

#### **CLOSURE REPORT**

Property:

Lost Tank 3 Federal #005

Eddy County, New Mexico 32.42244 N, 103.76144 W Incident ID No. nAPP2323352221

September 25, 2023 Ensolum Project No. 03B1417090

Prepared for:

Oxy USA Inc. P.O. Box 4294 Houston, TX 77210 Attn: Mr. Wade Dittrich

Prepared by:

Beaux Jennings

Senior Project Manager

Heather Holthaus Senior Project Manager



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Ensolum Project No. 03B1417090

#### 1.0 INTRODUCTION

#### 1.1 Executive Summary

- On June 26, 2023, a release of crude oil occurred from a flowline header as a result of internal
  corrosion at the Lost Tank 3 Federal #005, hereinafter referred to as the "Site". Approximately 25
  barrels (bbls) of crude oil was released to the ground surface, impacting an area approximately 150
  feet long by five to 15 feet wide, with approximately 20 bbls of crude oil recovered.
- On July 19, 2023, subsequent to the completion of excavation activities, Ensolum collected a total of five composite soil samples from the excavation floor (FS-1 through FS-5) and one composite soil sample from the excavation sidewall (SW-1). The floor samples were collected at a depth of 0.25 to three feet below ground surface (bgs), and the sidewall sample was collected at a depth of 0-3 feet bgs. Additionally, Ensolum collected four delineation background soil samples (BG-N, BG-S, BG-E and BG-W) from locations approximately 1-2 feet outside of the excavation area at a depth of 0-0.25 feet bgs.
- The primary objective of the closure activities was to reduce chemical of concern (COC) concentrations in the on-Site soils to below the applicable New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD) Closure Criteria for Soils Impacted by a Release using the New Mexico Administrative Code (NMAC) 19.15.29 Releases as guidance.
- The final excavation area measured approximately 152 feet long with a width that varied between five to 15 feet wide. The depth of the excavation measured approximately 0.25 to three feet bgs.
- Based on the laboratory analytical results, the composite soil samples collected from the excavation area and the delineation background samples collected outside the excavation area did not exhibit benzene, total benzene, toluene, ethylbenzene, and xylene (BTEX), total petroleum hydrocarbons (TPH), gasoline range organics (GRO), diesel range organics (DRO), motor oil range organics (MRO) or chloride concentrations above the applicable NMOCD Closure Criteria.
- Subsequent to the results of the confirmation soil sampling, the excavated soils were removed and taken off-Site for proper disposal and the excavated area was backfilled with clean fill material and then contoured to the original surrounding grade. The spill area is a caliche pad and does not require reclamation or revegetation at this time.

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



#### 1.2 Site Description & Background

Operator:	Oxy USA Inc. (Oxy)
Site Name:	Lost Tank 3 Federal #005
Location:	Eddy County, New Mexico 32.42244 N, 103.76144 W
Property:	Bureau of Land Management (BLM)
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

The Topographic Map depicting the location of the Site is included as **Figure 1**, the Site Vicinity Map is included as **Figure 2**, the Site Map indicating the locations of composite soil samples is included as **Figure 3**, and the Closure Criteria Map is included as **Figure 4** in **Appendix A**.

#### 1.3 Project Objective

The primary objective of the closure activities was to reduce COC concentrations in the on-Site soils to below the applicable New Mexico EMNRD OCD closure criteria 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 NMAC 19.15.29 *Releases*, which establishes investigation and abatement action requirements for sites subject to reporting and/or corrective action. Ensolum utilized information provided by Oxy, the general site characteristics, and information available from the New Mexico Office of the State Engineer (OSE) and the New Mexico EMNRD OCD Imaging database to determine the appropriate closure criteria for the Site.

- The Site is not located within 300 feet of a New Mexico ENMRD OCD-defined continuously flowing watercourse or any other 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 an occupied permanent residence, school, hospital, institution, or church.
- According to the OSE WRSS database there are no private, domestic freshwater wells used by less than five (5) households for domestic or stock water purposes identified within 500 feet of the Site.
- According to the OSE WRSS database there are no freshwater wells identified within 1,000 feet of the Site as declared in the previous bullet.
- 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 Bureau of Land Management (BLM), the Site is not located within an unstable area.



The Site is noted to be located within an area of minimal flood hazard.

A search of the OSE WRSS database was conducted for water wells within 0.5-mile radius of the Site to determine the depth to groundwater in the vicinity of the Site. A depth to water soil boring, related to incident NAPP2133533688 at Lost Tank 10 Federal #003, was identified approximately 0.2-mile southeast of the Site. The soil boring (SB-03) was installed on April 5, 2022 by Trinity Oilfield Services & Rentals, LLC. Depth to water was shown to be >105 feet.

**Figure 4** identifies the location of the depth to water soil boring (**Appendix A**). Supporting Documentation is included as **Appendix B**.

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

	Closure Criteria f	or Soils Impacted by a Rel	ease
Minimum depth below any point within horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Method	Limit
	Chloride	EPA 300.0 or SM4500 CI B	20,000 mg/kg
	TPH (GRO+DRO)	EPA SW-846 Method 8015M	1,000 mg/kg
>100 feet	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 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 June 26, 2023, a release of crude oil occurred from a flowline header as a result of internal corrosion at the Site. Approximately 25 bbls of crude oil was released to the ground surface, impacting an area approximately 150 feet long by five to 15 feet wide, with approximately 20 bbls of crude oil recovered.

On July 19, 2023, subsequent to the completion of excavation activities, Ensolum collected a total of five composite soil samples from the excavation floor (FS-1 through FS-5) and one composite soil sample from the excavation sidewall (SW-1). The floor samples were collected at a depth of 0.25 to three feet bgs, and the sidewall sample was collected at a depth of 0-3 feet bgs. Additionally, Ensolum collected four delineation background soil samples (BG-N, BG-S, BG-E and BG-W) from locations approximately 1-2 feet outside of the excavation area at a depth of 0-0.25 feet bgs.

Based on the laboratory analytical results, no additional excavation was required. Subsequent to the results of the confirmation soil sampling, the excavated soils were removed and taken off-Site for proper disposal.

The final excavation area measured approximately 152 feet long with a width that varied between five to 15 feet wide. The depth of the excavation measured approximately 0.25 to three feet bgs.

The lithology encountered during the completion of sampling activities consisted primarily of caliche.



**Figure 3** identifies approximate soil sample locations and approximate dimensions of the impacted area with respect to the Site (**Appendix A**). Photographic documentation of the field activities is included in **Appendix C**.

#### 4.0 SOIL SAMPLING PROGRAM

Ensolum's soil sampling program included the collected of a total of six composite soil samples from six locations within the excavation area (FS-1 through FS-5, and SW-1), and four delineation soil samples from four locations approximately 1-2 feet outside of the excavation area (BG-N, BG-S, BG-E and BG-W).

The soil samples were collected and placed in laboratory prepared glassware, labeled/sealed using laboratory supplied labels and custody seals, and stored on ice in a cooler. The samples were relinquished to Cardinal Laboratories in Hobbs, New Mexico for standard laboratory analysis.

#### 5.0 SOIL LABORATORY ANALYTICAL METHODS

The soil samples were analyzed for BTEX utilizing Environmental Protection Agency (EPA) SW-846 Method 8021B, TPH GRO/DRO/MRO utilizing EPA SW-846 Method 8015M, and chloride utilizing EPA Method 4500-CI B.

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

#### 6.0 DATA EVALUATION

Ensolum compared the benzene, total BTEX, TPH GRO/DRO, TPH GRO/DRO/MRO, and chloride concentrations associated with the excavation floor (FS-1 through FS-5), the excavation sidewall (SW-1), and the confirmation delineation samples collected approximately 1-2 feet outside the excavation area (BG-N, BG-S, BG-E and BG-W) to the applicable NMOCD Closure Criteria.

