ENSOLUM

October 20, 2025

New Mexico Oil Conservation Division
New Mexico Energy, Minerals, and Natural Resources Department
1220 South St. Francis Street
Santa Fe, New Mexico 87505

Re: Remediation Work Plan
MOC SWD SW Battery
Incident Number NAPP2315046261
API: 30-015-21669
Eddy County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Oxy USA Inc. (Oxy), has prepared the following *Remediation Work Plan* to document assessment, delineation, and soil sampling activities completed to date and propose actions to address residual impacted soil identified at the MOC SWD SW Battery (Site), following a release of crude oil and produced water. The following *Remediation Work Plan* proposes to excavate impacted soil identified at the Site.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit K, Section 7, Township 20 South, Range 25 East, in Eddy County, New Mexico (32.586619°, -104.526978°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On May 17, 2023, lightning struck the gun barrel of a produced water tank, resulting in the release of approximately 20 barrels (bbls) of crude oil and 80 bbls of produced water into the containment and onto the surface of the well pad. A vacuum truck was dispatched to the Site to recover free-standing fluids; approximately 10 bbls of crude oil and 40 bbls of produced water were recovered. Oxy reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Notification of Release (NOR) on May 30, 2023. The release was assigned Incident Number nAPP2315046261.

SITE CHARACTERIZATION, KARST SURVEY RESULTS, AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization are summarized below and detailed in the NMOCD permitting portal Form C-141 Site Characterization section. Potential receptors are identified on Figure 1.

On March 20, 2024, a soil boring (SB-15) was advanced by Trinity Oilfield Services to a depth of 55 feet below ground surface (bgs) via hollow-stem auger drill rig. The soil boring was located approximately 190 feet northeast from the Site on the northeast corner of the well pad. No moisture or groundwater was encountered during drilling activities. The temporary well was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 55 feet bgs. The borehole was properly abandoned with drill cuttings and hydrated bentonite chips. The Well Record & Log is included in Appendix A. All wells used for depth to water determination are depicted on Figure 1.

The closest continuously flowing or significant watercourse to the site is a riverine, located approximately 1,191 feet north of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring. The Site is not within a 100-year floodplain. The Site is not overlying a subsurface mine.

Southwest Geophysical Consulting, LLC, a BLM-approved third-party cave/karst contractor, conducted a desktop survey, aerial survey, and geophysical survey of the Site. In summary, no surface karst features within the 200-foot survey area surrounding the release extent were identified in the desktop or surface karst surveys. Results of the geophysical study indicated a well-layered geologic system is present beneath the Site with no anomalies in the data that would be consistent with air-filled subsurface voids or a pathway to groundwater, which was confirmed to be greater than 55 feet bgs in a dry boring advanced approximately 190 feet from the Site.

Based on the results of the karst survey, a lack of sensitive receptors near the Site, and groundwater documented to be greater than 55 feet bgs, Oxy proposes application of the following revised NMOCD Table I Closure Criteria (Closure Criteria), deemed appropriate based on new information obtained for this report:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)- gasoline range organics (GRO) and TPH- diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 10,000 mg/kg

The detailed report provided by Southwest Geophysical Consulting, LLC is included in Appendix B.

DELINEATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

Between January 29, 2025 and April 17, 2025, Site activities were conducted to evaluate the release extent based on information provided on the Form C-141 and visual observations. Five potholes (PH01 through PH05) were advanced via trackhoe and geoprobe. The potholes were advanced to maximum depths ranging from 18 feet to 34 feet bgs. Discrete soil samples were collected from each pothole at depths ranging from 0.25 feet bgs to 34 feet bgs. Additionally, four boreholes (DS01 through DS04) were advanced via geoprobe around the release extent to confirm the lateral extent of the release. The boreholes were advanced to a depth of 34 feet bgs. Discrete soil samples were collected from each borehole at depths ranging from 0.25 feet to 34 feet bgs.

Soil from the potholes and boreholes were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. Field screening results and observations were logged on lithologic soil sampling logs, which are included in Appendix C. The soil sample locations are depicted on Figure 2. Photographic documentation was completed during the Site visits and a photographic log is included in Appendix D.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following Standard Method SM4500 Cl-B.

Laboratory analytical results for potholes PH01 and PH04 indicated chloride and/or TPH concentrations exceeded the Site Closure Criteria at depths ranging from the ground surface to 4 feet bgs. Laboratory analytical results for potholes PH02, PH03, and PH05, indicated all COC concentrations were compliant with the Site Closure Criteria. Laboratory analytical results for boreholes DS01 through DS04 indicated all COCs were compliant with the most stringent Closure Criteria and successfully defined the lateral extent of the release. Laboratory analytical results are presented in Table 1 and the complete laboratory reports and chain-of-custody documentation are presented in Appendix E.

