



ENSOLUM

DEFERRAL REQUEST

Property:

Sand Dunes South Corridor CTB

**Unit B, S18, T24S, R31E
32.223643° N, 103.812787° W
Eddy County, New Mexico
NMOCD Incident ID: nAPP2404728286**

November 7, 2024
Ensolum Project No. 03B1417154

Prepared for:
Oxy USA, Inc.
PO Box 4324
Houston, Texas 77210

Attn: Wade Dittrich

Prepared by:

Kelly Lowery, GIT
Project Manager

Beaux Jennings
Associate Principal

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DEFERRAL REQUEST

Sand Dunes South Corridor CTB

Unit B, S18, T24S, R31E
32.223643° N, 103.812787° W
Eddy County, New Mexico
NMOCD Incident ID: nAPP2404728286

Ensolum Project No. 03B1417154

1.0 INTRODUCTION

1.1 Site Description and Background

Operator:	Oxy USA, Inc. (Oxy)
Site Name:	Sand Dunes South Corridor CTB
Location:	Unit B, Section 18, Township 24 South, Range 31 East 32.223643° N, 103.812787° W Eddy County, New Mexico
Property:	Federal Land managed by the Bureau of Land Management (BLM)
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On February 12, 2024, Oxy had a release of produced water at the Site due to a pump failure. The pump was isolated, locked, tagged out, and repaired. Approximately 20 barrels (bbls) of produced water were released onto the surface of the tank battery. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids, with approximately 10 bbls of produced water recovered. Oxy reported the release to the New Mexico EMNRD OCD via a report through the online notice of release (NOR) form on February 16, 2024. The release was assigned Incident Number nAPP2404728286.

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 soil to be in compliance with 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 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. Supporting documentation and figures associated with the following bullets are provided in **Appendix B**.

- One permitted United States Geological Society (USGS) groundwater well (321310103482101) was identified within a 0.5-mile radius of the Site on the OSE Water Rights Reporting System (WRRS) database. The depth to water was most recently measured on January 17, 2013 and indicated to be 74.44 feet below ground surface (bgs).
- 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 of a permanent residence, school, hospital, institution, or church.
- According to the OSE WRSS database, there are no private, domestic freshwater wells used by less than five households for domestic or stock water purposes identified within 500 feet of the Site.
- According to the OSE WRSS database, no freshwater wells have been identified within 1,000 feet of the Site.
- The Site is not located within incorporated municipal boundaries or within a defined municipal freshwater well field covered under a municipal ordinance adopted pursuant to New Mexico Statute Annotated (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 Geographical Information System (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 potential.
- 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
51-100 feet	Chloride	EPA 300.0 or SM4500 Cl B	10,000 mg/kg
	TPH (GRO+DRO)	EPA SW-846 Method 8015M	1,000 mg/kg
	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 February 12, 2024, Oxy had a release of produced water at the Site due to a pump failure. The pump was isolated, locked, tagged out, and repaired. Approximately 20 bbls of produced water were released onto the surface of the tank battery. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids, with approximately 10 bbls of produced water recovered.

On June 24, 2024 and July 11, 2024, site assessment activities were conducted at the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. Initial excavation activities were conducted utilizing hand tools in an attempt to remove all impacted soils immediately adjacent to and beneath active production equipment. During this time, refusal was encountered inhibiting further excavation with hand tools and mechanical equipment was not able to be utilized inside the tank battery per Oxy's safety protocols. Due to the proximity of the active production equipment throughout the release extent hindering the removal of all impacted soils, three potholes (PH-01 through PH-03) were advanced via hydrovac within the release extent to depths ranging from 0.5 feet to 2 feet bgs for vertical delineation. Discrete soil samples were collected from each pothole at depths ranging from 0.5 feet to 2 feet bgs. Additionally, eight grab lateral delineation soil samples (SS01 through SS08) were collected around the release at a depth of 0.5 feet bgs to confirm the lateral extent of the release. The soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips.

The soil samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX), total petroleum hydrocarbons (TPH), gasoline range organics (GRO), diesel range organics (DRO), motor oil/lube oil range organics (MRO), chloride, and/or methanol in accordance with the New Mexico EMNRD OCD Closure Criteria for Soils Impacted by a Release (51 - 100 feet) (NMOCD Closure Criteria).

Based on laboratory analytical results, no impacted soil was identified at the Site.



Figure 3 is a map that identifies the release extent and approximate soil sample locations (**Appendix A**). Photographic documentation of the field activities is included in **Appendix C**. Field screening results and observations for each pothole were documented on a lithologic soil sampling log and are included in **Appendix B**.

4.0 SOIL SAMPLING PROGRAM

Ensolum's soil sampling program from June 24, 2024 and July 11, 2024 included the collection of a total of 13 delineation soil samples from 11 locations from within and around the release extent (PH-01 through PH-03, and SS01 through SS08) for laboratory analysis.

The delineation 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, under proper chain-of-custody procedures.

5.0 SOIL LABORATORY ANALYTICAL METHODS

The delineation soil samples were analyzed for BTEX following the United States Environmental Protection Agency (EPA) SW-846 Method 8021B, TPH GRO/DRO/MRO following EPA SW-846 Method 8015M/D, and chloride using SM4500Cl-B.

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 benzene, total BTEX, TPH-GRO/DRO/MRO, and chloride concentrations or laboratory sample detection limits (SDLs) associated with the delineation soil samples from within and around the release extent (PH-01 through PH-03, and SS01 through SS08) to the NMOCD Closure Criteria.

- Laboratory analytical results indicated benzene concentrations for the delineation soil samples are below the laboratory sample detection limits (SDLs) and the NMOCD Closure Criteria of 10 milligrams per kilogram (mg/kg).
- Laboratory analytical results indicated that total BTEX concentrations for the delineation soil samples are below the laboratory SDLs or the NMOCD Closure Criteria of 50 mg/kg.
- Laboratory analytical results indicated combined TPH GRO/DRO concentrations for the delineation soil samples are below the laboratory SDLs and/or the applicable NMOCD Closure Criteria of 1,000 mg/kg for depth to groundwater between 51 to 100 feet.
- Laboratory analytical results indicated combined TPH-GRO/DRO/MRO concentrations for the delineation soil samples are below the laboratory SDLs and/or the applicable NMOCD Closure Criteria of 2,500 mg/kg for depth to groundwater between 51 to 100 feet.



- Laboratory analytical results indicated chloride concentrations for the delineation soil samples are below the laboratory SDLs and/or the applicable NMOCD Closure Criteria of 10,000 mg/kg for depth to groundwater between 51 to 100 feet.

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

7.0 RECLAMATION AND RE-VEGETATION

Laboratory analytical results associated with the delineation soil samples collected at the Site indicate that all soils left in place are compliant with the applicable NMOCD Closure Criteria. The spill area is located within a facility caliche pad and does not require reclamation or revegetation at this time.

8.0 DEFERRAL REQUEST

Oxy is requesting deferral of final remediation due to the presence of active production equipment, subsurface, and surface lines within the spill area. The impacted soil is limited to the area immediately adjacent to and beneath active production equipment, where remediation would require a major facility deconstruction.

The impacted soil remaining in place beneath the production equipment is delineated vertically to depths ranging from 0.5 to 2 feet bgs based on the applicable NMOCD Closure Criteria for the site. As depicted on **Figure 3** in **Appendix A**, approximately 2,434 square feet of soil is outlined as the proposed reclamation extent utilizing the delineation soil samples collected one to two feet outside of the spill area, which are compliant with the most stringent NMOCD Closure Criteria limits for Total TPH (100 mg/kg) and chloride (600 mg/kg). Upon tank battery pad reclamation, approximately 361 cubic yards (cy) will be removed and taken offsite for proper disposal to meet the reclamation requirements of NMAC 19.15.29.13.D (1).

Oxy does not believe deferral will result in imminent risk to human health, the environment, or groundwater. Depth to groundwater was determined to be greater than 70 feet bgs, and the release remained entirely on-pad immediately adjacent to and underneath active production equipment.

Based on the field observations, field screening activities, and soil sample laboratory analytical results, Oxy is submitting this Deferral Request, describing site assessment and delineation activities that have occurred and requesting deferral of final remediation for EMNRD NMOCD Incident ID: nAPP2404728286 until the Site is reconstructed, and or the tank battery pad is abandoned.

9.0 FINDINGS AND RECOMMENDATION

- On February 12, 2024, Oxy had a release of produced water at the Site due to a pump failure. The pump was isolated, locked, tagged out, and repaired. Approximately 20 bbls of produced water were released onto the surface of the tank battery. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids, with approximately 10 bbls of produced water recovered.
- Ensolum's soil sampling program from June 24, 2024 and July 11, 2024 included the collection of a total of 13 delineation soil samples from 11 locations from within and around the release (PH-01 through PH-03, and SS01 through SS08) for laboratory



analysis. The delineation samples were collected at depths ranging from 0.5 feet to 2 feet bgs.

- The primary objective of the closure activities was to identify the presence or absence of impacted soil with applicable NMOCD Closure Criteria for Soils Impacted by a Release using the New Mexico EMNRD OCD's NMAC 19.15.29 *Releases* as guidance.
- Based on laboratory analytical results, delineation soil samples collected from within and around the release did not exhibit benzene, total BTEX, TPH GRO/DRO/MRO or chloride concentrations above the applicable NMOCD Closure Criteria.

Based on the field observations, field screening activities, and soil sample laboratory analytical results, Oxy is submitting this Deferral Request, describing site assessment and delineation activities that have occurred and requesting deferral of final remediation for EMNRD NMOCD Incident ID: nAPP2404728286 until the Site is reconstructed, and or the tank battery pad is abandoned.

10.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

10.1 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.

10.2 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 in 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.