- Laboratory analytical results indicate benzene concentrations for the soil samples are below the laboratory sample detection limits (SDLs) and the applicable NMOCD Closure Criteria of 10 milligrams per kilogram (mg/kg).
- Laboratory analytical results indicate that total BTEX concentrations for the soil samples are below the laboratory SDLs and the applicable NMOCD Closure Criteria of 50 mg/kg.
- Laboratory analytical results indicate combined TPH GRO/DRO concentrations for the soil samples
  are below the laboratory SDLs and/or the applicable NMOCD Closure Criteria of 1,000 mg/kg for
  depth to groundwater >100 feet.
- Laboratory analytical results indicate combined TPH GRO/DRO/MRO concentrations for the soil samples are below the laboratory SDLs and/or the applicable NMOCD Closure Criteria of 2,500 mg/kg for depth to groundwater >100 feet.
- Laboratory analytical results indicate chloride concentrations for the soil samples are below the applicable NMOCD Closure Criteria of 20,000 mg/kg for depth to groundwater >100 feet.

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



#### 7.0 RECLAMATION AND RE-VEGETATION

Subsequent to the results of the confirmation soil sampling, the excavated soils were removed and taken off-Site for property disposal. The excavated area was backfilled with clean fill material and caliche, and then contoured to the original surrounding grade. The spill area was located within a facility caliche pad and does not require reclamation or revegetation at this time.

#### 8.0 FINDINGS AND RECOMMENDATION

- On June 26, 2023, a release of crude oil occurred from a flowline header as a result of internal
  corrosion at the Site. Approximately 25 bbls of crude oil was released to the ground surface,
  impacting an area approximately 150 feet long by five to 15 feet wide, with approximately 20 bbls
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- The final excavation area measured approximately 152 feet long with a width that varied between five to 15 feet wide. The depth of the excavation measured approximately 0.25 to three feet bgs.
- Based on the laboratory analytical results, the composite soil samples collected from the excavation area and the delineation background samples collected outside the excavation area did not exhibit BTEX, TPH GRO/DRO/MRO or chloride concentrations above the applicable NMOCD Closure Criteria.

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.

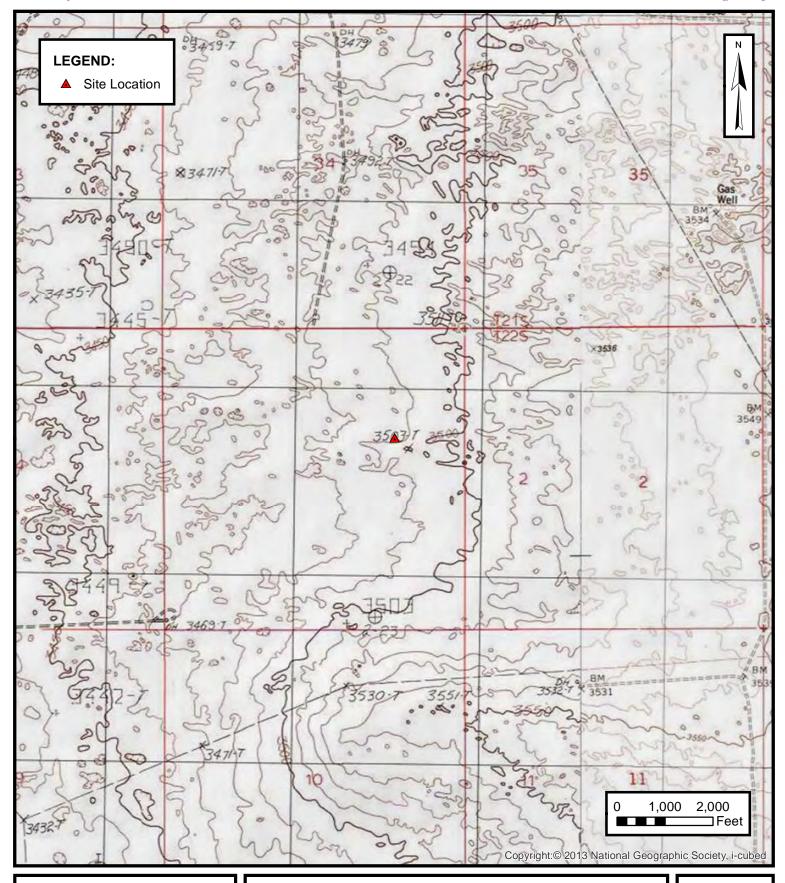
#### 9.3 Reliance

This report has been prepared for the exclusive use of Oxy USA, Inc., 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 Oxy USA, Inc. and Ensolum. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the Closure Report, and Ensolum's Master Services Agreement. The limitation of liability defined in the agreement is the aggregate limit of Ensolum's liability to the client.



**APPENDIX A** 

Figures



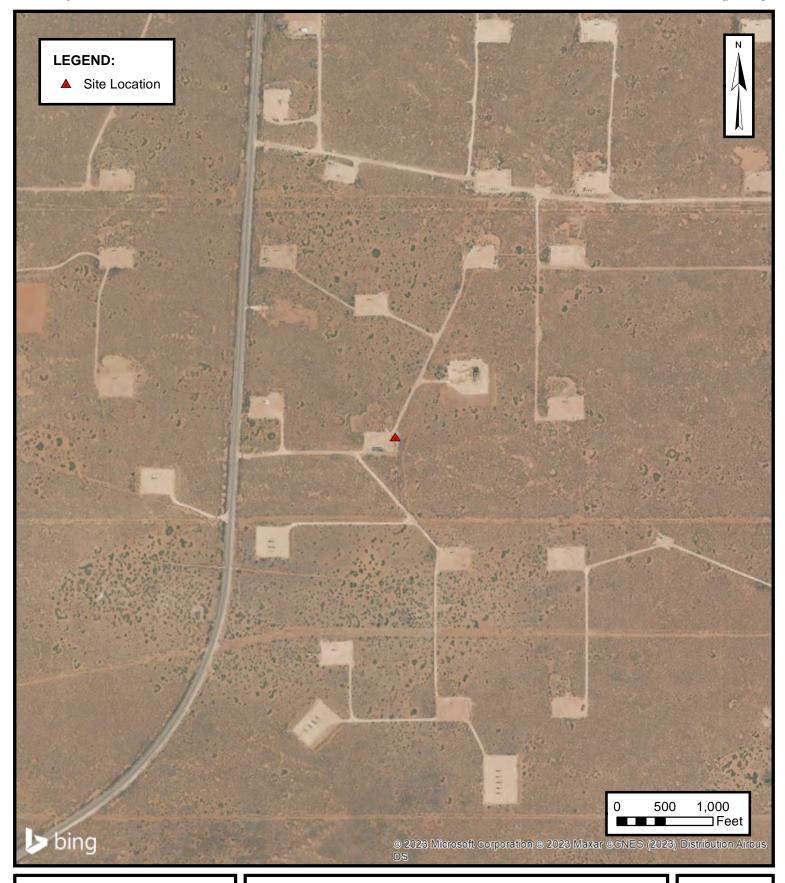


#### **TOPOGRAPHIC MAP**

OXY USA INC. LOST TANK 3 FED #005 Eddy County, New Mexico 32.42244° N, 103.76144° W

PROJECT NUMBER: 03B1417090

**FIGURE** 



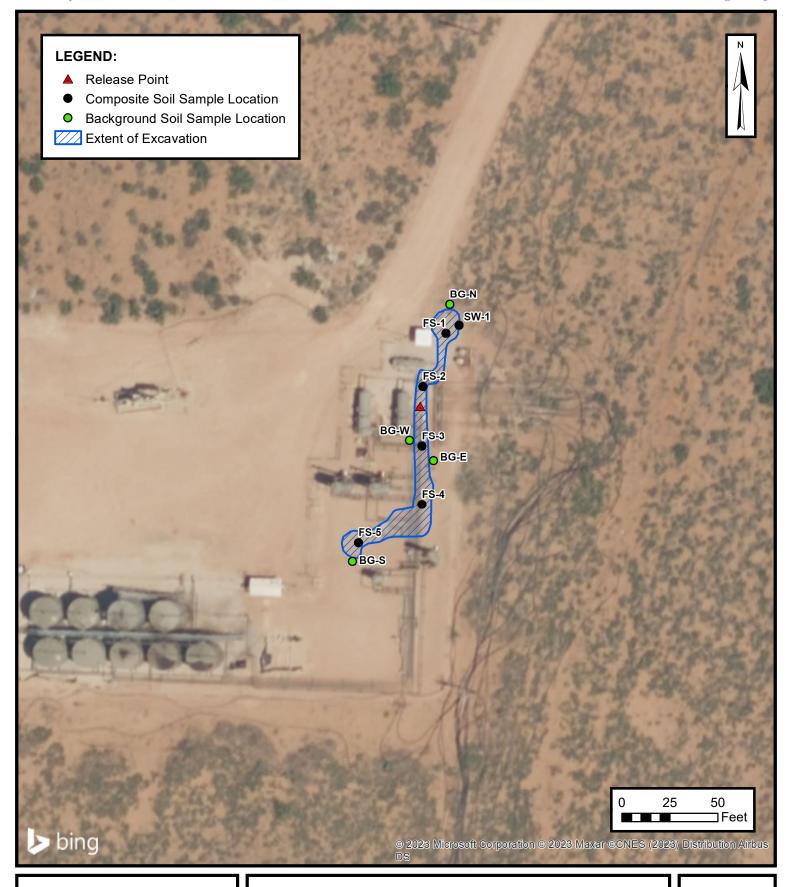


#### SITE VICINITY MAP

OXY USA INC. LOST TANK 3 FED #005 Eddy County, New Mexico 32.42244° N, 103.76144° W