PROPOSED REMEDIATION WORK PLAN

The delineation soil sampling results indicate soil containing elevated TPH and/or chloride concentrations exists across an approximate 1,030 square foot area and extends to a maximum depth of 4 feet bgs. Oxy proposes completing the following remediation activities:

- Excavation of impacted soil to depths ranging from the ground surface to 4 feet bgs. Excavation will proceed laterally until sidewall samples confirm COC concentrations are compliant with the Site Closure Criteria or to the maximum extent practicable (MEP) due to active production equipment and utilities. The proposed excavation extent is shown on Figure 3.
- An estimated 155 cubic yards of impacted soil will be excavated to the MEP. The excavated soil will be transferred a New Mexico approved landfill facility for disposal.
- The excavation will be backfilled and recontoured to match pre-existing conditions.

Oxy will proceed with the excavation and soil sampling activities and will submit a *Closure Report* within 90 days of the date of approval of this *Remediation Work Plan* by the NMOCD.

If you have any questions or comments, please contact Mr. Beaux Jennings at (210) 219-8858 or bjennings@ensolum.com.

Sincerely,
Ensolum, LLC

Hadlie Green
Project Geologist

Beaux Jennings
Associate Principal

cc: Daniel Sparks, Oxy USA Inc.
BLM

Appendices:

Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations
Figure 3	Proposed Excavation Map
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Records
Appendix B	Environmental Karst Study Report
Appendix C	Lithologic Soil Sampling Logs
Appendix D	Photographic Log
Appendix E	Laboratory Analytical Reports & Chain-of-Custody Documentation

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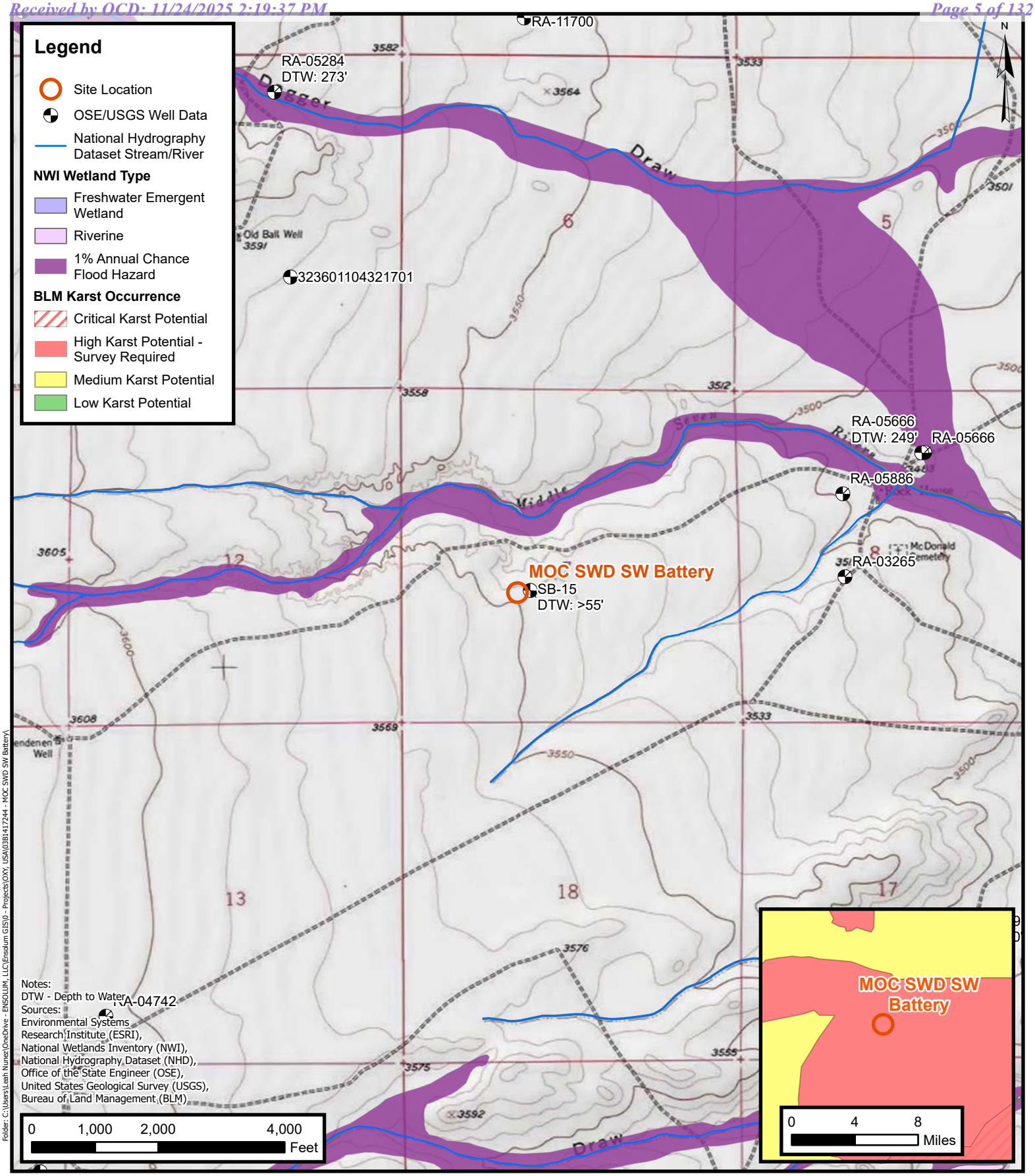
FIGURES