10.3 Reliance

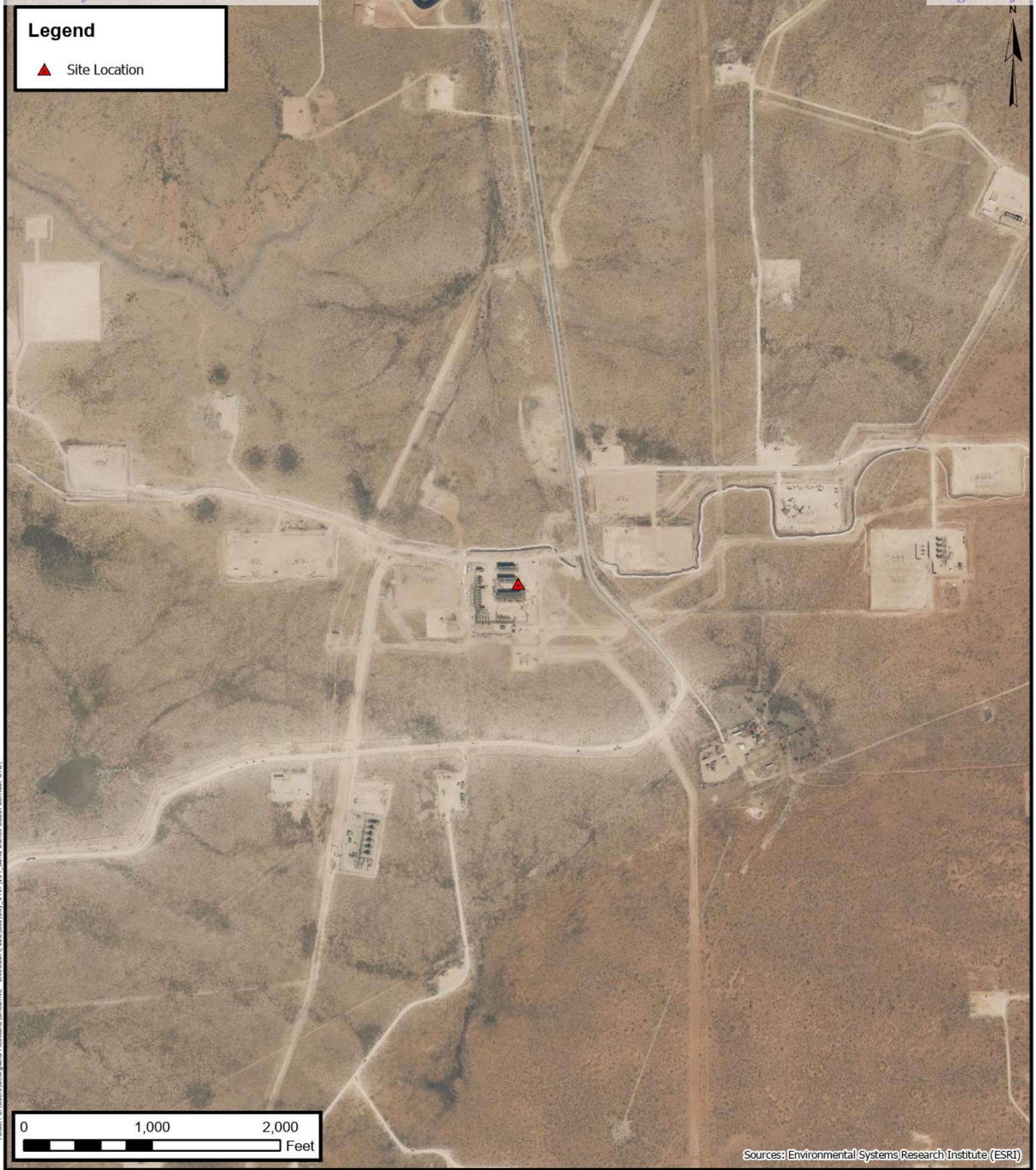
This report has been prepared for the exclusive use of Oxy USA, Inc., and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization of Oxy USA, Inc. and Ensolum. Any unauthorized distribution 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.





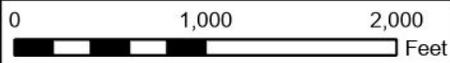
APPENDIX A

Figures



Legend

▲ Site Location



Sources: Environmental Systems Research Institute (ESRI)

Folder: C:\Users\Georgiana McSwane\OneDrive - ENSOLUM, LLC\GIS\Oxy - 1417154_Sand Dunes South Corridor CTB\

Site Vicinity Map
 Oxy USA Inc.
 Sand Dunes South Corridor CTB
 32.223643° N, 103.812787° W
 Eddy County, New Mexico

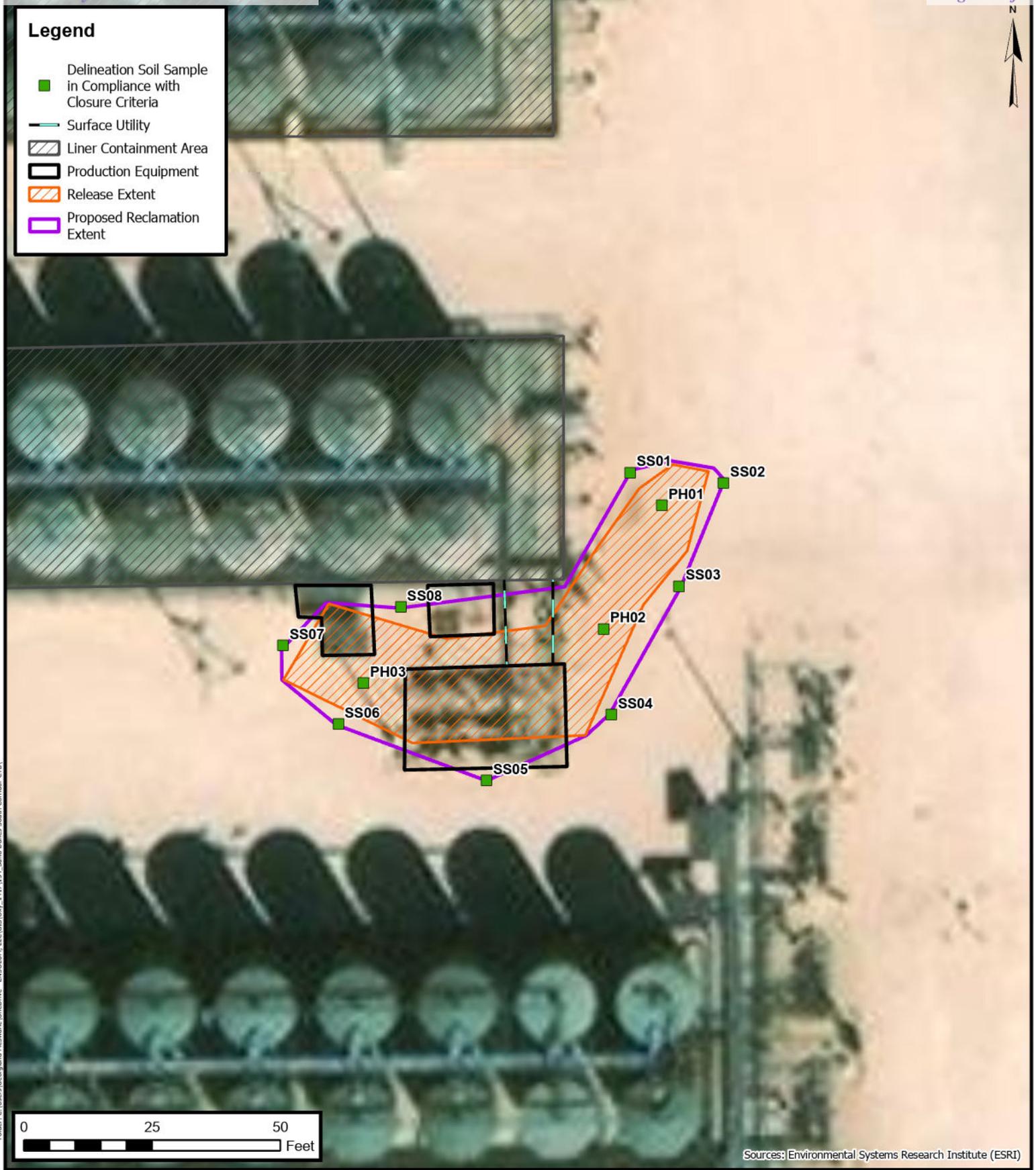
PROJECT NUMBER: 03B1417154

FIGURE
2

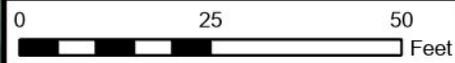


Legend

- Delineation Soil Sample in Compliance with Closure Criteria
- Surface Utility
- Liner Containment Area
- Production Equipment
- Release Extent
- Proposed Reclamation Extent



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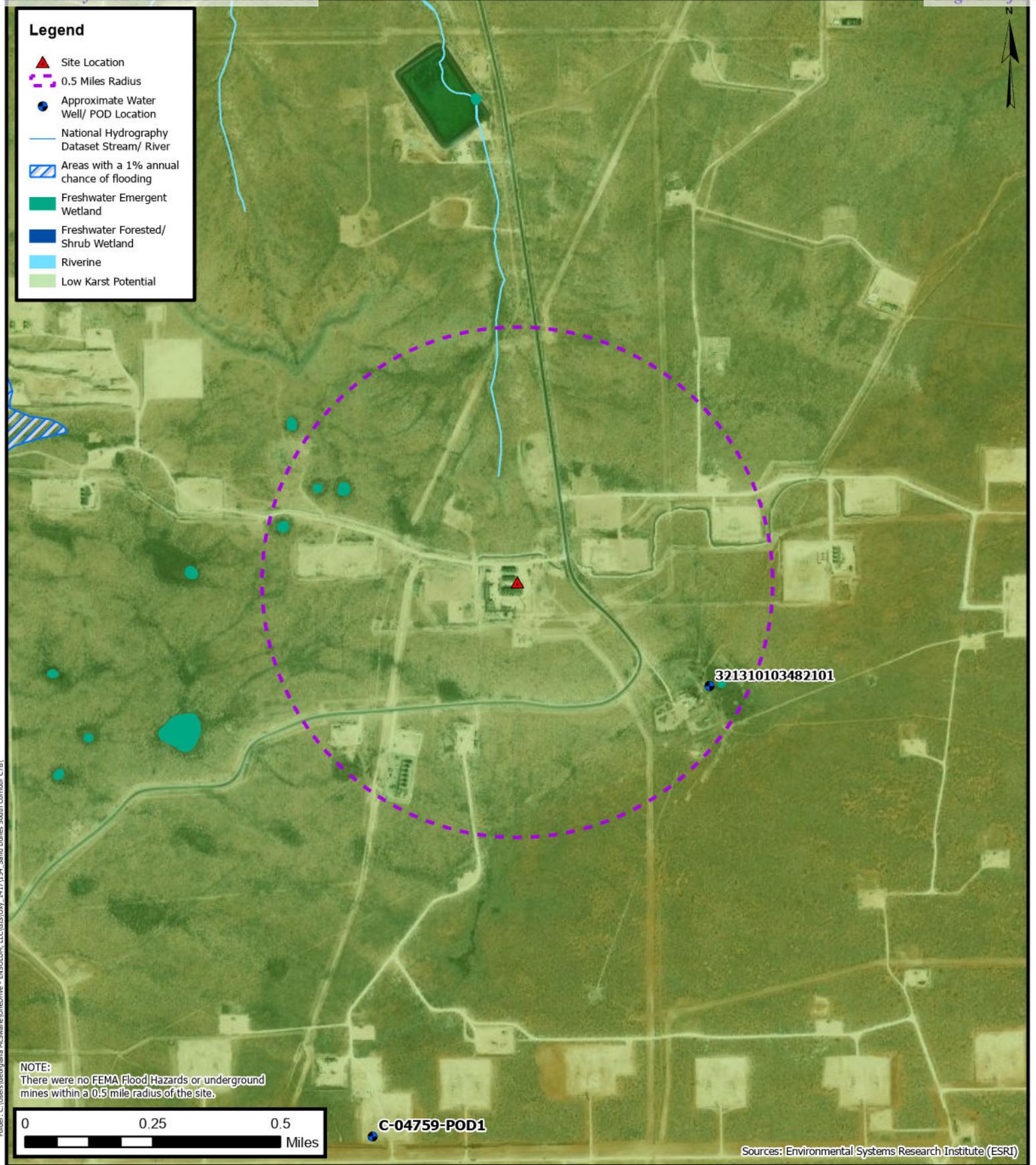
Sources: Environmental Systems Research Institute (ESRI)



