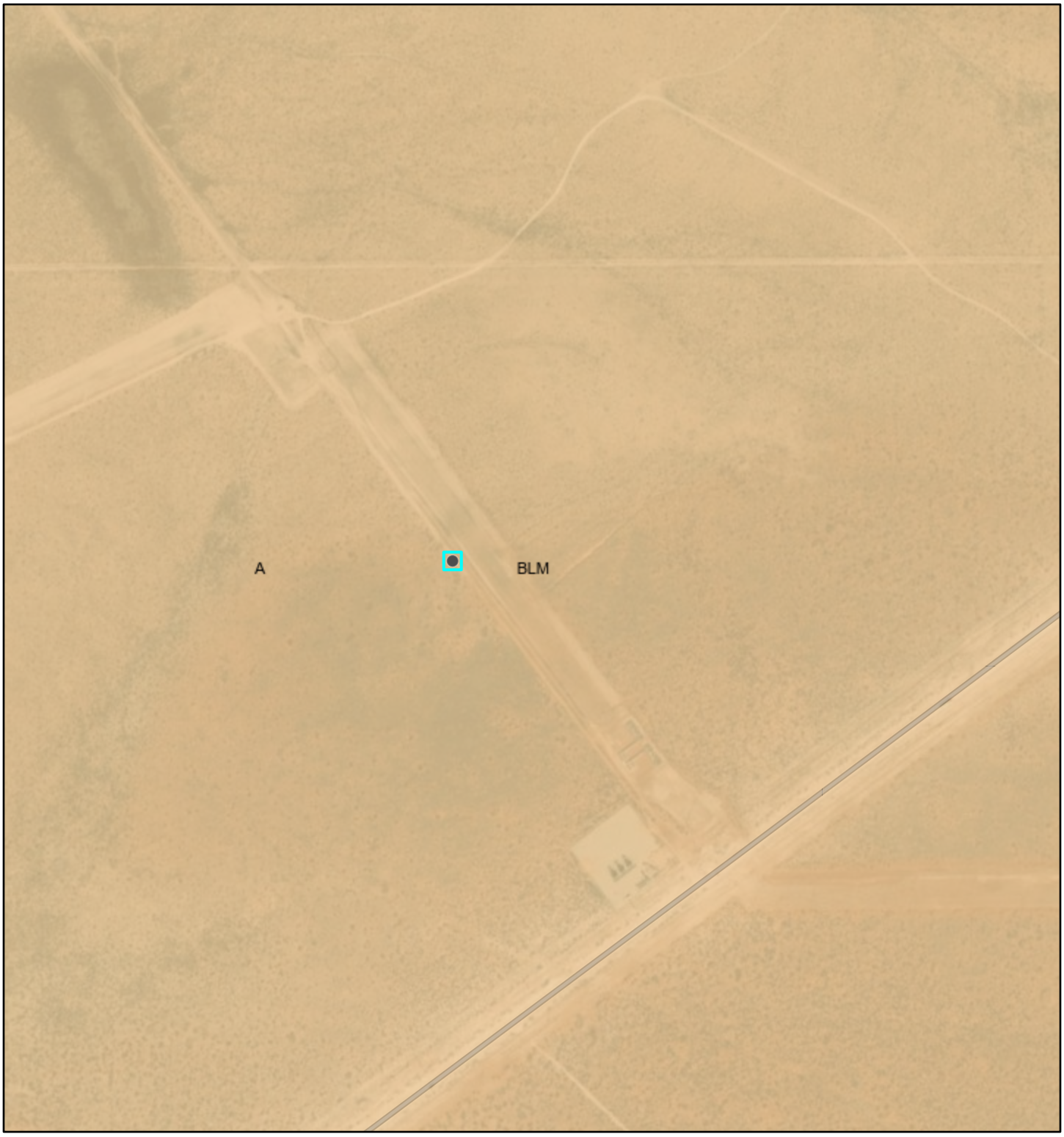
0 0.15 0.3 0.6 km

USGS, OCD, Esri, HERE, Garmin, iPC, Maxar, BLM

New Mexico Oil Conservation Division

NM OCD Oil and Gas Map. http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=4d017f2306164de29fd2fb9f8f35ca75: New Mexico Oil Conservation Division

Trunk C Produced Water Release



10/16/2023, 4:46:25 PM

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

Mineral Ownership

A-All minerals are owned by U.S.

Land Ownership

BLM

U.S. BLM, Esri Community Maps Contributors, Texas Parks & Wildlife, © OpenStreetMap, Microsoft, CONANP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, NM Coal Mine Reclamation Program, NM EMNRD, Maxar

EMNRD MMD GIS Coordinator

NM Energy, Minerals and Natural Resources Department (http://nm-emnrd.maps.arcgis.com/apps/webappbuilder/index.html?id=7ebfa3c432db42978d66c99a9cc8311a)

National Flood Hazard Layer FIRMette

FEMA

103°53'11"W 32°9'12"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

103°52'33"W 32°8'41"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 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*

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

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

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

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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 10/16/2023 at 5:44 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.

Form WR-23
SANTA FE

STATE ENGINEER OFFICE

A0493

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

(Plat of 640 acres)

(A) Owner of well Buck Jackson
Street and Number Box 671
City Pecos State Texas
Well was drilled under Permit No. C-1379 and is located in the
SE ¼ SE ¼ SW ¼ of Section 10 Twp. 25 Rge. 30E
(B) Drilling Contractor Emmett Barron License No. WD 30
Street and Number 307 South 10th St.
City Carlsbad State N. Mex.
Drilling was commenced January 22 19 68
Drilling was completed March 20 19 68

Elevation at top of casing in feet above sea level ____ Total depth of well 400
State whether well is shallow or artesian shallow Depth to water upon completion none

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1				
2				None Dry sand
3				
4				
5				

STATE ENGINEER OFFICE
SANTA FE, N.M.
1968 MAY 8 AM 8:27

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
7" OD	26	10	1	265	265	None	None	None
			All 7" Casing pulled from well					
			Dry Hole					

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
		None			

Section 5 PLUGGING RECORD

Name of Plugging Contractor ____ License No. ____
Street and Number ____ City ____ State ____
Tons of Clay used ____ Tons of Roughage used ____ Type of roughage ____
Plugging method used ____ Date Plugged ____ 19 ____
Plugging approved by:

Basin Supervisor

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

FOR USE OF STATE ENGINEER ONLY

Date Received 1968 APR 26 AM 8:27

File No. C-1379 Use Stock Location No. 25.30.10.344

Section 6

LOG OF WELL

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color	Type of Material Encountered
0	2	2		Top soil
2	20	18		Sandy Caliche
20	90	70		Hard Gray sand
90	100	10		Red soft sand stone
100	120	20	Red	Conglomerate sand stone
120	140		Red	Sandy clay
140	150	10	Gray	Hard sand
150	175	25		Red Bed Sandy
175	180	5		Gray hard sand
180	190	10		Soft Gray Sand
190	200	10		Sandy red bed
200	210	10		Gray sand
210	230	20		Sandy red bed
230	290	60		Hard sandy red bed
290	300	10		Gray sand
300	325	25		Sandy red Bed
325	340	15		Soft red Sand stone
340	360	20		Red sand soft
360	400	40		Red sand soft, bottom
				Dry