PROJECT NUMBER: 03B1417090

**FIGURE** 



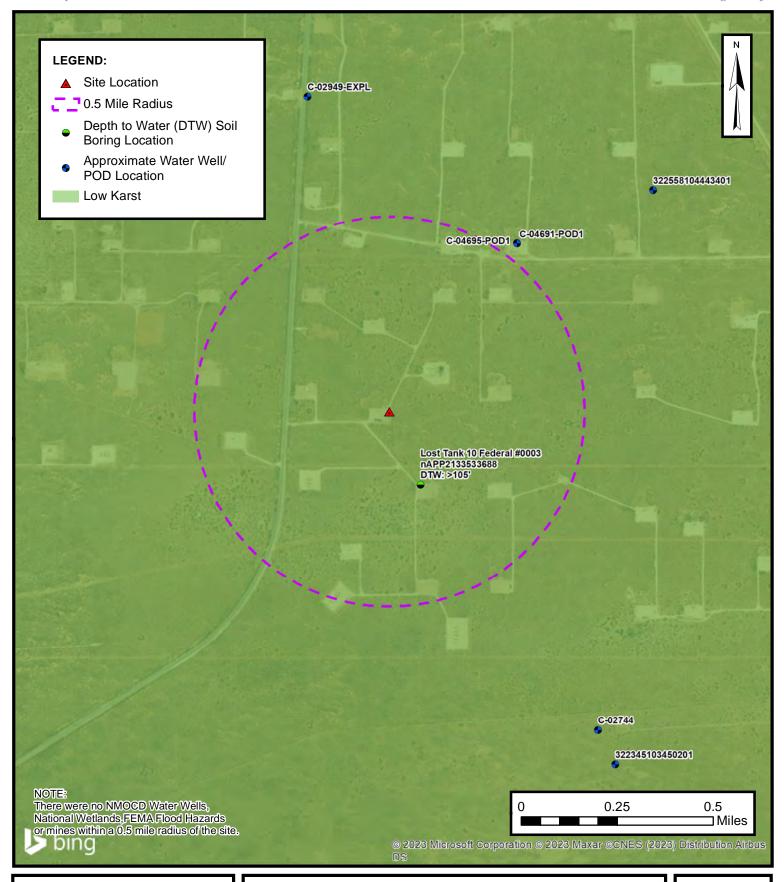


#### SITE MAP

OXY USA INC. LOST TANK 3 FED #005 Eddy County, New Mexico 32.42244° N, 103.76144° W

PROJECT NUMBER: 03B1417090

**FIGURE** 





#### **CLOSURE CRITERIA MAP**

OXY USA INC. LOST TANK 3 FED #005 Eddy County, New Mexico 32.42244° N, 103.76144° W

PROJECT NUMBER: 03B1417090

FIGURE



**APPENDIX B** 

**Supporting Documentation** 



#### Soil Bore Log SB-03

TRINITY OILFIELD SERVICES

PROJECT NAME Lost Tank 10
CLIENT OXY USA, Inc.

DRILLING DATE 04/05/2022 TOTAL DEPTH 105' **COORDINATES** 32.41972, -103.759621

COORD SYS NAD 83 ULSTR I-03-22S-31E SURFACE ELEVATION 3503

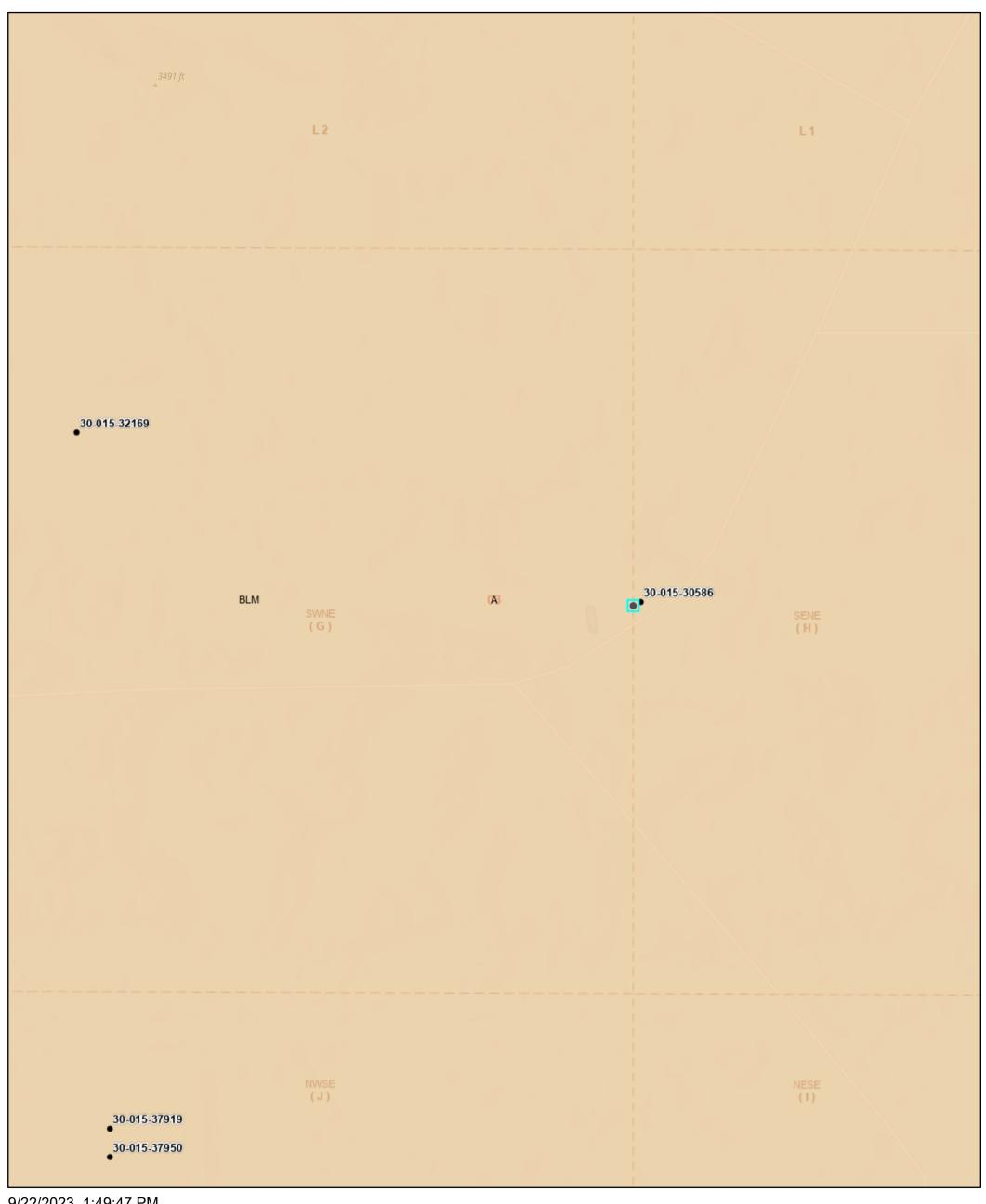
**COMMENTS** Spud on the Northwest Corner of the Lost Tank 3 Federal #11 Well Pad.