Site Map
 Oxy USA Inc.
 Sand Dunes South Corridor CTB
 32.223643° N, 103.812787° W
 Eddy County, New Mexico

PROJECT NUMBER: 03B1417154

FIGURE
3



Folder: C:\Users\Georgiana McSwane\OneDrive - ENSOLUM, LLC\GIS\Day - 1417154_Sand Dunes South Corridor CTB\



Closure Criteria Map

Oxy USA Inc.
 Sand Dunes South Corridor CTB
 32.223643° N, 103.812787° W
 Eddy County, New Mexico

FIGURE

4

PROJECT NUMBER: 03B1417154



APPENDIX B

Supporting Documentation



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hide News Bulletins

- Explore the *NEW* [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 321310103482101

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 321310103482101 24S.31E.17.13120

Eddy County, New Mexico

Latitude 32°13'14.1", Longitude 103°48'23.4" NAD83

Land-surface elevation 3,530.00 feet above NGVD29

This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1959-02-03			D	62610	3459.50	NGVD29	P	Z			A
1959-02-03			D	62611	3461.24	NAVD88	P	Z			A
1959-02-03			D	72019	70.50		P	Z			A
1959-03-25			D	62610	3462.33	NGVD29	1	Z			A
1959-03-25			D	62611	3464.07	NAVD88	1	Z			A
1959-03-25			D	72019	67.67		1	Z			A
1976-12-02			D	62610	3463.98	NGVD29	1	Z			A
1976-12-02			D	62611	3465.72	NAVD88	1	Z			A
1976-12-02			D	72019	66.02		1	Z			A
2013-01-17	21:00 UTC		m	62610	3455.56	NGVD29	1	S	USGS	S	A
2013-01-17	21:00 UTC		m	62611	3457.30	NAVD88	1	S	USGS	S	A
2013-01-17	21:00 UTC		m	72019	74.44		1	S	USGS	S	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Status	P	Pumping
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement		Not determined

Section	Code	Description
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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- [Automated retrievals](#)
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[Accessibility](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

Title: Groundwater for New Mexico: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?>



Page Contact Information: [New Mexico Water Data Maintainer](#)

Page Last Modified: 2024-06-12 14:00:33 EDT

0.34 0.31 nadww01

Kelly Lowery

From: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Sent: Tuesday, May 14, 2024 9:51 AM
To: Kelly Lowery
Cc: wade_dittrich@oxy.com; Tyson_Pierce@oxy.com; Beaux Jennings; Bratcher, Michael, EMNRD; Wells, Shelly, EMNRD; Velez, Nelson, EMNRD
Subject: Extension Request for Sand Dunes South Corridor CTB (Incident ID: nAPP2404728286)

[****EXTERNAL EMAIL****]

RE: Incident #NAPP2404728286

Kelly,

Your request for a 90 day extension to **August 12th, 2024** is approved. 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: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Friday, May 10, 2024 1:31 PM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: FW: [EXTERNAL] Extension Request for Sand Dunes South Corridor CTB (Incident ID: nAPP2404728286)

From: Kelly Lowery <klowery@ensolum.com>
Sent: Friday, May 10, 2024 1:27 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Dittrich, John W <Wade_Dittrich@oxy.com>; Pierce, Tyson (Legacy Safety & Consulting LLC) <tyson_pierce@oxy.com>; Beaux Jennings <bjennings@ensolum.com>
Subject: [EXTERNAL] Extension Request for Sand Dunes South Corridor CTB (Incident ID: nAPP2404728286)

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

Good afternoon,

On behalf of Oxy USA, Inc., Ensolum, LLC would like to request a 90-day extension for the Sand Dunes South Corridor CTB (Incident ID: nAPP2404728286). Excavation activities are currently on-going at the Site but have been delayed due to scheduling challenges with personnel and contractors. We ask that you please approve this extension request for future sampling and subsequent reporting.

Please let us know if you have any questions.

Thank you,



Kelly Lowery, GIT
Project Geologist
214-733-3165
Ensolum, LLC
in f 

Kelly Lowery

From: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Sent: Friday, August 9, 2024 12:34 PM
To: Kelly Lowery
Cc: Dittrich, John W; Pierce, Tyson (The Bergaila Company); Beaux Jennings; Bratcher, Michael, EMNRD; Wells, Shelly, EMNRD; Velez, Nelson, EMNRD
Subject: Final Extension - Sand Dunes South Corridor CTB (Incident ID: nAPP2404728286)

[****EXTERNAL EMAIL****]

RE: Incident #NAPP2404728286

Kelly,

Your request for a 90 day extension to **November 7th, 2024** is approved. This will be the **final extension** for this release. 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: Kelly Lowery <klowery@ensolum.com>
Sent: Friday, August 9, 2024 11:15 AM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Cc: Dittrich, John W <Wade_Dittrich@oxy.com>; Pierce, Tyson (The Bergaila Company) <Tyson_Pierce@oxy.com>; Beaux Jennings <bjennings@ensolum.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Subject: [EXTERNAL] RE: Extension Request - Sand Dunes South Corridor CTB (Incident ID: nAPP2404728286)

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

Yes sir, the Site Characterization for this site was submitted to the NMOCD portal on 2/21/2024. I've attached a Closure Criteria map for reference as well.

Thank you,



Kelly Lowery, GIT
 Project Geologist
 214-733-3165
 Ensolum, LLC
 in f 

From: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrn.nm.gov>
Sent: Friday, August 9, 2024 11:50 AM
To: Kelly Lowery <klowery@ensolum.com>
Cc: Dittrich, John W <Wade_Dittrich@oxy.com>; Pierce, Tyson (The Bergaila Company) <Tyson_Pierce@oxy.com>;
 Beaux Jennings <bjennings@ensolum.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrn.nm.gov>; Wells, Shelly,
 EMNRD <Shelly.Wells@emnrn.nm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrn.nm.gov>
Subject: Extension Request - Sand Dunes South Corridor CTB (Incident ID: nAPP2404728286)

[**EXTERNAL EMAIL**]

RE: Incident #NAPP2404728286

Kelly,

An extension for this incident has already been granted. The OCD will need to see the full Site Assessment/Characterization before another extension can be granted. The OCD needs to know if there are any receptors or possibility of groundwater contamination. Please include attachment, so we can review.

Regards,

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.emnrn.state.nm.us/OCD/>



From: Wells, Shelly, EMNRD <Shelly.Wells@emnrn.nm.gov>
Sent: Friday, August 9, 2024 9:46 AM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrn.nm.gov>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrn.nm.gov>
Subject: FW: [EXTERNAL] Extension Request - Sand Dunes South Corridor CTB (Incident ID: nAPP2404728286)

From: Kelly Lowery <klowery@ensolum.com>
Sent: Friday, August 9, 2024 9:29 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrn.nm.gov>
Cc: Dittrich, John W <Wade_Dittrich@oxy.com>; Pierce, Tyson (Legacy Safety & Consulting LLC)

<tyson_pierce@oxy.com>; Beaux Jennings <bjennings@ensolum.com>

Subject: [EXTERNAL] Extension Request - Sand Dunes South Corridor CTB (Incident ID: nAPP2404728286)

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

Good morning,

On behalf of Oxy USA, Inc., Ensolum, LLC would like to request a 90-day extension for the Sand Dunes South Corridor CTB (Incident ID: nAPP2404728286). Due to delays in scheduling with contractors and various team members, additional excavation activities at the Site have recently been completed to meet the Closure Criteria Limits specific to this location and pending analytical report, we will begin the drafting the Closure for this Site. We humbly ask for an extension so that we may wrap up the Site fully and complete the report so that it can be thoroughly reviewed before submitting the final copy to the portal. Please let us know if you have any questions.