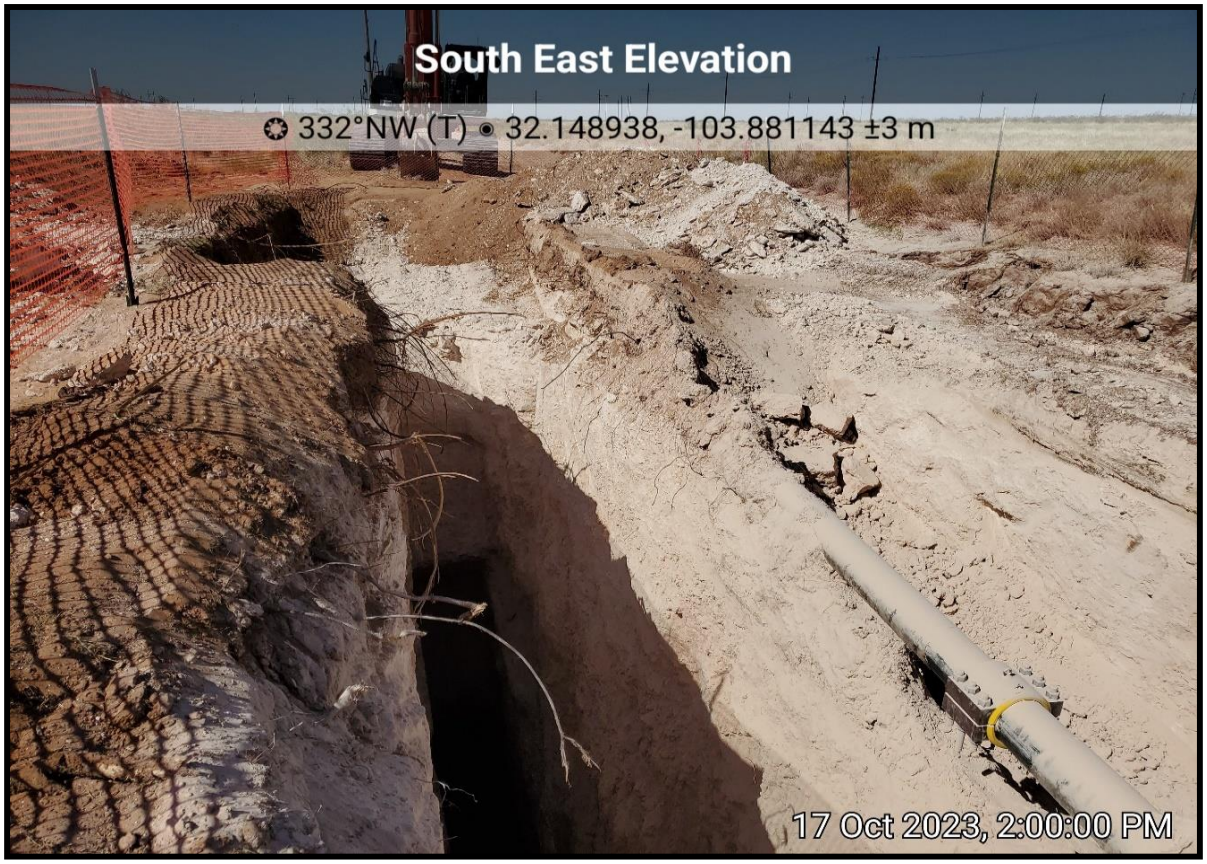
The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Emmett Barrow
Well Driller

ENSOLUM

APPENDIX C

Photographic Documentation



View of excavation activities, facing northwest.

View of stockpile on site, facing west.

View of excavation activities, facing northwest.

View of excavation activities, facing northwest.

View of excavation activities, facing northwest.

View of excavation activities, facing northwest.

ENSOLUM

APPENDIX D

Table

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Trunk C
Enterprise Field Services, LLC
Eddy County, New Mexico
Ensolum Project No. 03B12263316

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**
Composite Excavation Floor Soil Sample Analytical Results												
FS01	10/19/2023	7	<0.019	<0.038	<0.038	<0.076	<0.076	<3.8	**13**	<48	<48	**750**
	10/26/2023	7	NS					NS				<60
FS02	10/19/2023	27	<0.015	<0.030	<0.030	<0.059	<0.059	<3.0	<9.6	<48	<48	<60
FS03	11/03/2023	12.5	<0.019	<0.037	<0.037	<0.074	<0.074	<3.7	<9.2	<46	<46	**98**
Composite Excavation Sidewall Soil Sample Analytical Results												
SW01	10/19/2023	0 - 7	<0.020	<0.039	<0.039	<0.078	<0.078	<3.9	**17**	<48	<48	**850**
	10/26/2023	0 - 7	NS					NS				**120**
SW02	10/19/2023	0 - 5	<0.018	<0.035	<0.035	<0.070	<0.070	<3.5	<9.4	<47	<47	**140**
		5 - 10	<0.022	<0.044	<0.044	<0.089	<0.089	<4.4	<9.6	<48	<48	<60
		10 - 15	<0.018	<0.037	<0.037	<0.073	<0.073	<3.7	<9.8	<49	<49	<60
		15 - 20	<0.023	<0.047	<0.047	<0.094	<0.094	<4.7	<9.6	<48	<48	<60
		20 - 25	<0.023	<0.045	<0.045	<0.091	<0.091	<4.5	<9.8	<49	<49	**190**
SW03	11/03/2023	0 - 4	<0.020	<0.039	<0.039	<0.079	<0.079	<3.9	<9.4	<47	<47	<60
		4 - 8	<0.019	<0.037	<0.037	<0.075	<0.075	<3.7	<9.5	<48	<48	**91**
		8 - 12	<0.017	<0.035	<0.035	<0.070	<0.070	<3.5	<9.9	<50	<50	**140**
SW04	11/03/2023	0 - 4	<0.018	<0.037	<0.037	<0.074	<0.074	<3.7	<9.4	<47	<47	<60
		4 - 8	<0.032	<0.065	<0.065	<0.13	<0.13	<6.5	<9.6	<48	<48	<60
		8 - 12	<0.020	<0.039	<0.039	<0.078	<0.078	<3.9	<9.8	<49	<49	**230**
Confirmation Delineation Soil Sample Analytical Results												
North	10/19/2023	0.25	<0.016	<0.032	<0.032	<0.064	<0.064	<3.2	<9.5	<47	<47	<60
East	10/19/2023	0.25	<0.017	<0.034	<0.034	<0.067	<0.067	<3.4	<9.7	<49	<49	<60
South	10/19/2023	0.25	**0.084**	**0.25**	<0.035	**0.14**	**0.474**	<3.5	**73**	**180**	**253**	**88**
	10/26/2023	0.5	NS					<3.3	**47**	**110**	**157**	NS
	11/03/2023	1	<0.015	<0.031	<0.031	<0.062	<0.062	<3.1	<9.9	<49	<49	<3.0
North West	10/19/2023	0.25	<0.017	<0.034	<0.034	<0.068	<0.068	<3.4	<9.9	<50	<50	<59
South West	10/19/2023	0.25	<0.017	<0.034	<0.034	<0.068	<0.068	<3.4	<9.9	<49	<49	<60
Composite Stockpile Soil Sample Analytical Results												
SP	10/19/2023	NA	<0.022	<0.044	**0.059**	**0.16**	**0.219**	**9.6**	**99**	**180**	**289**	**160**