LOGGED BY CJ CHECKED BY DD

	CHECKED BY DD											
Depth (ft)	Moisture	Material Description	Elevation (ft)									
- - -	D	Brown Sandy Loam. Dry	3500									
- 5 5		Reddish Brown Sandy Clay Loam. Dry	3495									
- 10 -		Tan Sandy Clay Loam. Dry	3490									
- - 15												
- - 20			- 3485 - - - -									
- - 25		Tan Sandy Clay Loam. Dry	<u> </u>									
- - 30			3475									
- - - - - 35		Reddish Brown Sandy Clay Loam. Dry	3470 									
- - - - - -		Reddish Brown Sandy Clay Loam. Dry	3465 									
- - - 45		Reddish Brown Sandy Clay Loam. Dry	3460									
- - - 50		Reddish Brown Sandy Clay Loam. Dry	3455									
- - - - 55			3450									
		Dark Reddish Brown Sandy Clay. Dry	3445									
- 65  - 65			- - 3440									
- - -			- - 3435									
- 70												
- 75 			_ _ 3425									
80  			- - - 3420									
- - 85 - -			- - - - 3415									
-  90  -		Reddish Brown Sandy Loam. Dry	3410									
- 95 		Dark Reddish Brown Sandy Clay Loam. Dry	3405									
 100 		Dark Nedulari Diowii Salidy Clay Loalii. Diy										
- - 105 -		Termination Depth at:105 ft.	- 3400 									
- - 110			3395									

**DRY HOLE** This bore log is intended to evidence a depth to groundwater greater than 105'.

# **OCD Well Locations**



9/22/2023, 1:49:47 PM

Wells - Large Scale

Oil, Active

Mineral Ownership

A-All minerals are owned by U.S.

Land Ownership

BLM

PLSS Second Division

**PLSS First Division** 

1:2,257 0 0.02 0.04 0.08 mi 0.04 0.07 0.14 km

U.S. BLM, Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department., Esri Community Maps Contributors, New Mexico State University, Texas Parks & Wildlife, © OpenStreetMap,

# Received by OCD: 9/25/2023 4:33:00 PM National Flood Hazard Layer FIRMette





Without Base Flood Elevation (BFE) With BFE or Depth Zone AE, AO, AH, VE, AR SPECIAL FLOOD HAZARD AREAS Regulatory Floodway 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X **Future Conditions 1% Annual** Chance Flood Hazard Zone X Area with Reduced Flood Risk due to Levee. See Notes. Zone X OTHER AREAS OF Area with Flood Risk due to Levee Zone D FLOOD HAZARD NO SCREEN Area of Minimal Flood Hazard Zone X Effective LOMRs OTHER AREAS Area of Undetermined Flood Hazard Zone D - - - Channel, Culvert, or Storm Sewer **GENERAL** STRUCTURES | LILLIL Levee, Dike, or Floodwall 20.2 Cross Sections with 1% Annual Chance 17.5 Water Surface Elevation **Coastal Transect** ₩ 513 W Base Flood Elevation Line (BFE) Limit of Study Jurisdiction Boundary **Coastal Transect Baseline** OTHER **Profile Baseline FEATURES** Hydrographic Feature Digital Data Available No Digital Data Available MAP PANELS Unmapped The pin displayed on the map is an approximate

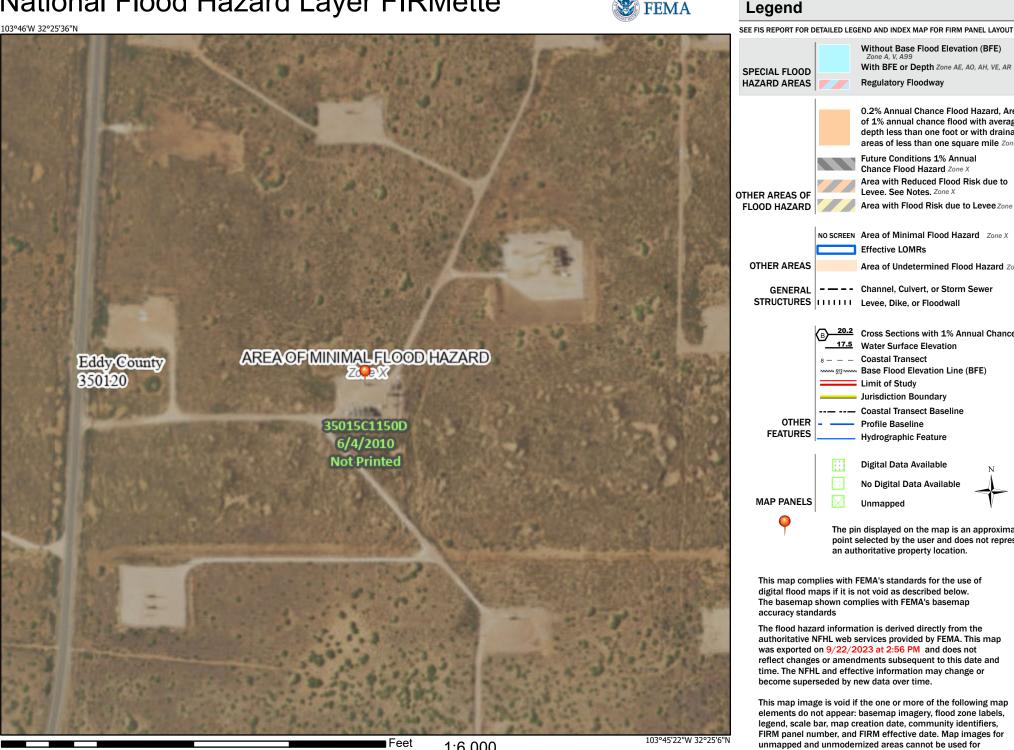
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

point selected by the user and does not represent

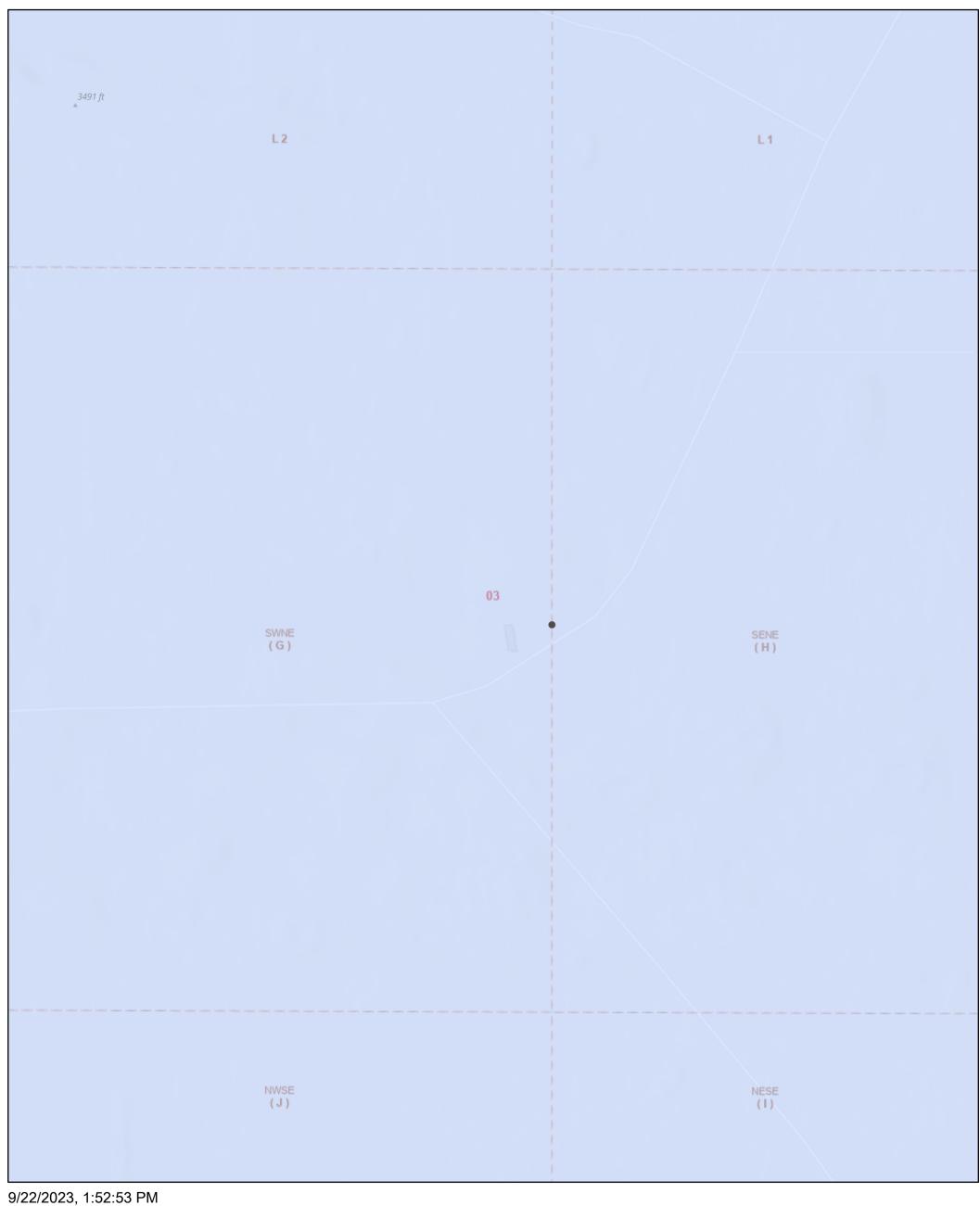
an authoritative property location.