Thank you,



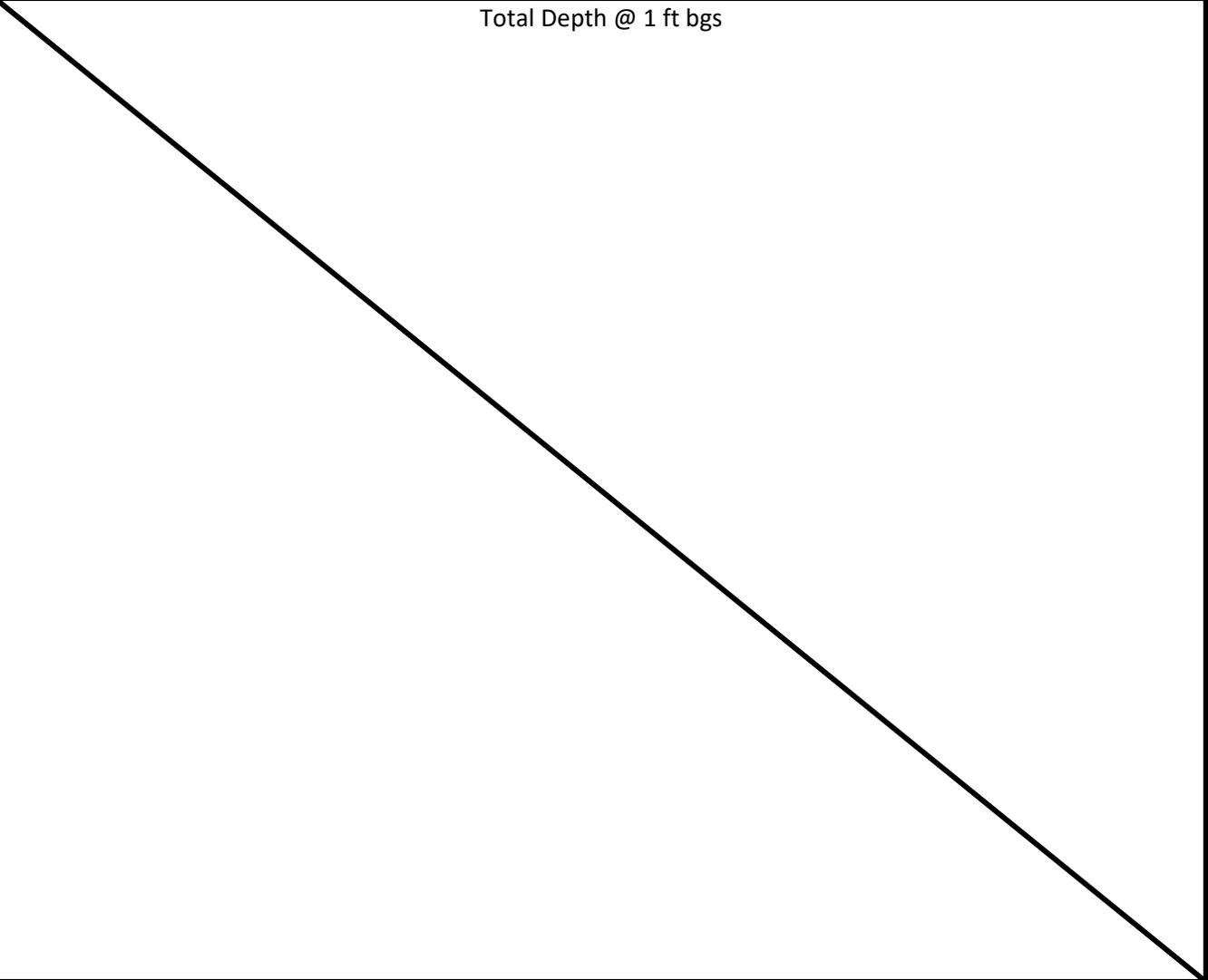
Kelly Lowery, GIT

Project Geologist

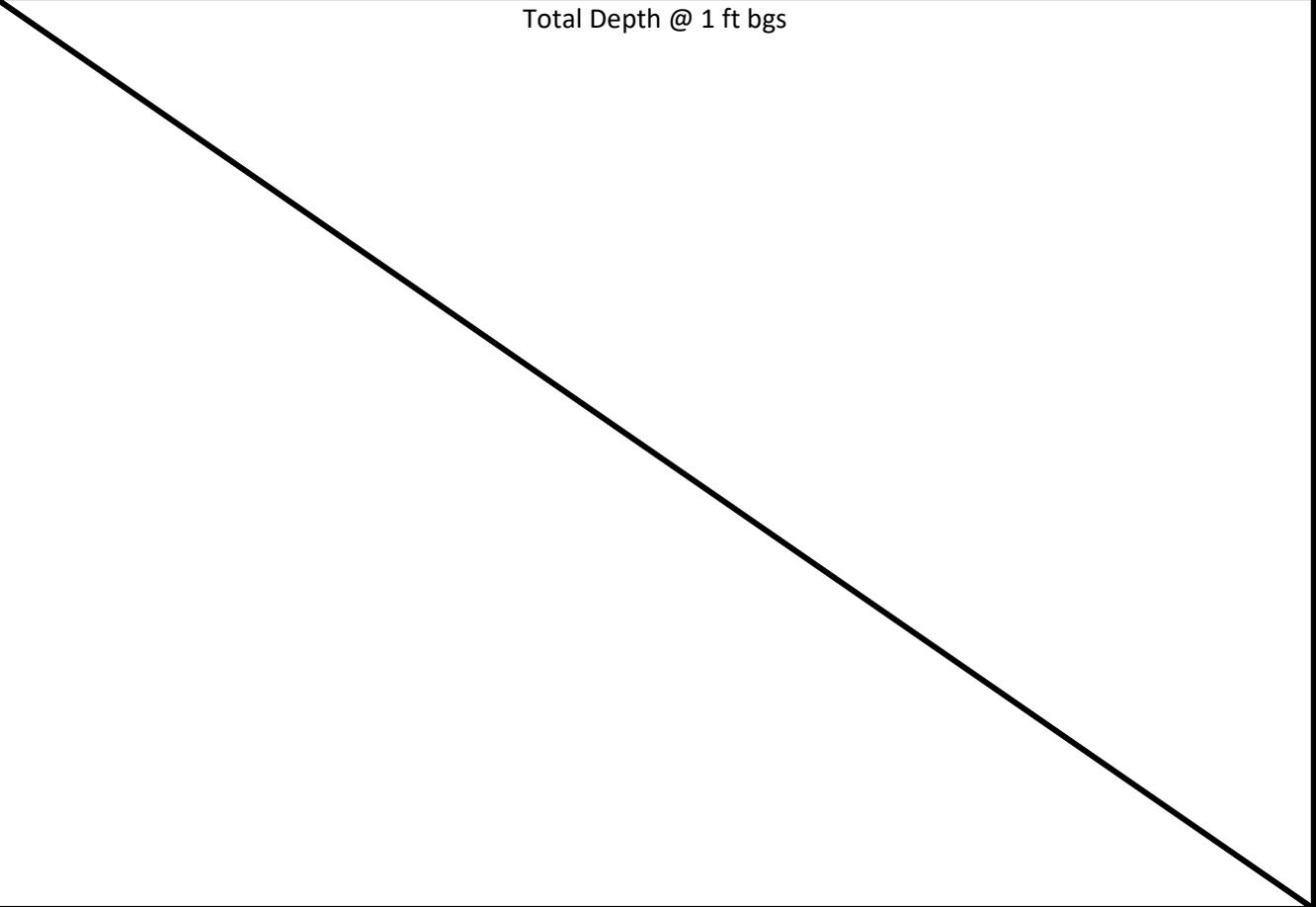
214-733-3165

Ensolum, LLC



					Sample Name: PH-01		Date: 06/24/2024	
					Site Name: Sand Dunes South Corridor CTB			
					Incident Number: nAPP2404728286			
					Job Number: 03B1417154			
LITHOLOGIC / SOIL SAMPLING LOG					Logged By: KS		Method: Hydrovac	
Coordinates: 32.2236569, -103.8128255					Hole Diameter: N/A		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. M-Moist; N-No								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
M	1,439	0.0	N	PH-01	0.5	0.5	CCHE	CALICHE, some sand and large gravel clasts, brown, moist, no odor, no staining.
M	<170	0.0	N	PH-01	1	1	CCHE	SAA, more sand
Total Depth @ 1 ft bgs								
								

					Sample Name: PH-02		Date: 06/24/2024	
					Site Name: Sand Dunes South Corridor CTB			
					Incident Number: nAPP2404728286			
					Job Number: 03B1417154			
LITHOLOGIC / SOIL SAMPLING LOG					Logged By: KS		Method: Hydrovac	
Coordinates: 32.2235921, -103.8128638					Hole Diameter: N/A		Total Depth: 2'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. M-Moist; N-No								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
M	2,895	0.0	N	PH-02	0.5	0.5	CCHE	CALICHE, some sand and large gravel clasts, brown, moist, no odor, no staining.
M	1,142	0.0	N			1	CCHE	SAA, more sand and clay
M	2,049	0.0	N	PH-02	2	2	CL	CLAY, some sand and some gravel, non-cohesive, low plasticity, brown, moist, fine.
Total Depth @ 2 ft bgs								

					Sample Name: PH-03		Date: 06/24/2024	
					Site Name: Sand Dunes South Corridor CTB			
					Incident Number: nAPP2404728286			
					Job Number: 03B1417154			
LITHOLOGIC / SOIL SAMPLING LOG					Logged By: KS		Method: Hydrovac	
Coordinates: 32.2235635, -103.8130154					Hole Diameter: N/A		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. M-Moist; N-No								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
M	<170	0.0	N	PH-03	0.5	0.5	CCHE	CALICHE, some sand and large gravel clasts, brown, moist, no odor, no staining.
M	<170	0.0	N			1	CCHE	SAA, more sand and clay
Total Depth @ 1 ft bgs								
								



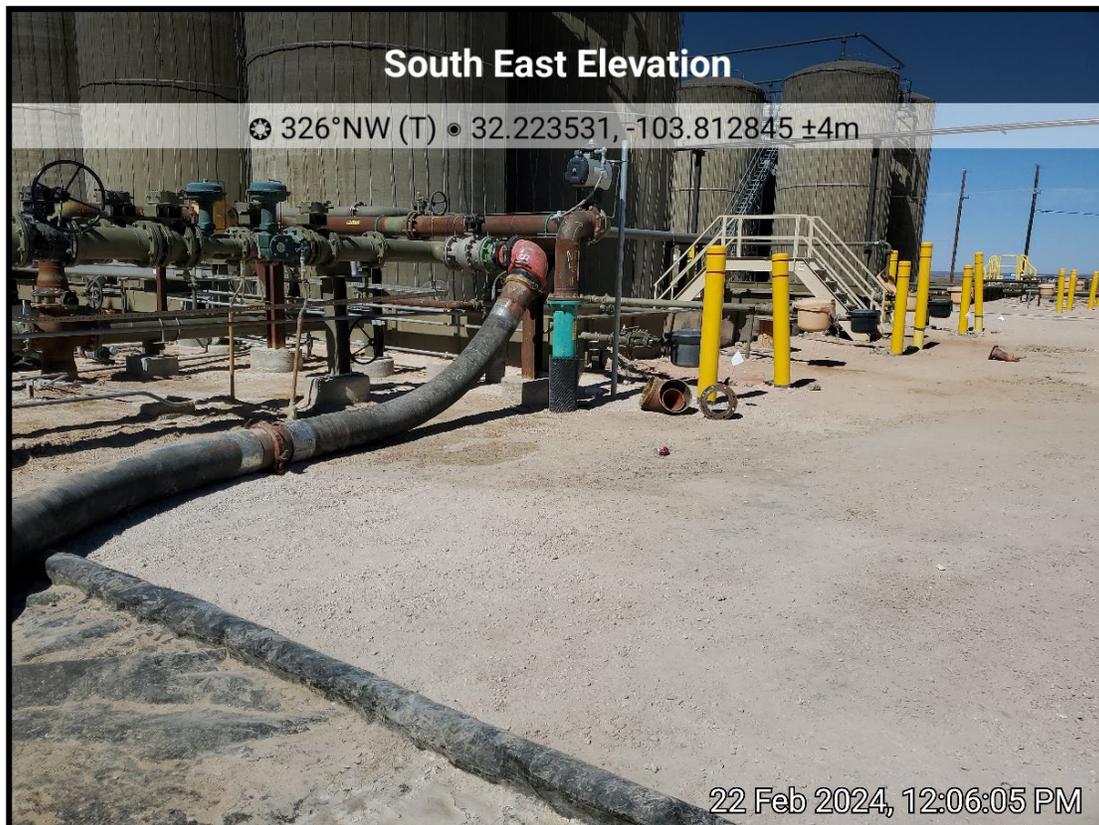
APPENDIX C

Photographic Documentation

Project: Sand Dunes South Corridor CTB
Entity: Oxy USA, Inc.
Incident ID: nAPP2404728286



View of initial release extent prior to delineation activities, facing north (02/22/2024).