*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
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

ENSOLUM

APPENDIX E

Laboratory Analytical Reports & Chain-of-Custody Documentation

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

October 31, 2023

Kelly Lowery

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

RE: Trunk C Produced Water Release OrderNo.: 2310A55

Dear Kelly Lowery:

Hall Environmental Analysis Laboratory received 6 sample(s) on 10/21/2023 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2310A55**
Date Reported: **10/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC **Client Sample ID:** North
Project: Trunk C Produced Water Release **Collection Date:** 10/19/2023 9:08:00 AM
Lab ID: 2310A55-001 **Matrix:** MEOH (SOIL) **Received Date:** 10/21/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	10/23/2023 9:19:35 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/23/2023 9:19:35 AM
Surr: DNOP	102	69-147		%Rec	1	10/23/2023 9:19:35 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **KMN**
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	10/21/2023 11:52:00 AM
Surr: BFB	103	15-244		%Rec	1	10/21/2023 11:52:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **KMN**
Benzene	ND	0.016		mg/Kg	1	10/21/2023 11:52:00 AM
Toluene	ND	0.032		mg/Kg	1	10/21/2023 11:52:00 AM
Ethylbenzene	ND	0.032		mg/Kg	1	10/21/2023 11:52:00 AM
Xylenes, Total	ND	0.064		mg/Kg	1	10/21/2023 11:52:00 AM
Surr: 4-Bromofluorobenzene	87.1	39.1-146		%Rec	1	10/21/2023 11:52:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	10/23/2023 11:10:57 AM

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

Qualifiers:

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

Analytical Report
Lab Order **2310A55**
Date Reported: **10/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC **Client Sample ID:** East
Project: Trunk C Produced Water Release **Collection Date:** 10/19/2023 9:06:00 AM
Lab ID: 2310A55-002 **Matrix:** MEOH (SOIL) **Received Date:** 10/21/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/23/2023 9:30:11 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/23/2023 9:30:11 AM
Surr: DNOP	101	69-147		%Rec	1	10/23/2023 9:30:11 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **KMN**
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	10/21/2023 12:57:00 PM
Surr: BFB	105	15-244		%Rec	1	10/21/2023 12:57:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **KMN**
Benzene	ND	0.017		mg/Kg	1	10/21/2023 12:57:00 PM
Toluene	ND	0.034		mg/Kg	1	10/21/2023 12:57:00 PM
Ethylbenzene	ND	0.034		mg/Kg	1	10/21/2023 12:57:00 PM
Xylenes, Total	ND	0.067		mg/Kg	1	10/21/2023 12:57:00 PM
Surr: 4-Bromofluorobenzene	89.3	39.1-146		%Rec	1	10/21/2023 12:57:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	10/23/2023 11:48:11 AM

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

Qualifiers:

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

Analytical Report
Lab Order **2310A55**
Date Reported: **10/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC **Client Sample ID:** South
Project: Trunk C Produced Water Release **Collection Date:** 10/19/2023 9:04:00 AM
Lab ID: 2310A55-003 **Matrix:** MEOH (SOIL) **Received Date:** 10/21/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	73	9.9		mg/Kg	1	10/23/2023 9:40:48 AM
Motor Oil Range Organics (MRO)	180	50		mg/Kg	1	10/23/2023 9:40:48 AM
Surr: DNOP	89.5	69-147		%Rec	1	10/23/2023 9:40:48 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **KMN**
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	10/21/2023 2:02:00 PM
Surr: BFB	99.3	15-244		%Rec	1	10/21/2023 2:02:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **KMN**
Benzene	0.084	0.017		mg/Kg	1	10/21/2023 2:02:00 PM
Toluene	0.25	0.035		mg/Kg	1	10/21/2023 2:02:00 PM
Ethylbenzene	ND	0.035		mg/Kg	1	10/21/2023 2:02:00 PM
Xylenes, Total	0.14	0.069		mg/Kg	1	10/21/2023 2:02:00 PM
Surr: 4-Bromofluorobenzene	84.3	39.1-146		%Rec	1	10/21/2023 2:02:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	89	60		mg/Kg	20	10/23/2023 12:00:36 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2310A55**
Date Reported: **10/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC **Client Sample ID:** North West
Project: Trunk C Produced Water Release **Collection Date:** 10/19/2023 9:10:00 AM
Lab ID: 2310A55-004 **Matrix:** MEOH (SOIL) **Received Date:** 10/21/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/23/2023 9:51:25 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/23/2023 9:51:25 AM
Surr: DNOP	104	69-147		%Rec	1	10/23/2023 9:51:25 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **KMN**
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	10/21/2023 2:24:00 PM
Surr: BFB	101	15-244		%Rec	1	10/21/2023 2:24:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **KMN**
Benzene	ND	0.017		mg/Kg	1	10/21/2023 2:24:00 PM
Toluene	ND	0.034		mg/Kg	1	10/21/2023 2:24:00 PM
Ethylbenzene	ND	0.034		mg/Kg	1	10/21/2023 2:24:00 PM
Xylenes, Total	ND	0.068		mg/Kg	1	10/21/2023 2:24:00 PM
Surr: 4-Bromofluorobenzene	85.1	39.1-146		%Rec	1	10/21/2023 2:24:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	59		mg/Kg	20	10/23/2023 12:13:00 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2310A55**
Date Reported: **10/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC **Client Sample ID:** South West
Project: Trunk C Produced Water Release **Collection Date:** 10/19/2023 9:24:00 AM
Lab ID: 2310A55-005 **Matrix:** MEOH (SOIL) **Received Date:** 10/21/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/23/2023 10:02:03 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/23/2023 10:02:03 AM
Surr: DNOP	96.6	69-147		%Rec	1	10/23/2023 10:02:03 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **KMN**
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	10/21/2023 2:45:00 PM
Surr: BFB	99.0	15-244		%Rec	1	10/21/2023 2:45:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **KMN**
Benzene	ND	0.017		mg/Kg	1	10/21/2023 2:45:00 PM
Toluene	ND	0.034		mg/Kg	1	10/21/2023 2:45:00 PM
Ethylbenzene	ND	0.034		mg/Kg	1	10/21/2023 2:45:00 PM
Xylenes, Total	ND	0.068		mg/Kg	1	10/21/2023 2:45:00 PM
Surr: 4-Bromofluorobenzene	86.3	39.1-146		%Rec	1	10/21/2023 2:45:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	10/23/2023 12:50:14 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2310A55**
Date Reported: **10/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC **Client Sample ID:** SP
Project: Trunk C Produced Water Release **Collection Date:** 10/19/2023 9:12:00 AM
Lab ID: 2310A55-006 **Matrix:** MEOH (SOIL) **Received Date:** 10/21/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	99	9.4		mg/Kg	1	10/23/2023 10:12:43 AM
Motor Oil Range Organics (MRO)	180	47		mg/Kg	1	10/23/2023 10:12:43 AM
Surr: DNOP	107	69-147		%Rec	1	10/23/2023 10:12:43 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **KMN**
Gasoline Range Organics (GRO)	9.6	4.4		mg/Kg	1	10/21/2023 3:07:00 PM
Surr: BFB	145	15-244		%Rec	1	10/21/2023 3:07:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **KMN**
Benzene	ND	0.022		mg/Kg	1	10/21/2023 3:07:00 PM
Toluene	ND	0.044		mg/Kg	1	10/21/2023 3:07:00 PM
Ethylbenzene	0.059	0.044		mg/Kg	1	10/21/2023 3:07:00 PM
Xylenes, Total	0.16	0.089		mg/Kg	1	10/21/2023 3:07:00 PM
Surr: 4-Bromofluorobenzene	93.6	39.1-146		%Rec	1	10/21/2023 3:07:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	160	61		mg/Kg	20	10/23/2023 1:02:38 PM