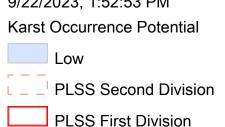
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/22/2023 at 2:56 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

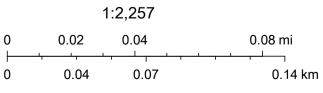
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory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



# Karst Map

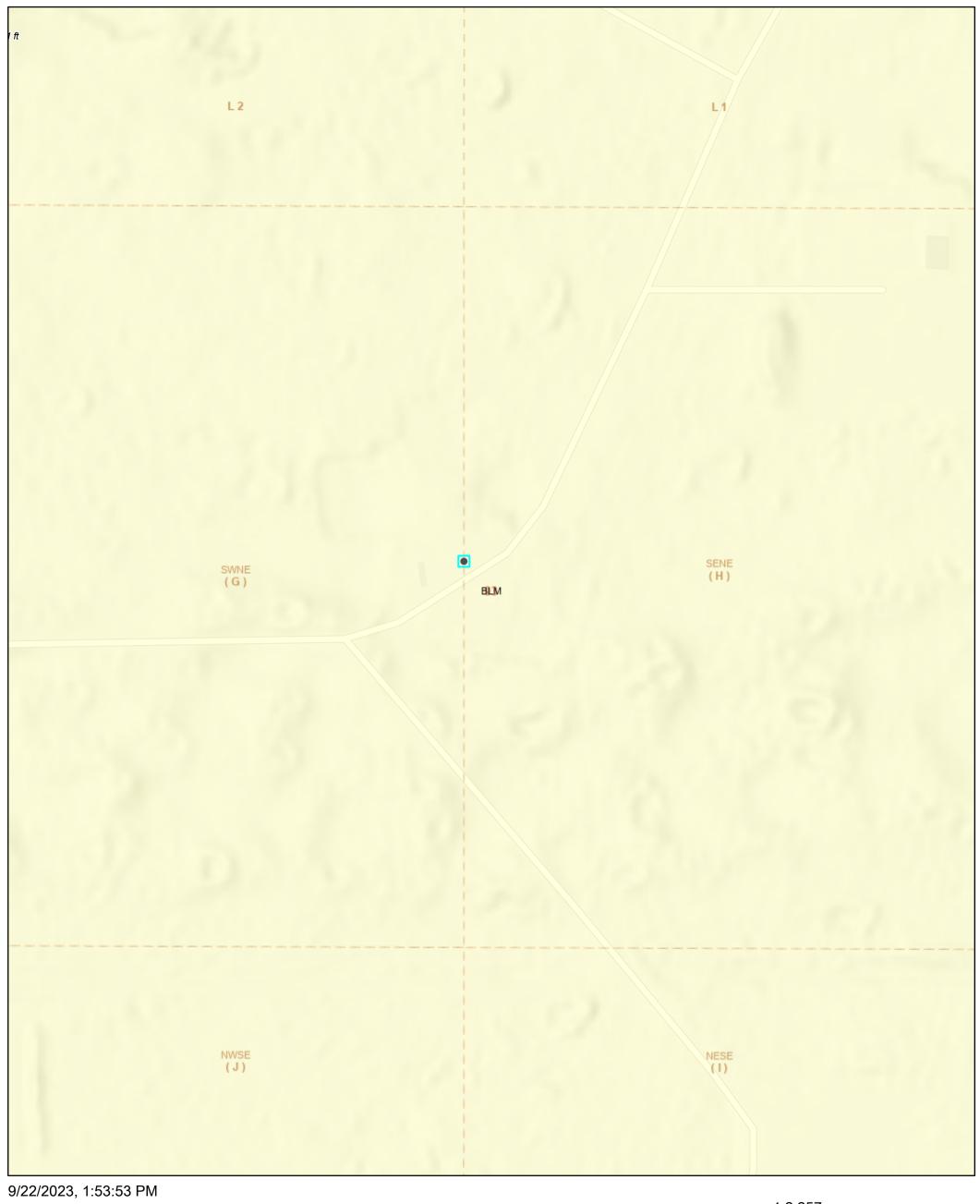


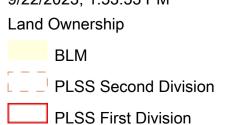


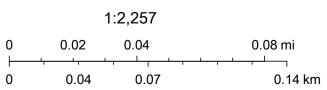


BLM, OCD, New Mexico Tech, Esri Community Maps Contributors, New Mexico State University, Texas Parks & Wildlife, © OpenStreetMap, Microsoft, CONANP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/

# Active Mines in New Mexico







U.S. BLM, Esri Community Maps Contributors, New Mexico State University, Texas Parks & Wildlife, © OpenStreetMap, Microsoft, CONANP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US

# **NWI Map**



September 22, 2023

#### Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Lake

Freshwater Forested/Shrub Wetland



Other

Riverine

Freshwater Pond



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.



**APPENDIX C** 

Photographic Documentation



View of the initial release area, facing northwest (June 28, 2023).



View of the initial release area, facing southwest (June 28, 2023).



View of the excavation area, facing north (July 19, 2023).



View of the excavation area, facing south (July 19, 2023).



APPENDIX D

Tables

Received by OCD: 9/25/2023 4:33:00 PM



#### TABLE 1

**SOIL SAMPLE ANALYTICAL RESULTS** 

Lost Tank 3 Federal #005 Oxy USA, Inc.

Eddy County, New Mexico Ensolum Project No. 03B1417090

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 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 (> 100 feet)			10	NE	NE	NE	50	1,000		NE	2,500	20,000		
	Floor Sample Analytical Results													
FS-1	07/19/2023	3	<0.050	<0.050	<0.050	<0.150	<0.300	28.3		<10.0	28.3	160		
FS-2	07/19/2023	0.25	<0.050	<0.050	<0.050	<0.150	<0.300	<1	0.0	<10.0	<10.0	128		
FS-3	07/19/2023	0.25	<0.050	<0.050	<0.050	<0.150	<0.300	24	l.9	<10.0	24.9	128		
FS-4	07/19/2023	0.25	<0.050	<0.050	<0.050	<0.150	<0.300	32.5		12.0	44.5	208		
FS-5	07/19/2023	0.25	<0.050	<0.050	<0.050	<0.150	<0.300	4	65	131	596	608		
					Sidewall S	Sample Analytic	cal Results							
SW-1	07/19/2023	0 - 3	<0.050	<0.050	<0.050	<0.150	<0.300	<1	<10.0		<10.0	16.0		
					Background	I Sample Analy	tical Results							
BG-N	07/19/2023	0 - 0.25	<0.050	<0.050	<0.050	<0.150	<0.300	20	5.9	13.2	40.1	208		
BG-E	07/19/2023	0 - 0.25	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0		<10.0	<10.0	48.0		
BG-S	07/19/2023	0 - 0.25	<0.050	<0.050	<0.050	<0.150	<0.300	28	3.8	<10.0	28.8	256		
BG-W	07/19/2023	0 - 0.25	<0.050	<0.050	<0.050	<0.150	<0.300	35	5.8	<10.0	35.8	208		

bgs: below ground surface mg/kg: milligrams per kilogram

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



# **APPENDIX E**

Laboratory Data Sheets and Chain-of-Custody Documentation



July 26, 2023

**BEAUX JENNINGS** 

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: LOST TANK 3 FEDERAL # 005

Enclosed are the results of analyses for samples received by the laboratory on 07/20/23 12:56.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> accred certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2 Haloacetic Acids (HAA-5)
Method EPA 524.2 Total Trihalomethanes (TTHM)
Method EPA 524.4 Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celey D. Keene