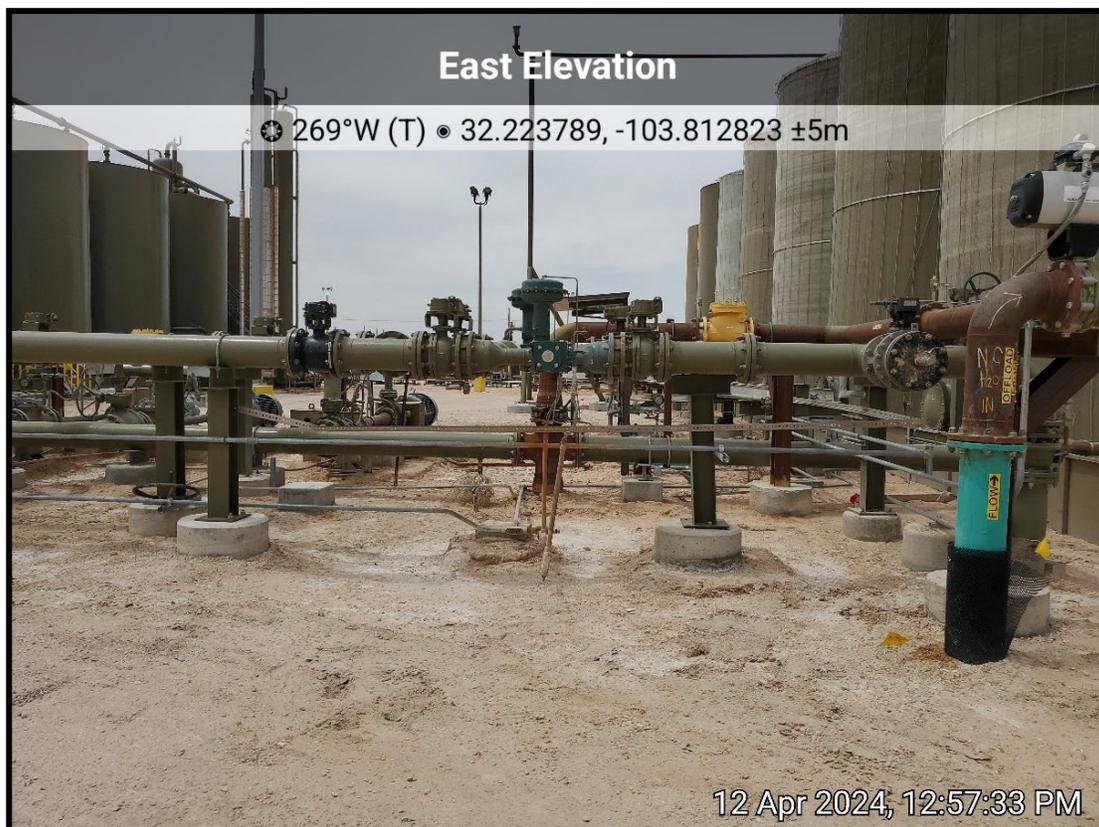


View of initial release extent prior to delineation activities, facing northwest (02/22/2024).

Project: Sand Dunes South Corridor CTB
Entity: Oxy USA, Inc.
Incident ID: nAPP2404728286



View of initial excavation attempt, facing northeast (04/12/2024).



View of initial excavation attempt, facing west (04/12/2024).

Project: Sand Dunes South Corridor CTB
Entity: Oxy USA, Inc.
Incident ID: nAPP2404728286



View of hydrovac pothole PH02 during delineation activities, facing west (06/24/2024).

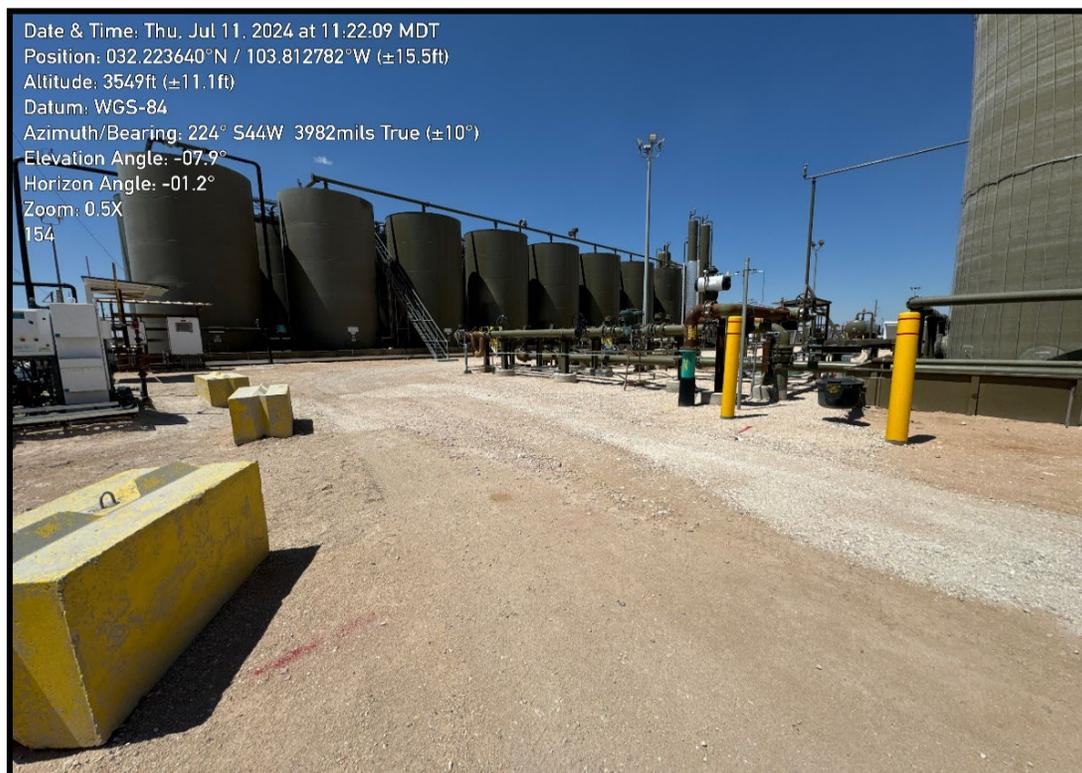


View of hydrovac pothole PH01 during delineation activities, facing west (06/24/2024).

Project: Sand Dunes South Corridor CTB
Entity: Oxy USA, Inc.
Incident ID: nAPP2404728286



View of release extent post backfill activities, facing southwest (07/11/2024).



View of release extent post backfill activities, facing southwest (07/11/2024).



APPENDIX D

Table



TABLE 1
DELINEATION SOIL SAMPLE ANALYTICAL RESULTS
 Sand Dunes South Corridor CTB
 Oxy USA, Inc.
 Eddy County, New Mexico
 Ensolum Project No. 03B1417154

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 (50-100 feet)			10	NE	NE	NE	50	1,000	NE	2,500	10,000	
Pothole Delineation Soil Sample Analytical Results												
PH-01	06/24/2024	0.5	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	1,340
	06/24/2024	1	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	96.0
PH-02	06/24/2024	0.5	<0.050	0.057	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	3,280
	06/24/2024	2	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	2,760
PH-03	06/24/2024	0.5	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	160
Lateral Delineation Soil Sample Analytical Results												
SS01	07/11/2024	0.5	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
SS02	07/11/2024	0.5	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
SS03	07/11/2024	0.5	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
SS04	07/11/2024	0.5	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
SS05	07/11/2024	0.5	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
SS06	07/11/2024	0.5	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
SS07	07/11/2024	0.5	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
SS08	07/11/2024	0.5	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0

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



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

July 05, 2024

KELLY LOWERY
ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND, TX 79705

RE: SAND DUNES SOUTH CORRIDOR CTB

Enclosed are the results of analyses for samples received by the laboratory on 06/24/24 13:06.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. 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 www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2 Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2 Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND TX, 79705	Project: SAND DUNES SOUTH CORRIDOR C Project Number: 03B1417154 Project Manager: KELLY LOWERY Fax To:	Reported: 05-Jul-24 15:36
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Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PH 03 0.5	H243733-01	Soil	24-Jun-24 09:38	24-Jun-24 13:06
PH 02 0.5	H243733-03	Soil	24-Jun-24 10:14	24-Jun-24 13:06
PH 02 2	H243733-05	Soil	24-Jun-24 10:31	24-Jun-24 13:06
PH 01 0.5	H243733-06	Soil	24-Jun-24 10:51	24-Jun-24 13:06
PH 01 1	H243733-07	Soil	24-Jun-24 11:00	24-Jun-24 13:06

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Analytical Results For:

ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND TX, 79705	Project: SAND DUNES SOUTH CORRIDOR C Project Number: 03B1417154 Project Manager: KELLY LOWERY Fax To:	Reported: 05-Jul-24 15:36
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**PH 03 0.5
H243733-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	160		16.0	mg/kg	4	4062855	AC	28-Jun-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4062739	JH	29-Jun-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4062739	JH	29-Jun-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4062739	JH	29-Jun-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4062739	JH	29-Jun-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4062739	JH	29-Jun-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			116 %		71.5-134	4062739	JH	29-Jun-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4062717	MS	28-Jun-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4062717	MS	28-Jun-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4062717	MS	28-Jun-24	8015B	

Surrogate: 1-Chlorooctane			121 %		48.2-134	4062717	MS	28-Jun-24	8015B	
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Surrogate: 1-Chlorooctadecane			131 %		49.1-148	4062717	MS	28-Jun-24	8015B	
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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND TX, 79705	Project: SAND DUNES SOUTH CORRIDOR C Project Number: 03B1417154 Project Manager: KELLY LOWERY Fax To:	Reported: 05-Jul-24 15:36
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**PH 02 0.5
H243733-03 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	3280		16.0	mg/kg	4	4062855	AC	28-Jun-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4062739	JH	29-Jun-24	8021B	
Toluene*	0.057		0.050	mg/kg	50	4062739	JH	29-Jun-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4062739	JH	29-Jun-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4062739	JH	29-Jun-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4062739	JH	29-Jun-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			121 %		71.5-134	4062739	JH	29-Jun-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4062717	MS	28-Jun-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4062717	MS	28-Jun-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4062717	MS	28-Jun-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>			115 %		48.2-134	4062717	MS	28-Jun-24	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			127 %		49.1-148	4062717	MS	28-Jun-24	8015B	
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*=Accredited Analyte