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2310A55**

31-Oct-23

Client: Ensolum LLC

Project: Trunk C Produced Water Release

Sample ID: **MB-78284**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **78284**	RunNo: **100650**
Prep Date: **10/21/2023**	Analysis Date: **10/21/2023**	SeqNo: **3690958** Units: **mg/Kg**

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

Sample ID: **LCS-78284**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **78284**	RunNo: **100650**
Prep Date: **10/21/2023**	Analysis Date: **10/21/2023**	SeqNo: **3690959** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.0	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2310A55**

31-Oct-23

Client: Ensolum LLC

Project: Trunk C Produced Water Release

Sample ID: **LCS-78288** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **78288** RunNo: **100648**

Prep Date: **10/23/2023** Analysis Date: **10/23/2023** SeqNo: **3690836** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	103	61.9	130			
Surr: DNOP	5.0		5.000		99.8	69	147			

Sample ID: **MB-78288** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **78288** RunNo: **100648**

Prep Date: **10/23/2023** Analysis Date: **10/23/2023** SeqNo: **3690837** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		105	69	147			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2310A55**

31-Oct-23

Client: Ensolum LLC

Project: Trunk C Produced Water Release

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **GS100639**	RunNo: **100639**
Prep Date:	Analysis Date: **10/21/2023**	SeqNo: **3690356** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.6	70	130			
Surr: BFB	2200		1000		222	15	244			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **GS100639**	RunNo: **100639**
Prep Date:	Analysis Date: **10/21/2023**	SeqNo: **3690357** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		104	15	244			

Sample ID: **2310A55-001ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **North**	Batch ID: **GS100639**	RunNo: **100639**
Prep Date:	Analysis Date: **10/21/2023**	SeqNo: **3690359** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	3.2	15.90	1.094	92.9	70	130			
Surr: BFB	1300		636.1		211	15	244			

Sample ID: **2310A55-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **North**	Batch ID: **GS100639**	RunNo: **100639**
Prep Date:	Analysis Date: **10/21/2023**	SeqNo: **3690360** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	17	3.2	15.90	1.094	98.4	70	130	5.35	20	
Surr: BFB	1400		636.1		221	15	244	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2310A55**

31-Oct-23

Client: Ensolum LLC

Project: Trunk C Produced Water Release

Sample ID: **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **BS100639**	RunNo: **100639**
Prep Date:	Analysis Date: **10/21/2023**	SeqNo: **3690338** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	90.2	70	130			
Toluene	0.90	0.050	1.000	0	89.8	70	130			
Ethylbenzene	0.93	0.050	1.000	0	92.9	70	130			
Xylenes, Total	2.8	0.10	3.000	0	93.2	70	130			
Surr: 4-Bromofluorobenzene	0.90		1.000		90.0	39.1	146			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **BS100639**	RunNo: **100639**
Prep Date:	Analysis Date: **10/21/2023**	SeqNo: **3690339** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.90		1.000		90.2	39.1	146			

Sample ID: **2310A55-002ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **East**	Batch ID: **BS100639**	RunNo: **100639**
Prep Date:	Analysis Date: **10/21/2023**	SeqNo: **3690342** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.59	0.017	0.6739	0	88.2	70	130			
Toluene	0.59	0.034	0.6739	0.01541	85.8	70	130			
Ethylbenzene	0.60	0.034	0.6739	0	89.3	70	130			
Xylenes, Total	1.8	0.067	2.022	0.01229	89.2	70	130			
Surr: 4-Bromofluorobenzene	0.58		0.6739		86.6	39.1	146			

Sample ID: **2310A55-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **East**	Batch ID: **BS100639**	RunNo: **100639**
Prep Date:	Analysis Date: **10/21/2023**	SeqNo: **3690343** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.59	0.017	0.6739	0	87.1	70	130	1.27	20	
Toluene	0.58	0.034	0.6739	0.01541	84.1	70	130	1.92	20	
Ethylbenzene	0.59	0.034	0.6739	0	87.6	70	130	1.98	20	
Xylenes, Total	1.8	0.067	2.022	0.01229	87.4	70	130	2.08	20	
Surr: 4-Bromofluorobenzene	0.57		0.6739		84.0	39.1	146	0	0	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Ensolum LLC | Work Order Number: 2310A55 | RcptNo: 1

Received By: Tracy Casarrubias 10/21/2023 8:00:00 AM

Completed By: Tracy Casarrubias 10/21/2023 8:53:13 AM

Reviewed By: JN 10/23/23

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: TMC 10/21/23

Special Handling (if applicable)

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

Person Notified: Date:

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

Regarding:

Client Instructions: Date and time of relinquisment are missing on COC- TMC 10/21/23

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.6	Good	Yes	Yogi		

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 601 N. Marienfeld St. Suite 400