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



#### Analytical Results For:

ENSOLUM, LLC BEAUX JENNINGS 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:

Received: 07/20/2023 Reported: 07/26/2023

U//20/2023

Project Name: LOST TANK 3 FEDERAL # 005 Project Number: 03B1417090

Project Location: OXY - EDDY COUNTY

Sampling Date: 07/19/2023

Sampling Type: Soil

Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

#### Sample ID: SW - 1 0-3' (H233786-01)

BTEX 8021B	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/25/2023	ND	2.10	105	2.00	1.88	
Toluene*	<0.050	0.050	07/25/2023	ND	2.03	102	2.00	3.20	
Ethylbenzene*	<0.050	0.050	07/25/2023	ND	2.09	104	2.00	1.96	
Total Xylenes*	<0.150	0.150	07/25/2023	ND	6.33	106	6.00	2.63	
Total BTEX	<0.300	0.300	07/25/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	106	% 71.5-13	4						
Chloride, SM4500CI-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/25/2023	ND	432	108	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/25/2023	ND	193	96.5	200	2.42	
DRO >C10-C28*	<10.0	10.0	07/25/2023	ND	196	98.2	200	3.16	
EXT DRO >C28-C36	<10.0	10.0	07/25/2023	ND					
Surrogate: 1-Chlorooctane	95.4	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	103	% 49.1-14	8						

A ... - L ... - - - I D. .. MC

Cardinal Laboratories \*=Accredited Analyte

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Celey D. Keene



#### Analytical Results For:

ENSOLUM, LLC BEAUX JENNINGS 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:

Received: 07/20/2023 Reported: 07/26/2023

LOST TANK 3 FEDERAL # 005

ma/ka

Project Name: LOST TANK 3
Project Number: 03B1417090

Project Location: OXY - EDDY COUNTY

Sampling Date: 07/19/2023

Sampling Type: Soil

Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

#### Sample ID: FS - 1 3' (H233786-02)

RTFY 8021R

BIEX 8021B	тд/кд		Anaiyze	Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/25/2023	ND	2.10	105	2.00	1.88	
Toluene*	<0.050	0.050	07/25/2023	ND	2.03	102	2.00	3.20	
Ethylbenzene*	<0.050	0.050	07/25/2023	ND	2.09	104	2.00	1.96	
Total Xylenes*	<0.150	0.150	07/25/2023	ND	6.33	106	6.00	2.63	
Total BTEX	<0.300	0.300	07/25/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 71.5-13	4						
Chloride, SM4500CI-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	07/25/2023	ND	432	108	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/25/2023	ND	193	96.5	200	2.42	
DRO >C10-C28*	28.3	10.0	07/25/2023	ND	196	98.2	200	3.16	
EXT DRO >C28-C36	<10.0	10.0	07/25/2023	ND					
Surrogate: 1-Chlorooctane	93.3	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	101	% 49.1-14	8						

Applyzod By: MC

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Celey D. Keene



#### Analytical Results For:

ENSOLUM, LLC BEAUX JENNINGS 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:

Received: 07/20/2023 Reported: 07/26/2023

07/26/2023 LOST TANK 3 FEDERAL # 005

Project Name: LOST TANK 3
Project Number: 03B1417090

Project Location: OXY - EDDY COUNTY

Sampling Date: 07/19/2023

Sampling Type: Soil

Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

#### Sample ID: FS - 2 0.25' (H233786-03)

BTEX 8021B	mg/kg		Analyze	Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/25/2023	ND	2.06	103	2.00	0.00804	
Toluene*	<0.050	0.050	07/25/2023	ND	1.97	98.7	2.00	2.97	
Ethylbenzene*	<0.050	0.050	07/25/2023	ND	2.04	102	2.00	2.55	
Total Xylenes*	<0.150	0.150	07/25/2023	ND	6.09	101	6.00	2.06	
Total BTEX	<0.300	0.300	07/25/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	112	% 71.5-13	4						
Chloride, SM4500CI-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	07/25/2023	ND	432	108	400	3.77	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/25/2023	ND	193	96.5	200	2.42	
DRO >C10-C28*	<10.0	10.0	07/25/2023	ND	196	98.2	200	3.16	
EXT DRO >C28-C36	<10.0	10.0	07/25/2023	ND					
Surrogate: 1-Chlorooctane	99.8	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	108	% 49.1-14	8						

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Celey D. Keine



#### Analytical Results For:

ENSOLUM, LLC BEAUX JENNINGS 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:

Received: 07/20/2023 Reported: 07/26/2023

LOST TANK 3 FEDERAL # 005

Project Name: LOST TANK 3
Project Number: 03B1417090

Project Location: OXY - EDDY COUNTY

Sampling Date: 07/19/2023

Sampling Type: Soil

Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

#### Sample ID: FS - 3 0.25' (H233786-04)

BTEX 8021B	mg/kg		Analyze	Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/25/2023	ND	2.06	103	2.00	0.00804	
Toluene*	<0.050	0.050	07/25/2023	ND	1.97	98.7	2.00	2.97	
Ethylbenzene*	<0.050	0.050	07/25/2023	ND	2.04	102	2.00	2.55	
Total Xylenes*	<0.150	0.150	07/25/2023	ND	6.09	101	6.00	2.06	
Total BTEX	<0.300	0.300	07/25/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	116	% 71.5-13	4						
Chloride, SM4500CI-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	07/25/2023	ND	432	108	400	3.77	
TPH 8015M	mg,	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/25/2023	ND	193	96.5	200	2.42	
DRO >C10-C28*	24.9	10.0	07/25/2023	ND	196	98.2	200	3.16	
EXT DRO >C28-C36	<10.0	10.0	07/25/2023	ND					
Surrogate: 1-Chlorooctane	96.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	104	% 49.1-14	8						

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Celey D. Keine



#### Analytical Results For:

ENSOLUM, LLC BEAUX JENNINGS 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:

Received: 07/20/2023 Reported: 07/26/2023

LOST TANK 3 FEDERAL # 005

Project Name: LOST TANK 3
Project Number: 03B1417090

Project Location: OXY - EDDY COUNTY

Sampling Date: 07/19/2023

Sampling Type: Soil

Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

#### Sample ID: FS - 4 0.25' (H233786-05)

BTEX 8021B	mg/kg		Analyze	Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/25/2023	ND	2.06	103	2.00	0.00804	
Toluene*	<0.050	0.050	07/25/2023	ND	1.97	98.7	2.00	2.97	
Ethylbenzene*	<0.050	0.050	07/25/2023	ND	2.04	102	2.00	2.55	
Total Xylenes*	<0.150	0.150	07/25/2023	ND	6.09	101	6.00	2.06	
Total BTEX	<0.300	0.300	07/25/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	113	% 71.5-13	14						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	07/25/2023	ND	432	108	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/25/2023	ND	193	96.5	200	2.42	
DRO >C10-C28*	32.5	10.0	07/25/2023	ND	196	98.2	200	3.16	
EXT DRO >C28-C36	12.0	10.0	07/25/2023	ND					
Surrogate: 1-Chlorooctane	97.2	% 48.2-13	14						
Surrogate: 1-Chlorooctadecane	108	% 49.1-14	18						

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

\*=Accredited Analyte



#### Analytical Results For:

ENSOLUM, LLC BEAUX JENNINGS 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:

Received: 07/20/2023 Reported: 07/26/2023

LOST TANK 3 FEDERAL # 005

Project Number: 03B1417090

Project Location: OXY - EDDY COUNTY

Sampling Date: 07/19/2023

Sampling Type: Soil

Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

#### Sample ID: FS - 5 0.25' (H233786-06)

Project Name:

BTEX 8021B	mg/kg		Analyze	Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/25/2023	ND	2.06	103	2.00	0.00804	
Toluene*	<0.050	0.050	07/25/2023	ND	1.97	98.7	2.00	2.97	
Ethylbenzene*	<0.050	0.050	07/25/2023	ND	2.04	102	2.00	2.55	
Total Xylenes*	<0.150	0.150	07/25/2023	ND	6.09	101	6.00	2.06	
Total BTEX	<0.300	0.300	07/25/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	116	% 71.5-13	4						
Chloride, SM4500CI-B	mg,	/kg	Analyze	ed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	608	16.0	07/25/2023	ND	432	108	400	3.77	
TPH 8015M	mg,	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/25/2023	ND	193	96.5	200	2.42	
DRO >C10-C28*	465	10.0	07/25/2023	ND	196	98.2	200	3.16	
EXT DRO >C28-C36	131	10.0	07/25/2023	ND					
Surrogate: 1-Chlorooctane	69.5	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	76.9	% 49.1-14	8						

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Celey D. Keene



#### Analytical Results For:

ENSOLUM, LLC BEAUX JENNINGS 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:

Received: 07/20/2023 Reported: 07/26/2023

Project Name: LOST TANK 3 FEDERAL # 005

Project Number: 03B1417090

Project Location: OXY - EDDY COUNTY

Sampling Date: 07/19/2023

Sampling Type: Soil

Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

#### Sample ID: BG - N 0-0.25' (H233786-07)

RTFY 8021R

BIEX 8021B	тд/кд		Anaiyze	Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/25/2023	ND	2.06	103	2.00	0.00804	
Toluene*	<0.050	0.050	07/25/2023	ND	1.97	98.7	2.00	2.97	
Ethylbenzene*	<0.050	0.050	07/25/2023	ND	2.04	102	2.00	2.55	
Total Xylenes*	<0.150	0.150	07/25/2023	ND	6.09	101	6.00	2.06	
Total BTEX	<0.300	0.300	07/25/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	114	% 71.5-13	4						
Chloride, SM4500CI-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	07/25/2023	ND	432	108	400	3.64	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/25/2023	ND	193	96.5	200	2.42	
DRO >C10-C28*	26.9	10.0	07/25/2023	ND	196	98.2	200	3.16	
EXT DRO >C28-C36	13.2	10.0	07/25/2023	ND					
Surrogate: 1-Chlorooctane	98.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	108	% 49.1-14	8						

Applyzod By: 1H /

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Celey D. Keine



#### Analytical Results For:

ENSOLUM, LLC BEAUX JENNINGS 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:

Received: 07/20/2023 Reported: 07/26/2023

07/26/2023 LOST TANK 3 FEDERAL # 005

Project Name: LOST TANK 3
Project Number: 03B1417090

Project Location: OXY - EDDY COUNTY

Sampling Date: 07/19/2023

Sampling Type: Soil

Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

#### Sample ID: BG - E 0-0.25' (H233786-08)

RTFY 8021R

B1EX 8021B	mg,	кg	Anaiyze	a By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/25/2023	ND	2.06	103	2.00	0.00804	
Toluene*	<0.050	0.050	07/25/2023	ND	1.97	98.7	2.00	2.97	
Ethylbenzene*	<0.050	0.050	07/25/2023	ND	2.04	102	2.00	2.55	
Total Xylenes*	<0.150	0.150	07/25/2023	ND	6.09	101	6.00	2.06	
Total BTEX	<0.300	0.300	07/25/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	114 9	% 71.5-13	4						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/25/2023	ND	432	108	400	3.64	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/25/2023	ND	193	96.5	200	2.42	
DRO >C10-C28*	<10.0	10.0	07/25/2023	ND	196	98.2	200	3.16	
EXT DRO >C28-C36	<10.0	10.0	07/25/2023	ND					
Surrogate: 1-Chlorooctane	96.5	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	105	% 49.1-14	8						

Applyzod By: 1H /

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Celey D. Keene



#### Analytical Results For:

ENSOLUM, LLC BEAUX JENNINGS 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:

Received: 07/20/2023 Reported: 07/26/2023

LOST TANK 3 FEDERAL # 005

Project Name: LOST TANK 3
Project Number: 03B1417090

Project Location: OXY - EDDY COUNTY

Sampling Date: 07/19/2023

Sampling Type: Soil

Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

#### Sample ID: BG - S 0-0.25' (H233786-09)

RTFY 8021R

B1EX 8021B	mg,	кg	Anaiyze	a By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/25/2023	ND	2.06	103	2.00	0.00804	
Toluene*	<0.050	0.050	07/25/2023	ND	1.97	98.7	2.00	2.97	
Ethylbenzene*	<0.050	0.050	07/25/2023	ND	2.04	102	2.00	2.55	
Total Xylenes*	<0.150	0.150	07/25/2023	ND	6.09	101	6.00	2.06	
Total BTEX	<0.300	0.300	07/25/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	115	% 71.5-13	4						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	07/25/2023	ND	432	108	400	3.64	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/25/2023	ND	193	96.5	200	2.42	
DRO >C10-C28*	28.8	10.0	07/25/2023	ND	196	98.2	200	3.16	
EXT DRO >C28-C36	<10.0	10.0	07/25/2023	ND					
Surrogate: 1-Chlorooctane	98.7	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	107	% 49.1-14	8						

Applyzod By: 1H /

Cardinal Laboratories \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whistoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keine



#### Analytical Results For:

ENSOLUM, LLC BEAUX JENNINGS 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:

Received: 07/20/2023 Reported: 07/26/2023

07/26/2023 LOST TANK 3 FEDERAL # 005

Project Name: LOST TANK 3
Project Number: 03B1417090

Project Location: OXY - EDDY COUNTY

Sampling Date: 07/19/2023

Sampling Type: Soil

Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

#### Sample ID: BG - W 0-0.25' (H233786-10)

BTEX 8021B	mg,	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/25/2023	ND	2.06	103	2.00	0.00804	
Toluene*	<0.050	0.050	07/25/2023	ND	1.97	98.7	2.00	2.97	
Ethylbenzene*	<0.050	0.050	07/25/2023	ND	2.04	102	2.00	2.55	
Total Xylenes*	<0.150	0.150	07/25/2023	ND	6.09	101	6.00	2.06	
Total BTEX	<0.300	0.300	07/25/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	115 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	07/25/2023	ND	432	108	400	3.64	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/25/2023	ND	207	104	200	3.25	
DRO >C10-C28*	35.8	10.0	07/25/2023	ND	208	104	200	3.17	
EXT DRO >C28-C36	<10.0	10.0	07/25/2023	ND					
Surrogate: 1-Chlorooctane	92.8	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	109	% 49.1-14	18						

Cardinal Laboratories \*=Accredited Analyte

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Celeg & Freene



#### **Notes and Definitions**

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

\*\* Samples not received at proper temperature of 6°C or below.

\*\*\* Insufficient time to reach temperature.

- Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whistoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keine

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

# 101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

Company Name: Ensolum, L	LLC				
Project Manager: Beaux Jennings	nings	BO #	70	ANALYSIS R	REQUEST
Address: 601 N Marienfeld Street, Suite 400	treet, Suite 400	Company Out			
City: Midland	State: TX Zip: 79701	701 Attn: Wade Dittrich	ich		
Phone #: 210-219-8858	Fax #:				
Project #: 038141709D	Project Owner:	City:			
Project Name: Jost Cank	3 Federal #105	State: Zip:			
Project Location: Eddy /		Phone #: 575 300	0.0000		
Sampler Name:	Sun in C	Fov #-	0-2020		
FOR LAB LISE ONLY		rax #:			
TOR IND USE ONLY	C P.	MATRIX PRESERV.	SAMPLING		
Lab I.D. Sample I.D.	(feet)  Depth  AB OR (C)OMP	R: BASE: COOL	EX	Noride	
H233786	# CON	WASTI SOIL DIL SLUDG DTHEF ACID/B CE / C	BT	Cl.	
1-(M)-1	0-3 (1	4	-	×	
1.54.0	2 01			- )	
7-52 0	6.25° C'		25		
5.52 6	0.25 61		1252		
N-53-0	p. 25, C 1		135W		
6-53-8	0.25 41		1355		
N-9%	)		1252		
0 80-E	35		1400		
			1 1402		
LEASE NOTE: Liability and Damages, Cardinal's lia	D'-D, 25 6	PLEASE NOTE: Lability and Damages, Cardinal's liability and client's exclusive remotivitor any claim subject to the State of Stat	7 3 3 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	X	
Nativees. All claims including those for negligence and any oth rivice. In no event shall Cardinal be liable for incidental or cor flates or successors arising out of or related to the performant	Id any other cause whatsoever shall be deemed waived unless mantal or consequental damages, including without limitation, business performance of services hereunder by Cardinal repairdage of what	nanyes. All claims including those for negigence and any other cause whatsoever shall be determined water during and received by the client for the berives. In no event shall cardinal be liable for incidental or consequential damages, including without making and received by Cardinal within 30 days after completes the price of the special cardinal be liable for incidental or consequential damages, including without mitigation, business interruptions, loss of use, or loss of profits incurred by client, its substanties,	ount paid by the client for the lays after completion of the applicable rred by client, its subsidiaries,		
Neilliquistied by:	Date: 751/7 Received By:	d By:	Verbal Result: Yes	□ No Add'I Phone #:	
Relinguished But	H57	Rill	All Results are emailed.	Please provide Email address:	
	Date: 1/20/2 Received By:	d By:	REMARKS:		
Delivered By: (Circle One)					
Sampler UPS - Bus - Other:	Corrected Temp. °C	Cool Infact (Initials)	Turnaround Time:	Standard A Bacteria (only Rush Cool Intact	Bacteria (only) Sample Condition Cool Intact Observed Temp. °C
FURM-000 K 3.2 10/0//21	+ Cardinal cannot as	LI NO LI ON LI ON LI	Correction Factor -0.5°C	No No	Corrected Temp, °C