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Analytical Results For:

ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND TX, 79705	Project: SAND DUNES SOUTH CORRIDOR C Project Number: 03B1417154 Project Manager: KELLY LOWERY Fax To:	Reported: 05-Jul-24 15:36
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**PH 02 2
H243733-05 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	2760		16.0	mg/kg	4	4070317	CT	03-Jul-24	4500-CI-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4070235	JH	03-Jul-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4070235	JH	03-Jul-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4070235	JH	03-Jul-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4070235	JH	03-Jul-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4070235	JH	03-Jul-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			97.2 %			71.5-134	4070235	JH	03-Jul-24	8021B
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4070234	MS	03-Jul-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4070234	MS	03-Jul-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4070234	MS	03-Jul-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>			98.4 %			48.2-134	4070234	MS	03-Jul-24	8015B
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<i>Surrogate: 1-Chlorooctadecane</i>			112 %			49.1-148	4070234	MS	03-Jul-24	8015B
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Analytical Results For:

ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND TX, 79705	Project: SAND DUNES SOUTH CORRIDOR C Project Number: 03B1417154 Project Manager: KELLY LOWERY Fax To:	Reported: 05-Jul-24 15:36
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**PH 01 0.5
H243733-06 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	1340		16.0	mg/kg	4	4062855	AC	28-Jun-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4062739	JH	29-Jun-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4062739	JH	29-Jun-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4062739	JH	29-Jun-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4062739	JH	29-Jun-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4062739	JH	29-Jun-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			115 %		71.5-134	4062739	JH	29-Jun-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4062718	MS	27-Jun-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4062718	MS	27-Jun-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4062718	MS	27-Jun-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>			76.1 %		48.2-134	4062718	MS	27-Jun-24	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			80.2 %		49.1-148	4062718	MS	27-Jun-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND TX, 79705	Project: SAND DUNES SOUTH CORRIDOR C Project Number: 03B1417154 Project Manager: KELLY LOWERY Fax To:	Reported: 05-Jul-24 15:36
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**PH 01 1
H243733-07 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	96.0		16.0	mg/kg	4	4070317	CT	03-Jul-24	4500-CI-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4070235	JH	03-Jul-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4070235	JH	03-Jul-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4070235	JH	03-Jul-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4070235	JH	03-Jul-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4070235	JH	03-Jul-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			97.3 %			71.5-134	4070235	JH	03-Jul-24	8021B
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4070234	MS	03-Jul-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4070234	MS	03-Jul-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4070234	MS	03-Jul-24	8015B	

Surrogate: 1-Chlorooctane			97.3 %			48.2-134	4070234	MS	03-Jul-24	8015B
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Surrogate: 1-Chlorooctadecane			109 %			49.1-148	4070234	MS	03-Jul-24	8015B
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Analytical Results For:

ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND TX, 79705	Project: SAND DUNES SOUTH CORRIDOR C Project Number: 03B1417154 Project Manager: KELLY LOWERY Fax To:	Reported: 05-Jul-24 15:36
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Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4062855 - 1:4 DI Water										
Blank (4062855-BLK1) Prepared & Analyzed: 28-Jun-24										
Chloride	ND	16.0	mg/kg							
LCS (4062855-BS1) Prepared & Analyzed: 28-Jun-24										
Chloride	416	16.0	mg/kg	400		104	80-120			
LCS Dup (4062855-BSD1) Prepared & Analyzed: 28-Jun-24										
Chloride	416	16.0	mg/kg	400		104	80-120	0.00	20	
Batch 4070317 - 1:4 DI Water										
Blank (4070317-BLK1) Prepared & Analyzed: 03-Jul-24										
Chloride	ND	16.0	mg/kg							
LCS (4070317-BS1) Prepared & Analyzed: 03-Jul-24										
Chloride	416	16.0	mg/kg	400		104	80-120			
LCS Dup (4070317-BSD1) Prepared & Analyzed: 03-Jul-24										
Chloride	416	16.0	mg/kg	400		104	80-120	0.00	20	

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Analytical Results For:

ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND TX, 79705	Project: SAND DUNES SOUTH CORRIDOR C Project Number: 03B1417154 Project Manager: KELLY LOWERY Fax To:	Reported: 05-Jul-24 15:36
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Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4062739 - Volatiles

Blank (4062739-BLK1)

Prepared: 27-Jun-24 Analyzed: 29-Jun-24

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0576		mg/kg	0.0500		115	71.5-134			

LCS (4062739-BS1)

Prepared: 27-Jun-24 Analyzed: 29-Jun-24

Benzene	1.95	0.050	mg/kg	2.00		97.6	82.8-130			
Toluene	2.14	0.050	mg/kg	2.00		107	86-128			
Ethylbenzene	2.21	0.050	mg/kg	2.00		111	85.9-128			
m,p-Xylene	4.39	0.100	mg/kg	4.00		110	89-129			
o-Xylene	2.21	0.050	mg/kg	2.00		111	86.1-125			
Total Xylenes	6.60	0.150	mg/kg	6.00		110	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	0.0540		mg/kg	0.0500		108	71.5-134			

LCS Dup (4062739-BSD1)

Prepared: 27-Jun-24 Analyzed: 29-Jun-24

Benzene	2.10	0.050	mg/kg	2.00		105	82.8-130	7.21	15.8	
Toluene	2.30	0.050	mg/kg	2.00		115	86-128	7.14	15.9	
Ethylbenzene	2.33	0.050	mg/kg	2.00		117	85.9-128	5.26	16	
m,p-Xylene	4.64	0.100	mg/kg	4.00		116	89-129	5.50	16.2	
o-Xylene	2.34	0.050	mg/kg	2.00		117	86.1-125	5.55	16.7	
Total Xylenes	6.97	0.150	mg/kg	6.00		116	88.2-128	5.52	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	0.0536		mg/kg	0.0500		107	71.5-134			

Batch 4070235 - Volatiles

Blank (4070235-BLK1)

Prepared: 02-Jul-24 Analyzed: 03-Jul-24

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							

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Analytical Results For:

ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND TX, 79705	Project: SAND DUNES SOUTH CORRIDOR C Project Number: 03B1417154 Project Manager: KELLY LOWERY Fax To:	Reported: 05-Jul-24 15:36
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Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4070235 - Volatiles

Blank (4070235-BLK1)

Prepared: 02-Jul-24 Analyzed: 03-Jul-24

Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	ND		mg/kg	0.0500		96.8	71.5-134			

LCS (4070235-BS1)

Prepared: 02-Jul-24 Analyzed: 03-Jul-24

Benzene	1.80	0.050	mg/kg	2.00		90.2	82.8-130			
Toluene	1.79	0.050	mg/kg	2.00		89.4	86-128			
Ethylbenzene	1.83	0.050	mg/kg	2.00		91.5	85.9-128			
m,p-Xylene	3.61	0.100	mg/kg	4.00		90.3	89-129			
o-Xylene	1.78	0.050	mg/kg	2.00		89.2	86.1-125			
Total Xylenes	5.40	0.150	mg/kg	6.00		90.0	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	0.0499		mg/kg	0.0500		99.9	71.5-134			

LCS Dup (4070235-BSD1)

Prepared: 02-Jul-24 Analyzed: 03-Jul-24

Benzene	2.04	0.050	mg/kg	2.00		102	82.8-130	12.4	15.8	
Toluene	2.03	0.050	mg/kg	2.00		102	86-128	12.7	15.9	
Ethylbenzene	2.07	0.050	mg/kg	2.00		103	85.9-128	12.2	16	
m,p-Xylene	4.09	0.100	mg/kg	4.00		102	89-129	12.3	16.2	
o-Xylene	2.01	0.050	mg/kg	2.00		101	86.1-125	12.2	16.7	
Total Xylenes	6.10	0.150	mg/kg	6.00		102	88.2-128	12.2	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	0.0494		mg/kg	0.0500		98.8	71.5-134			

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Analytical Results For:

ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND TX, 79705	Project: SAND DUNES SOUTH CORRIDOR C Project Number: 03B1417154 Project Manager: KELLY LOWERY Fax To:	Reported: 05-Jul-24 15:36
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Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4062717 - General Prep - Organics

Blank (4062717-BLK1)		Prepared & Analyzed: 27-Jun-24								
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	56.6		mg/kg	50.0		113	48.2-134			
Surrogate: 1-Chlorooctadecane	58.3		mg/kg	50.0		117	49.1-148			

LCS (4062717-BS1)		Prepared & Analyzed: 27-Jun-24								
GRO C6-C10	208	10.0	mg/kg	200		104	66.4-123			
DRO >C10-C28	215	10.0	mg/kg	200		108	66.5-118			
Total TPH C6-C28	423	10.0	mg/kg	400		106	77.6-123			
Surrogate: 1-Chlorooctane	61.1		mg/kg	50.0		122	48.2-134			
Surrogate: 1-Chlorooctadecane	68.3		mg/kg	50.0		137	49.1-148			

LCS Dup (4062717-BSD1)		Prepared & Analyzed: 27-Jun-24								
GRO C6-C10	208	10.0	mg/kg	200		104	66.4-123	0.0442	17.7	
DRO >C10-C28	223	10.0	mg/kg	200		112	66.5-118	3.87	21	
Total TPH C6-C28	432	10.0	mg/kg	400		108	77.6-123	2.00	18.5	
Surrogate: 1-Chlorooctane	60.1		mg/kg	50.0		120	48.2-134			
Surrogate: 1-Chlorooctadecane	62.9		mg/kg	50.0		126	49.1-148			

Batch 4062718 - General Prep - Organics

Blank (4062718-BLK1)		Prepared & Analyzed: 27-Jun-24								
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	42.5		mg/kg	50.0		85.1	48.2-134			
Surrogate: 1-Chlorooctadecane	45.6		mg/kg	50.0		91.2	49.1-148			

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Analytical Results For:

ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND TX, 79705	Project: SAND DUNES SOUTH CORRIDOR C Project Number: 03B1417154 Project Manager: KELLY LOWERY Fax To:	Reported: 05-Jul-24 15:36
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Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4062718 - General Prep - Organics