Phone #: 214-733-3165

email or Fax#: klowery@ensolum.com

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

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

Turn-Around Time:
☐ Standard ☑ Rush Same day TAT

Project Name: Trunk C Produced Water

Project #: 03B1226316

Project Manager: Kelly Lowery

Sampler: Kaeya Shimada

On Ice: ☒ Yes ☐ No 4°C

# of Coolers: 1

Cooler Temp (including CF): 36-0=36°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Depth	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
10/19/23							23104455										
10/19	[illegible]	soil	North	0.25'	Jar 1	cool/ice	001	X	X					X			
	0906		East		1		002										
	0904		South		1		003										
	0920		North-West		1		004	X	X					X			
	NT		NA	NA	~~NA~~	NA	~~005~~ TMG 10/21/23										
	0922		South-West	0.25	Jar 1	Cool/ice	~~006~~ 005	X	X					X			
	0922		SP	NA	Jar 2	Cool/ice	~~007~~ 006	X	X					X			
Per Kelly Lowery DAD 10/23/23				NFL													
				SR													

Date	Time	Relinquished by	Received by	Via	Date	Time
		[signature]		courier	10/21/23	8:00

Date	Time	Relinquished by	Received by	Via	Date	Time

Remarks: Bill to: Tom Long
Email: tjlong@epord.com
Enterprise Field Services, LLC

Paykey/AFE/NonAFE:

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.

eurofins | Environment Testing

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

November 03, 2023

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

RE: Trunk C Produced Water Release OrderNo.: 2310D37

Dear Kelly Lowery:

Eurofins Environment Testing South Central, LLC received 4 sample(s) on 10/28/2023 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
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2310D37**
Date Reported: **11/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC
Client Sample ID: FS01 7'
Project: Trunk C Produced Water Release
Collection Date: 10/26/2023 7:58:00 AM
Lab ID: 2310D37-001 **Matrix:** SOIL **Received Date:** 10/28/2023 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **KCB**
Chloride	ND	60		mg/Kg	20	10/30/2023 12:42:22 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2310D37**
Date Reported: **11/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC
Client Sample ID: SW01 0-7'
Project: Trunk C Produced Water Release
Collection Date: 10/26/2023 8:01:00 AM
Lab ID: 2310D37-002 **Matrix:** SOIL
Received Date: 10/28/2023 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **KCB**
Chloride	120	60		mg/Kg	20	10/30/2023 12:54:47 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2310D37**
Date Reported: **11/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC **Client Sample ID:** South 6"
Project: Trunk C Produced Water Release **Collection Date:** 10/26/2023 7:47:00 AM
Lab ID: 2310D37-003 **Matrix:** MEOH (SOIL) **Received Date:** 10/28/2023 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	46	9.4		mg/Kg	1	10/30/2023 11:27:32 AM
Motor Oil Range Organics (MRO)	110	47		mg/Kg	1	10/30/2023 11:27:32 AM
Surr: DNOP	107	69-147		%Rec	1	10/30/2023 11:27:32 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **KMN**
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	10/30/2023 12:05:00 PM
Surr: BFB	112	15-244		%Rec	1	10/30/2023 12:05:00 PM

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2310D37**

03-Nov-23

Client: Ensolum LLC

Project: Trunk C Produced Water Release

Sample ID: **MB-78435**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **78435**	RunNo: **100821**
Prep Date: **10/30/2023**	Analysis Date: **10/30/2023**	SeqNo: **3699446** Units: **mg/Kg**

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

Sample ID: **LCS-78435**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **78435**	RunNo: **100821**
Prep Date: **10/30/2023**	Analysis Date: **10/30/2023**	SeqNo: **3699447** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.5	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2310D37**

03-Nov-23

Client: Ensolum LLC

Project: Trunk C Produced Water Release

Sample ID: **MB-78432**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **78432**	RunNo: **100827**
Prep Date: **10/30/2023**	Analysis Date: **10/30/2023**	SeqNo: **3699597** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.6		10.00		96.4	69	147			

Sample ID: **LCS-78432**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **78432**	RunNo: **100827**
Prep Date: **10/30/2023**	Analysis Date: **10/30/2023**	SeqNo: **3699598** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	61.9	130			
Surr: DNOP	5.8		5.000		116	69	147			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2310D37**

03-Nov-23

Client: Ensolum LLC

Project: Trunk C Produced Water Release

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **GS100829**	RunNo: **100829**
Prep Date:	Analysis Date: **10/30/2023**	SeqNo: **3698897** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	98.9	70	130			
Surr: BFB	2300		1000		235	15	244			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **GS100829**	RunNo: **100829**
Prep Date:	Analysis Date: **10/30/2023**	SeqNo: **3698898** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1200		1000		117	15	244			

Sample ID: **2310D37-003ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **South 6"**	Batch ID: **GS100829**	RunNo: **100829**
Prep Date:	Analysis Date: **10/30/2023**	SeqNo: **3699746** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	3.3	16.26	0	99.4	70	130			
Surr: BFB	1400		650.2		220	15	244			

Sample ID: **2310D37-003amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **South 6"**	Batch ID: **GS100829**	RunNo: **100829**
Prep Date:	Analysis Date: **10/30/2023**	SeqNo: **3699747** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	3.3	16.26	0	95.6	70	130	3.90	20	
Surr: BFB	1400		650.2		218	15	244	0	0	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Ensolum LLC | Work Order Number: 2310D37 | RcptNo: 1

Received By: Cheyenne Cason 10/28/2023 7:50:00 AM

Completed By: Cheyenne Cason 10/28/2023 8:08:40 AM

Reviewed By: JM 10/30/23

Chain of Custody

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

Log In

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

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

Adjusted? _____

Checked by: CM 10/28/23

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.7	Good	Not Present	Yogi		
2	2.9	Good	Not Present	Yogi		

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 601 N. Marienfeld St. Suite 400

Phone #: 214-733-3165

email or Fax#: klowery@ensolum.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☑ Rush Same day

Project Name: Trunk C Produced Water Release

Project #: D3B1226316

Project Manager: Kelly Lowery

Sampler: Koory Shimada

On Ice: ☒ Yes ☐ No Yog:

# of Coolers: 2 0.7-0=0.7

Cooler Temp (including CF): 2.9-0=2.9

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

Analysis Request

Year 2023 Date	Time	Matrix	Sample Name	Depth (ft)	Container Type and #	Preservative Type	HEAL No. 2310D37	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
10/26	7:58	soil	FS01	7	Jar 1	ice/cool	001							X			
	8:01		SW01	0-7	Jar 1		002							X			
	9:47		South	6 in	Jar 1		003		X								
	8:36		FS01	8	Jar 1		004							X			
			Per sample bottle 10/30/23														
											NFE						
				NFE													
											SK						
				SK													

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
10/27/23	940				10/27/23	940
10/27/23	1900		CMC Courier		10/28/23	0750

Remarks: Bill to: Tom Long
Email: tjlong@epord.com
Enterprise Field Services, LLC
Hold Sample at 8'
Paykey/AFE/NonAFE: N67866#7

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.

eurofins | Environment Testing

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

November 13, 2023

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

RE: Trunk C Produced Water Release OrderNo.: 2311273

Dear Kelly Lowery:

Eurofins Environment Testing South Central, LLC received 8 sample(s) on 11/7/2023 for the analyses presented in the following report.