**APPENDIX F** 

C-141

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	nAPP2323352221
District RP	
Facility ID	
Application ID	

## **Release Notification**

			Resp	onsi	ble Party	у		
Responsible	Party: Oxy I	USA Inc.			OGRID: 1	16696		
Contact Nam	ne: Tyson Pi	erce			Contact T	Telephone: 575-3	390-3610	
Contact ema	il: Tyson_pi	erce@oxy.com			Incident #	# nAPP2323352	221	
Contact mail	ing address:	PO Box 4294, Ho	ouston, TX 77210					
			Location	of R	Release So	ource		
Latitude 32.4	2244		(NAD 83 in dec		Longitude <u>-</u>		<u> </u>	
Site Name: L	ost Tank 3 F	ederal #005			Site Type:	Wellhead		
Date Release	Discovered:	06/26/2023			API# 30-01	15-30586		
Unit Letter	Section	Township	Range		Coun	ity		
Н	3	22S	31E	Eddy	у			
Surface Owner	r: State		ribal Private (/	Name:			)	
			Nature and	l Vol	lume of <b>F</b>	Release		
Crude Oil		l(s) Released (Select al Volume Release		calculat	tions or specific		volumes provided below) vered (bbls): 20	
Produced		Volume Release				Volume Recovered (bbls):		
		CONTROL CONTROL SECTION SECTIO	tion of dissolved c	hloride	e in the	Yes No		
Condensa	ite	Volume Release				Volume Recov	vered (bbls)	
☐ Natural G	ias	Volume Release	d (Mcf)			Volume Recov	vered (Mcf)	
Other (de	scribe)	Volume/Weight	Released (provide	e units)	)	Volume/Weigl	ht Recovered (provide units)	
Cause of Rel	ease: Interna	ıl corrosion.						

Received by OCD: 9/25/2023 4:33:00 PM

Released to Imaging: 2/14/2024 9:41:54 AM

Released to Imaging:	orm C-141 age 2
ing: 2/14/	Was this a major release as defined by 19.15.29.7(A) NMAG
2/14/2024 9:41:54	⊠ Yes □ No
4 AM	If YES, was immedia

#### State of New Mexico Oil Conservation Division

Release is greater than 25 barrels.

		Re
Incident ID	nAPP2323352221	Cei
District RP		rea
Facility ID		- by
Application ID		0
his a major release?		Received by OCD: 9/25/2023 4:33:00 PM
		25/
		202
		3 4
		33
		1 90
		P
hat means (phone et	mail etc)?	7 2

19.15.29.7(A) NMAC?					
⊠ Yes □ No					
Z 163 110					
If YES, was immediate no	otice given to the OCD? By whom? To wh	om? When and by what means (phone, email, etc)?			
		gov and BLM_NM_CFO_Spill@blm.gov on 08/16/2023 at 1038.			
	Initial Re	esponse			
The responsible p		y unless they could create a safety hazard that would result in injury			
☐ The source of the rele	ase has been stopped.				
	s 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.					
	d above have not been undertaken, explain v				
has begun, please attach a	a narrative of actions to date. If remedial	emediation immediately after discovery of a release. If remediation efforts have been successfully completed or if the release occurred lease attach all information needed for closure evaluation.			
		pest of my knowledge and understand that pursuant to OCD rules and			
		ications and perform corrective actions for releases which may endanger CD does not relieve the operator of liability should their operations have			
		at to groundwater, surface water, human health or the environment. In responsibility for compliance with any other federal, state, or local laws			
and/or regulations.	a C-141 report does not reneve the operator of	responsibility for compliance with any other federal, state, or local laws			
Printed Name: Tyson Pier	rce	Title: Environmental Specialist			
Signature.		Date:9/25/23			
email: Tyson_pierce@oxy	<u>y.com</u>	Telephone: <u>575-390-3610</u>			
OCD Only					
Received by:		Date:			
Received by.		Date.			

If YES, for what reason(s) does the responsible party consider this a major release?



# State of New Mexico Oil Conservation Division

Incident ID	nAPP2323352221
District RP	
Facility ID	
Application ID	

## **Site Assessment/Characterization**

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?	<u>&gt;100</u> (ft bgs)				
Did this release impact groundwater or surface water?	☐ Yes ⊠ No				
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ⊠ No				
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No				
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No				
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No				
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No				
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ⊠ No				
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ⊠ No				
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No				
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ⊠ No				
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ⊠ No				
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	⊠ Yes □ No				
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil					

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

9	Characterization Report Checklist: Each of the following items must be included in the report.
١.	_
	Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
	Field data
	□ Data table of soil contaminant concentration data
	Depth to water determination
	Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
	Boring or excavation logs
	∑ Photographs including date and GIS information
4	☐ Topographic/Aerial maps
	\overline{\times} Laboratory data including chain of custody

the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 9.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

eleased to Imaging: 2/14/2024 9:41:54 AM

ReForm Page 4

There regulated and publication and Print Sig

# Form C-141 State of New Mexico Oil Conservation Division

		Re
Incident ID	nAPP2323352221	cei
District RP		ved
Facility ID		by
Application ID		9
and understand that pursu		Received by OCD: 9/25/2023 4:33:00 PA
	ases which may endanger ould their operations have	25//
ace water, human health		202
liance with any other fed	leral, state, or local laws	3 4
		33
ol Craciolist		90:
al Specialist		P
		1

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: Tyson Pierce	Title: Environmental Specialist
Signature:	Date:9/25/23
email: Tyson_pierce@oxy.com	Telephone: <u>575-390-3610</u>
OCD Only	
Received by:	Date:

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

A scaled site and sampling diagram as described in 19.15.29.11 NMAC

must be notified 2 days prior to liner inspection)

X Description of remediation activities

Incident ID	nAPP2323352221
District RP	
Facility ID	
Application ID	

For directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Note: Appropriate OCD District office

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

and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of a	ediate contamination that pose a threat to groundwater, surface water, C-141 report does not relieve the operator of responsibility for ions. The responsible party acknowledges they must substantially ditions that existed prior to the release or their final land use in		
Printed Name: Tyson Pierce	Title: Environmental Specialist		
Signature:	Date: 9/25/23		
emall: Tyson_pierce@oxy.com	Telephone: <u>575-390-3610</u>		
OCD Only			
Received by:	Date:		
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.			
Closure Approved by:	Date:		
Printed Name:	Title:		

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

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

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

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 268887

#### **CONDITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	268887
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By	Condition	Condition Date
rhamlet  We have received your Remediation Closure Report for Incident #NAPP2323352221 LOST TANK 3 FEDERAL #005, thank you. This Remediation Closure Report is approved. Areas reasonably needed for production or subsequent drilling operations will need to be reclaimed and revegetated as soon as they are no longer reasonably needed. A report for reclamation and revegetation including pictures of the contoured backfilled excavation surface and a thorough discussion on reseeding mixture, vegetation ratio, timelines, etc, will need to be submitted and approved prior to this incident receiving the final status of "Restoration Complete".		2/14/2024