LCS (4062718-BS1)		Prepared: 27-Jun-24 Analyzed: 28-Jun-24								
GRO C6-C10	182	10.0	mg/kg	200		91.2	66.4-123			
DRO >C10-C28	174	10.0	mg/kg	200		87.2	66.5-118			
Total TPH C6-C28	349	10.0	mg/kg	400		87.1	77.6-123			
Surrogate: 1-Chlorooctane	44.9		mg/kg	50.0		89.8	48.2-134			
Surrogate: 1-Chlorooctadecane	47.8		mg/kg	50.0		95.6	49.1-148			

LCS Dup (4062718-BSD1)		Prepared & Analyzed: 27-Jun-24								
GRO C6-C10	174	10.0	mg/kg	200		87.0	66.4-123	4.64	17.7	
DRO >C10-C28	178	10.0	mg/kg	200		88.8	66.5-118	1.81	21	
Total TPH C6-C28	352	10.0	mg/kg	400		87.9	77.6-123	0.927	18.5	
Surrogate: 1-Chlorooctane	45.2		mg/kg	50.0		90.3	48.2-134			
Surrogate: 1-Chlorooctadecane	48.2		mg/kg	50.0		96.5	49.1-148			

Batch 4070234 - General Prep - Organics

Blank (4070234-BLK1)		Prepared: 02-Jul-24 Analyzed: 03-Jul-24								
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	57.9		mg/kg	50.0		116	48.2-134			
Surrogate: 1-Chlorooctadecane	65.9		mg/kg	50.0		132	49.1-148			

LCS (4070234-BS1)		Prepared & Analyzed: 02-Jul-24								
GRO C6-C10	184	10.0	mg/kg	200		92.0	66.4-123			
DRO >C10-C28	182	10.0	mg/kg	200		90.8	66.5-118			
Total TPH C6-C28	366	10.0	mg/kg	400		91.4	77.6-123			
Surrogate: 1-Chlorooctane	58.8		mg/kg	50.0		118	48.2-134			
Surrogate: 1-Chlorooctadecane	65.3		mg/kg	50.0		131	49.1-148			

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Analytical Results For:

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Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4070234 - General Prep - Organics

LCS Dup (4070234-BSD1)

Prepared: 02-Jul-24 Analyzed: 03-Jul-24

GRO C6-C10	189	10.0	mg/kg	200	94.6	94.6	66.4-123	2.84	17.7	
DRO >C10-C28	189	10.0	mg/kg	200	94.5	94.5	66.5-118	4.02	21	
Total TPH C6-C28	378	10.0	mg/kg	400	94.6	94.6	77.6-123	3.43	18.5	
Surrogate: 1-Chlorooctane	59.7		mg/kg	50.0	119	119	48.2-134			
Surrogate: 1-Chlorooctadecane	66.2		mg/kg	50.0	132	132	49.1-148			

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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

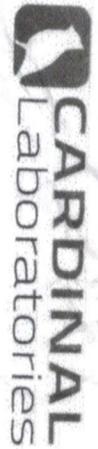
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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Ensolum, LLC
Project Manager: Kelly Lowery
Address: 601 N. Marland St. STE 400
City: Midland **State:** TX **Zip:** 79701
Phone #: 214-733-3165 **Email:** Klowery@ensolum.com
Project #: 03B1917154 **Project Owner:**
Project Name: Sand Dunes South Corridor LTDS
Project Location:
Sampler Name: Koria Skimada
FOR LAB USE ONLY

Company: OXY USA Inc
Address: Hwy Wade District
City:
State:
Zip:
Phone #: 595-350-2828
Email:

BILL TO **ANALYSIS REQUEST**

Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	BTEX	TPH	Chloride	Other
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER: ACID/BASE:						
H843733	PH03	0.5	✓	1							6-24-24	198	X	X	X	
	PH02	0.5	✓	1							154	1014	X	X	X	
	PH02	2	✓	1							1023	1051	X	X	X	
	PH01	0.5	✓	1							1100	1106	X	X	X	
	PH01	2	✓	1							1114	1114	X	X	X	
	PH01	3	✓	1							6-24-24	1114	X	X	X	

REMARKS: Paykey/AE/NO/AF: Hold samples @ 1, 2, 3, 1
 BTEX 8021
 TPH 8015
 Chloride 4500
 Hold Removed to 1/2/24

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Relinquished By: Koria Skimada
Date: 6/24/24
Time: 13:00
Received By: S. Rodriguez
Date: 6/24/24
Time: 13:00

Delivered By: (Circle One) UPS - Bus - Other: UPS
Observed Temp. °C: 29.2
Corrected Temp. °C: 29.2
Sample Condition: Cool Intact
Checked By: SR
Thermometer ID: #140
Correction Factor: -0.2

Verbal Result: Yes No
Add'l Phone #:
Thermometer Type: Standard Bath Cool Ice
Standard (only) Sample Condition: Yes No
Corrected Temp. °C: Yes No

FORM-006 R.3.2 10/07/21

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

July 17, 2024

KELLY LOWERY
ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND, TX 79705

RE: SAND DUNES SOUTH CORRIDOR CTB

Enclosed are the results of analyses for samples received by the laboratory on 07/12/24 8:47.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. 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 www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited 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.

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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, prominent 'C' and 'K'.

Celey D. Keene
Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM, LLC
 KELLY LOWERY
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	07/12/2024	Sampling Date:	07/11/2024
Reported:	07/17/2024	Sampling Type:	Soil
Project Name:	SAND DUNES SOUTH CORRIDOR CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417154	Sample Received By:	Alyssa Parras
Project Location:	OXY 32.223643, -103.812787		

Sample ID: SS01 0.5' (H244170-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2024	ND	1.94	96.8	2.00	0.315	
Toluene*	<0.050	0.050	07/15/2024	ND	1.96	98.1	2.00	0.546	
Ethylbenzene*	<0.050	0.050	07/15/2024	ND	2.09	105	2.00	0.456	
Total Xylenes*	<0.150	0.150	07/15/2024	ND	6.16	103	6.00	0.576	
Total BTEX	<0.300	0.300	07/15/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/15/2024	ND	432	108	400	3.64	

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	07/15/2024	ND	194	97.2	200	1.62	
DRO >C10-C28*	<10.0	10.0	07/15/2024	ND	194	97.2	200	3.72	
EXT DRO >C28-C36	<10.0	10.0	07/15/2024	ND					

Surrogate: 1-Chlorooctane 125 % 48.2-134

Surrogate: 1-Chlorooctadecane 129 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM, LLC
 KELLY LOWERY
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	07/12/2024	Sampling Date:	07/11/2024
Reported:	07/17/2024	Sampling Type:	Soil
Project Name:	SAND DUNES SOUTH CORRIDOR CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417154	Sample Received By:	Alyssa Parras
Project Location:	OXY 32.223643, -103.812787		

Sample ID: SS02 0.5' (H244170-02)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2024	ND	2.14	107	2.00	2.01	
Toluene*	<0.050	0.050	07/15/2024	ND	2.49	124	2.00	4.03	
Ethylbenzene*	<0.050	0.050	07/15/2024	ND	2.73	137	2.00	3.81	
Total Xylenes*	<0.150	0.150	07/15/2024	ND	8.32	139	6.00	3.81	
Total BTEX	<0.300	0.300	07/15/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 123 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/15/2024	ND	432	108	400	3.64	

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	07/15/2024	ND	194	97.2	200	1.62	
DRO >C10-C28*	<10.0	10.0	07/15/2024	ND	194	97.2	200	3.72	
EXT DRO >C28-C36	<10.0	10.0	07/15/2024	ND					

Surrogate: 1-Chlorooctane 125 % 48.2-134

Surrogate: 1-Chlorooctadecane 131 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM, LLC
 KELLY LOWERY
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	07/12/2024	Sampling Date:	07/11/2024
Reported:	07/17/2024	Sampling Type:	Soil
Project Name:	SAND DUNES SOUTH CORRIDOR CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417154	Sample Received By:	Alyssa Parras
Project Location:	OXY 32.223643, -103.812787		

Sample ID: SS03 0.5' (H244170-03)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2024	ND	2.14	107	2.00	2.01	
Toluene*	<0.050	0.050	07/15/2024	ND	2.49	124	2.00	4.03	
Ethylbenzene*	<0.050	0.050	07/15/2024	ND	2.73	137	2.00	3.81	
Total Xylenes*	<0.150	0.150	07/15/2024	ND	8.32	139	6.00	3.81	
Total BTEX	<0.300	0.300	07/15/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 127 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/15/2024	ND	432	108	400	3.64	

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	07/15/2024	ND	194	97.2	200	1.62	
DRO >C10-C28*	<10.0	10.0	07/15/2024	ND	194	97.2	200	3.72	
EXT DRO >C28-C36	<10.0	10.0	07/15/2024	ND					

Surrogate: 1-Chlorooctane 121 % 48.2-134

Surrogate: 1-Chlorooctadecane 130 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC
 KELLY LOWERY
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	07/12/2024	Sampling Date:	07/11/2024
Reported:	07/17/2024	Sampling Type:	Soil
Project Name:	SAND DUNES SOUTH CORRIDOR CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417154	Sample Received By:	Alyssa Parras
Project Location:	OXY 32.223643, -103.812787		

Sample ID: SS04 0.5' (H244170-04)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2024	ND	2.14	107	2.00	2.01	
Toluene*	<0.050	0.050	07/15/2024	ND	2.49	124	2.00	4.03	
Ethylbenzene*	<0.050	0.050	07/15/2024	ND	2.73	137	2.00	3.81	
Total Xylenes*	<0.150	0.150	07/15/2024	ND	8.32	139	6.00	3.81	
Total BTEX	<0.300	0.300	07/15/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 126 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/15/2024	ND	432	108	400	3.64	

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	07/15/2024	ND	194	97.2	200	1.62	
DRO >C10-C28*	<10.0	10.0	07/15/2024	ND	194	97.2	200	3.72	
EXT DRO >C28-C36	<10.0	10.0	07/15/2024	ND					

Surrogate: 1-Chlorooctane 122 % 48.2-134

Surrogate: 1-Chlorooctadecane 127 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM, LLC
 KELLY LOWERY
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	07/12/2024	Sampling Date:	07/11/2024
Reported:	07/17/2024	Sampling Type:	Soil
Project Name:	SAND DUNES SOUTH CORRIDOR CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417154	Sample Received By:	Alyssa Parras
Project Location:	OXY 32.223643, -103.812787		

Sample ID: SS05 0.5' (H244170-05)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2024	ND	2.14	107	2.00	2.01	
Toluene*	<0.050	0.050	07/15/2024	ND	2.49	124	2.00	4.03	
Ethylbenzene*	<0.050	0.050	07/15/2024	ND	2.73	137	2.00	3.81	
Total Xylenes*	<0.150	0.150	07/15/2024	ND	8.32	139	6.00	3.81	
Total BTEX	<0.300	0.300	07/15/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/15/2024	ND	432	108	400	3.64	