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

Please 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
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2311273**
Date Reported: **11/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC **Client Sample ID:** South 1'
Project: Trunk C Produced Water Release **Collection Date:** 11/3/2023 12:00:00 PM
Lab ID: 2311273-001 **Matrix:** MEOH (SOIL) **Received Date:** 11/7/2023 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/7/2023 9:57:52 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/7/2023 9:57:52 AM
Surr: DNOP	98.4	69-147		%Rec	1	11/7/2023 9:57:52 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	3.1		mg/Kg	1	11/7/2023 11:27:48 AM
Surr: BFB	92.0	15-244		%Rec	1	11/7/2023 11:27:48 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.015		mg/Kg	1	11/7/2023 11:27:48 AM
Toluene	ND	0.031		mg/Kg	1	11/7/2023 11:27:48 AM
Ethylbenzene	ND	0.031		mg/Kg	1	11/7/2023 11:27:48 AM
Xylenes, Total	ND	0.062		mg/Kg	1	11/7/2023 11:27:48 AM
Surr: 4-Bromofluorobenzene	96.5	39.1-146		%Rec	1	11/7/2023 11:27:48 AM
EPA METHOD 300.0: ANIONS						Analyst: **KCB**
Chloride	ND	60		mg/Kg	20	11/7/2023 11:34:44 AM

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

Qualifiers:

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

Analytical Report
Lab Order **2311273**
Date Reported: **11/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC **Client Sample ID:** FS03 12.5'
Project: Trunk C Produced Water Release **Collection Date:** 11/3/2023 2:38:00 PM
Lab ID: 2311273-002 **Matrix:** MEOH (SOIL) **Received Date:** 11/7/2023 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	11/7/2023 10:21:57 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/7/2023 10:21:57 AM
Surr: DNOP	98.5	69-147		%Rec	1	11/7/2023 10:21:57 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	11/7/2023 11:51:07 AM
Surr: BFB	92.4	15-244		%Rec	1	11/7/2023 11:51:07 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.019		mg/Kg	1	11/7/2023 11:51:07 AM
Toluene	ND	0.037		mg/Kg	1	11/7/2023 11:51:07 AM
Ethylbenzene	ND	0.037		mg/Kg	1	11/7/2023 11:51:07 AM
Xylenes, Total	ND	0.074		mg/Kg	1	11/7/2023 11:51:07 AM
Surr: 4-Bromofluorobenzene	97.1	39.1-146		%Rec	1	11/7/2023 11:51:07 AM
EPA METHOD 300.0: ANIONS						Analyst: **KCB**
Chloride	98	60		mg/Kg	20	11/7/2023 11:47:08 AM

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

Qualifiers:

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

Analytical Report
Lab Order **2311273**
Date Reported: **11/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC **Client Sample ID:** SW03 0-4'
Project: Trunk C Produced Water Release **Collection Date:** 11/3/2023 2:50:00 PM
Lab ID: 2311273-003 **Matrix:** MEOH (SOIL) **Received Date:** 11/7/2023 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	11/7/2023 10:46:02 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/7/2023 10:46:02 AM
Surr: DNOP	94.0	69-147		%Rec	1	11/7/2023 10:46:02 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	11/7/2023 12:14:34 PM
Surr: BFB	93.5	15-244		%Rec	1	11/7/2023 12:14:34 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.020		mg/Kg	1	11/7/2023 12:14:34 PM
Toluene	ND	0.039		mg/Kg	1	11/7/2023 12:14:34 PM
Ethylbenzene	ND	0.039		mg/Kg	1	11/7/2023 12:14:34 PM
Xylenes, Total	ND	0.079		mg/Kg	1	11/7/2023 12:14:34 PM
Surr: 4-Bromofluorobenzene	96.4	39.1-146		%Rec	1	11/7/2023 12:14:34 PM
EPA METHOD 300.0: ANIONS						Analyst: **KCB**
Chloride	ND	60		mg/Kg	20	11/7/2023 11:59:33 AM

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

Qualifiers:

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

Analytical Report
Lab Order **2311273**
Date Reported: **11/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC **Client Sample ID:** SW03 4-8'
Project: Trunk C Produced Water Release **Collection Date:** 11/3/2023 2:48:00 PM
Lab ID: 2311273-004 **Matrix:** MEOH (SOIL) **Received Date:** 11/7/2023 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	11/7/2023 11:10:01 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/7/2023 11:10:01 AM
Surr: DNOP	95.6	69-147		%Rec	1	11/7/2023 11:10:01 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	11/7/2023 12:37:54 PM
Surr: BFB	92.9	15-244		%Rec	1	11/7/2023 12:37:54 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.019		mg/Kg	1	11/7/2023 12:37:54 PM
Toluene	ND	0.037		mg/Kg	1	11/7/2023 12:37:54 PM
Ethylbenzene	ND	0.037		mg/Kg	1	11/7/2023 12:37:54 PM
Xylenes, Total	ND	0.075		mg/Kg	1	11/7/2023 12:37:54 PM
Surr: 4-Bromofluorobenzene	97.3	39.1-146		%Rec	1	11/7/2023 12:37:54 PM
EPA METHOD 300.0: ANIONS						Analyst: **KCB**
Chloride	91	60		mg/Kg	20	11/7/2023 12:11:58 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2311273**
Date Reported: **11/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC **Client Sample ID:** SW03 8-12'
Project: Trunk C Produced Water Release **Collection Date:** 11/3/2023 2:46:00 PM
Lab ID: 2311273-005 **Matrix:** MEOH (SOIL) **Received Date:** 11/7/2023 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/7/2023 11:34:00 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/7/2023 11:34:00 AM
Surr: DNOP	96.2	69-147		%Rec	1	11/7/2023 11:34:00 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	11/7/2023 1:01:19 PM
Surr: BFB	91.1	15-244		%Rec	1	11/7/2023 1:01:19 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.017		mg/Kg	1	11/7/2023 1:01:19 PM
Toluene	ND	0.035		mg/Kg	1	11/7/2023 1:01:19 PM
Ethylbenzene	ND	0.035		mg/Kg	1	11/7/2023 1:01:19 PM
Xylenes, Total	ND	0.070		mg/Kg	1	11/7/2023 1:01:19 PM
Surr: 4-Bromofluorobenzene	94.6	39.1-146		%Rec	1	11/7/2023 1:01:19 PM
EPA METHOD 300.0: ANIONS						Analyst: **KCB**
Chloride	140	60		mg/Kg	20	11/7/2023 12:24:22 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2311273**
Date Reported: **11/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC **Client Sample ID:** SW04 0-4'
Project: Trunk C Produced Water Release **Collection Date:** 11/3/2023 2:59:00 PM
Lab ID: 2311273-006 **Matrix:** MEOH (SOIL) **Received Date:** 11/7/2023 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	11/7/2023 11:58:04 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/7/2023 11:58:04 AM
Surr: DNOP	96.1	69-147		%Rec	1	11/7/2023 11:58:04 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	11/7/2023 1:24:43 PM
Surr: BFB	94.7	15-244		%Rec	1	11/7/2023 1:24:43 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.018		mg/Kg	1	11/7/2023 1:24:43 PM
Toluene	ND	0.037		mg/Kg	1	11/7/2023 1:24:43 PM
Ethylbenzene	ND	0.037		mg/Kg	1	11/7/2023 1:24:43 PM
Xylenes, Total	ND	0.074		mg/Kg	1	11/7/2023 1:24:43 PM
Surr: 4-Bromofluorobenzene	97.4	39.1-146		%Rec	1	11/7/2023 1:24:43 PM
EPA METHOD 300.0: ANIONS						Analyst: **KCB**
Chloride	ND	60		mg/Kg	20	11/7/2023 12:36:47 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2311273**
Date Reported: **11/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC **Client Sample ID:** SW04 4-8'
Project: Trunk C Produced Water Release **Collection Date:** 11/3/2023 2:56:00 PM
Lab ID: 2311273-007 **Matrix:** MEOH (SOIL) **Received Date:** 11/7/2023 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	11/7/2023 12:22:11 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/7/2023 12:22:11 PM
Surr: DNOP	95.9	69-147		%Rec	1	11/7/2023 12:22:11 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	6.5		mg/Kg	1	11/7/2023 1:48:05 PM
Surr: BFB	91.8	15-244		%Rec	1	11/7/2023 1:48:05 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.032		mg/Kg	1	11/7/2023 1:48:05 PM
Toluene	ND	0.065		mg/Kg	1	11/7/2023 1:48:05 PM
Ethylbenzene	ND	0.065		mg/Kg	1	11/7/2023 1:48:05 PM
Xylenes, Total	ND	0.13		mg/Kg	1	11/7/2023 1:48:05 PM
Surr: 4-Bromofluorobenzene	95.5	39.1-146		%Rec	1	11/7/2023 1:48:05 PM
EPA METHOD 300.0: ANIONS						Analyst: **KCB**
Chloride	ND	60		mg/Kg	20	11/7/2023 12:49:11 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2311273**
Date Reported: **11/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC **Client Sample ID:** SW04 8-12'
Project: Trunk C Produced Water Release **Collection Date:** 11/3/2023 2:53:00 PM
Lab ID: 2311273-008 **Matrix:** MEOH (SOIL) **Received Date:** 11/7/2023 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/7/2023 12:46:17 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/7/2023 12:46:17 PM
Surr: DNOP	112	69-147		%Rec	1	11/7/2023 12:46:17 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	11/7/2023 2:11:32 PM
Surr: BFB	95.4	15-244		%Rec	1	11/7/2023 2:11:32 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.020		mg/Kg	1	11/7/2023 2:11:32 PM
Toluene	ND	0.039		mg/Kg	1	11/7/2023 2:11:32 PM
Ethylbenzene	ND	0.039		mg/Kg	1	11/7/2023 2:11:32 PM
Xylenes, Total	ND	0.078		mg/Kg	1	11/7/2023 2:11:32 PM
Surr: 4-Bromofluorobenzene	97.8	39.1-146		%Rec	1	11/7/2023 2:11:32 PM
EPA METHOD 300.0: ANIONS						Analyst: **KCB**
Chloride	230	60		mg/Kg	20	11/7/2023 1:01:36 PM

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2311273**

13-Nov-23

Client: Ensolum LLC

Project: Trunk C Produced Water Release

Sample ID: **MB-78613**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **78613**	RunNo: **101002**
Prep Date: **11/7/2023**	Analysis Date: **11/7/2023**	SeqNo: **3708614** Units: **mg/Kg**

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

Sample ID: **LCS-78613**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **78613**	RunNo: **101002**
Prep Date: **11/7/2023**	Analysis Date: **11/7/2023**	SeqNo: **3708615** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.0	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2311273**

13-Nov-23

Client: Ensolum LLC

Project: Trunk C Produced Water Release

Sample ID: **MB-78610**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **78610**	RunNo: **100997**
Prep Date: **11/7/2023**	Analysis Date: **11/7/2023**	SeqNo: **3707263** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		98.6	69	147			

Sample ID: **LCS-78610**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **78610**	RunNo: **100997**
Prep Date: **11/7/2023**	Analysis Date: **11/7/2023**	SeqNo: **3707264** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	10	50.00	0	113	61.9	130			
Surr: DNOP	4.1		5.000		82.4	69	147			

Sample ID: **2311273-008AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **SW04 8-12'**	Batch ID: **78610**	RunNo: **100997**
Prep Date: **11/7/2023**	Analysis Date: **11/7/2023**	SeqNo: **3707609** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.5	47.71	0	106	54.2	135			
Surr: DNOP	3.6		4.771		75.7	69	147			

Sample ID: **2311273-008AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **SW04 8-12'**	Batch ID: **78610**	RunNo: **100997**
Prep Date: **11/7/2023**	Analysis Date: **11/7/2023**	SeqNo: **3707610** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	9.6	48.12	0	110	54.2	135	4.79	29.2	
Surr: DNOP	3.7		4.812		76.5	69	147	0	0	

Qualifiers:

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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#: **2311273**

13-Nov-23

Client: Ensolum LLC

Project: Trunk C Produced Water Release

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **GS100993**	RunNo: **100993**
Prep Date:	Analysis Date: **11/7/2023**	SeqNo: **3707152** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.8	70	130			
Surr: BFB	2000		1000		196	15	244			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **GS100993**	RunNo: **100993**
Prep Date:	Analysis Date: **11/7/2023**	SeqNo: **3707153** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		93.5	15	244			

Sample ID: **2311273-001ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **South 1'**	Batch ID: **GS100993**	RunNo: **100993**
Prep Date:	Analysis Date: **11/7/2023**	SeqNo: **3708296** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	14	3.1	15.41	0	92.1	70	130			
Surr: BFB	1200		616.5		193	15	244			

Sample ID: **2311273-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **South 1'**	Batch ID: **GS100993**	RunNo: **100993**
Prep Date:	Analysis Date: **11/7/2023**	SeqNo: **3708298** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	14	3.1	15.41	0	92.3	70	130	0.217	20	
Surr: BFB	1200		616.5		197	15	244	0	0	

Qualifiers:

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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#: **2311273**

13-Nov-23

Client: Ensolum LLC

Project: Trunk C Produced Water Release

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **BS100993**	RunNo: **100993**
Prep Date:	Analysis Date: **11/7/2023**	SeqNo: **3707156** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	103	70	130			
Toluene	1.0	0.050	1.000	0	103	70	130			
Ethylbenzene	1.0	0.050	1.000	0	103	70	130			
Xylenes, Total	3.1	0.10	3.000	0	103	70	130			
Surr: 4-Bromofluorobenzene	0.98		1.000		98.0	39.1	146			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **BS100993**	RunNo: **100993**
Prep Date:	Analysis Date: **11/7/2023**	SeqNo: **3707157** 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		96.4	39.1	146			

Sample ID: **2311273-002ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **FS03 12.5'**	Batch ID: **BS100993**	RunNo: **100993**
Prep Date:	Analysis Date: **11/7/2023**	SeqNo: **3708444** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.73	0.019	0.7424	0	97.8	70	130			
Toluene	0.73	0.037	0.7424	0	98.2	70	130			
Ethylbenzene	0.74	0.037	0.7424	0	99.4	70	130			
Xylenes, Total	2.2	0.074	2.227	0	99.2	70	130			
Surr: 4-Bromofluorobenzene	0.71		0.7424		96.1	39.1	146			

Sample ID: **2311273-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **FS03 12.5'**	Batch ID: **BS100993**	RunNo: **100993**
Prep Date:	Analysis Date: **11/7/2023**	SeqNo: **3708445** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.70	0.019	0.7424	0	94.2	70	130	3.70	20	
Toluene	0.71	0.037	0.7424	0	95.4	70	130	2.91	20	
Ethylbenzene	0.72	0.037	0.7424	0	96.7	70	130	2.76	20	
Xylenes, Total	2.2	0.074	2.227	0	98.0	70	130	1.22	20	
Surr: 4-Bromofluorobenzene	0.73		0.7424		97.8	39.1	146	0	0	

Qualifiers:

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eurofins | Environment Testing

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

Sample Log-In Check List

Client Name: **Ensolum LLC** Work Order Number: **2311273** RcptNo: **1**

Received By: **Juan Rojas** 11/7/2023 7:25:00 AM

Completed By: **Cheyenne Cason** 11/7/2023 7:35:22 AM

Reviewed By: 11/07/23

Chain of Custody

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

Log In

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

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

Adjusted? _____

Checked by: JW 11/7/23

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.1	Good	Not Present	Yogi		

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 601 N. Marienfeld St. Suite 400

Phone #: 214-733-3165

email or Fax#: klowery@ensolum.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: Same Day TAT
☐ Standard ☑ Rush

Project Name: Trunk C Produced Water Release

Project #: 03B1726316

Project Manager: Kelly Lowery

Sampler: Kaoru Shimady

On Ice: ☐ Yes ☐ No

# of Coolers: 1 (Yes)

Cooler Temp (including CF): 4.0+0.1=4.1

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

Analysis Request

Date	Time	Matrix	Sample Name	Depth	Container Type and #	Preservative Type	HEAL No. 2311273	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
2023 11/03	~~1127~~ 1220	soil	South	1	Jar 1	ice/cool	001	X	X					X			
	1438		FS03	1.5	1		002										
	1450		SW03	0-4	1		003										
	1448		↓	4-8	1		004										
	1446		↓	8-12	1		005										
	1459		SW04	0-4	1		006										
	1456		↓	4-8	1		007										
↓	1453	↓	↓	8-12	↓ 1	↓	008	X	X					X			

Date	Time	Relinquished by	Received by	Via	Date	Time
Nov 3						
11/6/23	1900				11/6/23	1000
				rounder	11/7/23	7:25

Remarks: Bill to: Tom Long
Email: tjlong@eprod.com
Enterprise Field Services, LLC

Paykey/AFE/NonAFE: N67867

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.

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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

Action 295770

QUESTIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 295770
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2329035104**
Incident Name	**NAPP2329035104 TRUNK C @ 0**
Incident Type	**Natural Gas Release**
Incident Status	**Remediation Closure Report Received**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	TRUNK C
Date Release Discovered	10/17/2023
Surface Owner	Federal

Incident 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 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	*Not answered.*
Is the concentration of chloride in the produced water >10,000 mg/l	*Not answered.*
Condensate Released (bbls) Details	Cause: Corrosion | Pipeline (Any) | Condensate | Released: 5 BBL | Recovered: 0 BBL | Lost: 5 BBL.
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
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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QUESTIONS (continued)

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 295770
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**More info needed to determine if 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.*
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

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: 12/18/2023

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QUESTIONS (continued)

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 295770
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

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)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	U.S. Geological Survey
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 1000 (ft.) and ½ (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 1 and 5 (mi.)
A wetland	Between 1000 (ft.) and ½ (mi.)
A subsurface mine	Between 1 and 5 (mi.)
An (non-karst) unstable area	Between 1 and 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between 1000 (ft.) and ½ (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
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.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	230
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	50
GRO+DRO (EPA SW-846 Method 8015M)	14.3
BTEX (EPA SW-846 Method 8021B or 8260B)	0.1
Benzene (EPA SW-846 Method 8021B or 8260B)	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.	
On what estimated date will the remediation commence	10/19/2023
On what date will (or did) the final sampling or liner inspection occur	11/03/2023
On what date will (or was) the remediation complete(d)	11/03/2023
What is the estimated surface area (in square feet) that will be reclaimed	351
What is the estimated volume (in cubic yards) that will be reclaimed	800
What is the estimated surface area (in square feet) that will be remediated	351
What is the estimated volume (in cubic yards) that will be remediated	800
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.	
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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QUESTIONS (continued)

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 295770
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

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	*Not answered.*
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	Yes
What is the name of the NMED facility	Lea Lands
(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: 12/18/2023
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 II
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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 (continued)

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 295770
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

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 submission	No

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QUESTIONS (continued)

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 295770
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**295787**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**10/19/2023**
What was the (estimated) number of samples that were to be gathered	**10**
What was the sampling surface area in square feet	**200**

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	351
What was the total volume (cubic yards) remediated	800
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	351
What was the total volume (in cubic yards) reclaimed	800
Summarize any additional remediation activities not included by answers (above)	None

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	Name: Thomas Long Title: Sr Field Environmental Scientist Email: tjlong@eprod.com Date: 12/18/2023

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QUESTIONS (continued)

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 295770
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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CONDITIONS

Action 295770

CONDITIONS

Operator:	OGRID:
Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	241602
	Action Number: 295770
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your Remediation Closure Report for Incident #NAPP2329035104 TRUNK C, thank you. This Remediation Closure Report is approved. The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical.	3/25/2024
rhamlet	Pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan. A revegetation report will not be accepted until the release area, including areas reasonably needed for production or drilling activities, are complete. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable. 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.	3/25/2024
rhamlet	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. 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.	3/25/2024