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	07/15/2024	ND	194	97.2	200	1.62	
DRO >C10-C28*	<10.0	10.0	07/15/2024	ND	194	97.2	200	3.72	
EXT DRO >C28-C36	<10.0	10.0	07/15/2024	ND					

Surrogate: 1-Chlorooctane 132 % 48.2-134

Surrogate: 1-Chlorooctadecane 138 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM, LLC
 KELLY LOWERY
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	07/12/2024	Sampling Date:	07/11/2024
Reported:	07/17/2024	Sampling Type:	Soil
Project Name:	SAND DUNES SOUTH CORRIDOR CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417154	Sample Received By:	Alyssa Parras
Project Location:	OXY 32.223643, -103.812787		

Sample ID: SS06 0.5' (H244170-06)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2024	ND	2.14	107	2.00	2.01	
Toluene*	<0.050	0.050	07/15/2024	ND	2.49	124	2.00	4.03	
Ethylbenzene*	<0.050	0.050	07/15/2024	ND	2.73	137	2.00	3.81	
Total Xylenes*	<0.150	0.150	07/15/2024	ND	8.32	139	6.00	3.81	
Total BTEX	<0.300	0.300	07/15/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 120 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/15/2024	ND	432	108	400	3.64	

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	07/15/2024	ND	194	97.2	200	1.62	
DRO >C10-C28*	<10.0	10.0	07/15/2024	ND	194	97.2	200	3.72	
EXT DRO >C28-C36	<10.0	10.0	07/15/2024	ND					

Surrogate: 1-Chlorooctane 114 % 48.2-134

Surrogate: 1-Chlorooctadecane 119 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC
 KELLY LOWERY
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	07/12/2024	Sampling Date:	07/11/2024
Reported:	07/17/2024	Sampling Type:	Soil
Project Name:	SAND DUNES SOUTH CORRIDOR CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417154	Sample Received By:	Alyssa Parras
Project Location:	OXY 32.223643, -103.812787		

Sample ID: SS07 0.5' (H244170-07)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2024	ND	2.14	107	2.00	2.01	
Toluene*	<0.050	0.050	07/15/2024	ND	2.49	124	2.00	4.03	
Ethylbenzene*	<0.050	0.050	07/15/2024	ND	2.73	137	2.00	3.81	
Total Xylenes*	<0.150	0.150	07/15/2024	ND	8.32	139	6.00	3.81	
Total BTEX	<0.300	0.300	07/15/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 119 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/15/2024	ND	432	108	400	3.64	

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	07/15/2024	ND	194	97.2	200	1.62	
DRO >C10-C28*	<10.0	10.0	07/15/2024	ND	194	97.2	200	3.72	
EXT DRO >C28-C36	<10.0	10.0	07/15/2024	ND					

Surrogate: 1-Chlorooctane 120 % 48.2-134

Surrogate: 1-Chlorooctadecane 125 % 49.1-148

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM, LLC
 KELLY LOWERY
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	07/12/2024	Sampling Date:	07/11/2024
Reported:	07/17/2024	Sampling Type:	Soil
Project Name:	SAND DUNES SOUTH CORRIDOR CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417154	Sample Received By:	Alyssa Parras
Project Location:	OXY 32.223643, -103.812787		

Sample ID: SS08 0.5' (H244170-08)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2024	ND	2.14	107	2.00	2.01	
Toluene*	<0.050	0.050	07/15/2024	ND	2.49	124	2.00	4.03	
Ethylbenzene*	<0.050	0.050	07/15/2024	ND	2.73	137	2.00	3.81	
Total Xylenes*	<0.150	0.150	07/15/2024	ND	8.32	139	6.00	3.81	
Total BTEX	<0.300	0.300	07/15/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 122 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/15/2024	ND	432	108	400	3.64	

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	07/15/2024	ND	194	97.2	200	1.62	
DRO >C10-C28*	<10.0	10.0	07/15/2024	ND	194	97.2	200	3.72	
EXT DRO >C28-C36	<10.0	10.0	07/15/2024	ND					

Surrogate: 1-Chlorooctane 124 % 48.2-134

Surrogate: 1-Chlorooctadecane 127 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- BS1 Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high.
- 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

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Ensolum, LLC
 Project Manager: Beaux Jennings / Kelly Lowery
 Address: 601 N. Marientfield St. STE 400
 City: Midland State: TX Zip: 79701
 Phone #: 210-219-8858 Fax #: 210-219-8858
 Project #: 03B1417154 Project Owner:
 Project Name: Sand Dunes South Corridor CTB
 Project Location: Loving County
 Sampler Name: Tabitha Givadian
 P.O. #: Company: Oxy USA, Inc.
 Attn: Wade Dittich
 Address:
 City: State: Zip:
 Phone #: 575-390-2828 Fax #:

Lab ID	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	BTEX 8021	TPH 8015	Chloride 4500
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:					
1	SS01	0.5	G	1	X							7/11/24	1100	X	X	X
2	SS02	0.5	G	1	X							7/11/24	1102	X	X	X
3	SS03	0.5	G	1	X							7/11/24	1104	X	X	X
4	SS04	0.5	G	1	X							7/11/24	1106	X	X	X
5	SS05	0.5	G	1	X							7/11/24	1108	X	X	X
6	SS06	0.5	G	1	X							7/11/24	1110	X	X	X
7	SS07	0.5	G	1	X							7/11/24	1112	X	X	X
8	SS08	0.5	G	1	X							7/11/24	1114	X	X	X

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Relinquished By: [Signature] Date: 7/11/24
 Received By: [Signature] Date: 7/11/24
 Delivered By: (Circle One) Observed Temp. °C: 19.0
 Corrected Temp. °C: [Blank]
 Sampler - UPS - Bus - Other: [Blank]
 Sample Condition: Cool Intact Yes No
 Checked By: [Signature] Initials: [Blank]
 Turnaround Time: Standard Rush
 Bacteria (only) Sample Condition: Cool Intact Yes No
 Corrected Temp. °C: [Blank]

REMARKS: SS04 @ 5' 1550's 0.5' Ort water in gas
 custom soil test in run
 AD 7/12/24 848
 AD 7/12/24
 Thermometer ID #449
 Correction Factor 49°C #449
 * Wrote on wrong CDC. 7/12/24

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Oil Conservation Division
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Santa Fe, NM 87505

QUESTIONS

Action 400573

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 400573
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2404728286
Incident Name	NAPP2404728286 SAND DUNES SOUTH CORRIDOR CTB @ 0
Incident Type	Produced Water Release
Incident Status	Deferral Request Received
Incident Facility	[fAPP2127048458] Sand Dunes South Corridor CTB

Location of Release Source	
<i>Please answer all the questions in this group.</i>	
Site Name	SAND DUNES SOUTH CORRIDOR CTB
Date Release Discovered	02/12/2024
Surface Owner	Federal

Incident Details	
<i>Please answer all the questions in this group.</i>	
Incident Type	Produced Water 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	
<i>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.</i>	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure Pump Produced Water Released: 20 BBL Recovered: 10 BBL Lost: 10 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	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, Page 2

Action 400573

QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 400573
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be 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	<i>Unavailable.</i>
<i>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.</i>	

Initial Response	
<i>The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.</i>	
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	<i>Not answered.</i>
<i>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>	
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: Wade Dittrich Title: Environmental Coordinator Email: wade_dittrich@oxy.com Date: 11/07/2024

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QUESTIONS, Page 3

Action 400573

QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 400573
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

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	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between ½ and 1 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1000 (ft.) and ½ (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1000 (ft.) and ½ (mi.)
Any other fresh water well or spring	Between 1000 (ft.) and ½ (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1000 (ft.) and ½ (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between ½ and 1 (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
<i>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.</i>	
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)	3280
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

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	02/12/2024
On what date will (or did) the final sampling or liner inspection occur	07/11/2024
On what date will (or was) the remediation complete(d)	07/11/2024
What is the estimated surface area (in square feet) that will be reclaimed	2434
What is the estimated volume (in cubic yards) that will be reclaimed	361
What is the estimated surface area (in square feet) that will be remediated	2434
What is the estimated volume (in cubic yards) that will be remediated	361

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, Page 4

Action 400573

QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 400573
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Remediation Plan (continued)

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:

(Select all answers below that apply.)

(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	LEA LAND LANDFILL [fEEM0112342028]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.

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

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Wade Dittrich Title: Environmental Coordinator Email: wade_dittrich@oxy.com Date: 11/07/2024
--	---

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

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QUESTIONS, Page 5

Action 400573

QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 400573
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Deferral Requests Only	
<i>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.</i>	
Requesting a deferral of the remediation closure due date with the approval of this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction	Yes
Please list or describe the production equipment and how (re)moving the equipment would cause major facility deconstruction	The spill is immediately adjacent to an active tank battery, truck unloading/loading area, and immediately under active pumps and above/below ground piping. Removing soils would cause structural integrity issues to the surrounding equipment and cause safety issues.
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	2434
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	361
<i>Per Paragraph (2) of Subsection C of 19.15.29.12 NMAC if contamination is located in areas immediately under or around production equipment such as production tanks, wellheads and pipelines where remediation could cause a major facility deconstruction, the remediation, restoration and reclamation may be deferred with division written approval until the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first.</i>	
Enter the facility ID (f#) on which this deferral should be granted	Sand Dunes South Corridor CTB [fAPP2127048458]
Enter the well API (30-) on which this deferral should be granted	Not answered.
Contamination does not cause an imminent risk to human health, the environment, or groundwater	True
<i>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>	
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: Wade Dittrich Title: Environmental Coordinator Email: wade_dittrich@oxy.com Date: 11/07/2024

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QUESTIONS, Page 6

Action 400573

QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 400573
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	361552
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	07/11/2024
What was the (estimated) number of samples that were to be gathered	8
What was the sampling surface area in square feet	1600

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	No
--	-----------

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CONDITIONS

Action 400573

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 400573
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	OXY's deferral requests final remediation for (Incident Number NAPP2404728286) until final reclamation of the well pad or major construction, whichever comes first. Ensolum and OXY do not believe deferment will result in imminent risk to human health, the environment, or groundwater. The impacted soil is outlined as the proposed reclamation extent on figure 3 that is next to active production equipment, subsurface, and surface lines, where remediation would require a major facility deconstruction. At this time, OCD approves this request. The Deferral Request and C-141 will be accepted for record and placed in the incident file. The release will remain open in OCD database files and reflect an open environmental issue.	3/26/2025