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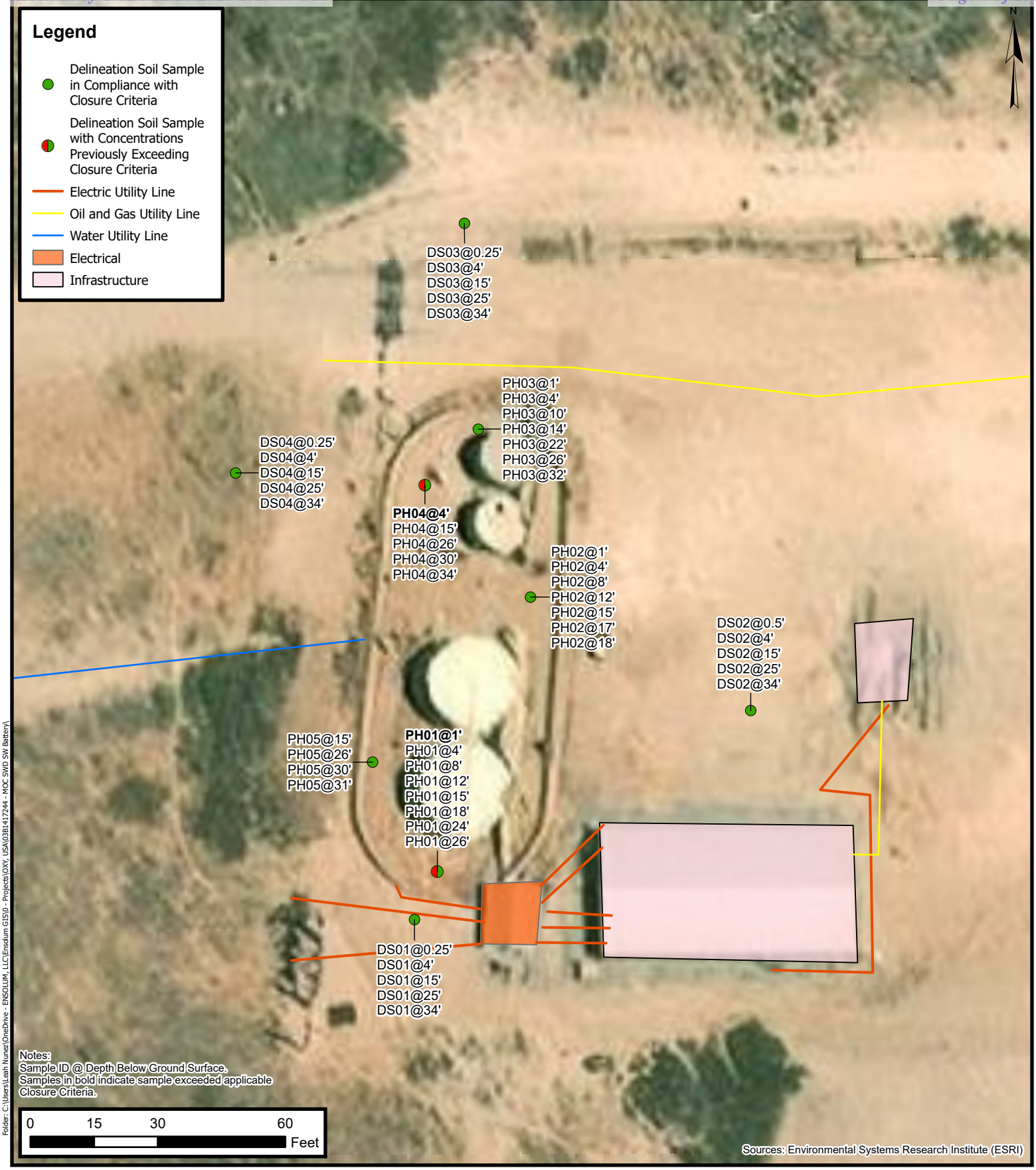
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

Oxy USA Inc.
MOC SWD SW Battery
Incident Number: NAPP2315046261
Unit K, Sec 7, T20S, R25E
Eddy County, New Mexico

FIGURE 1



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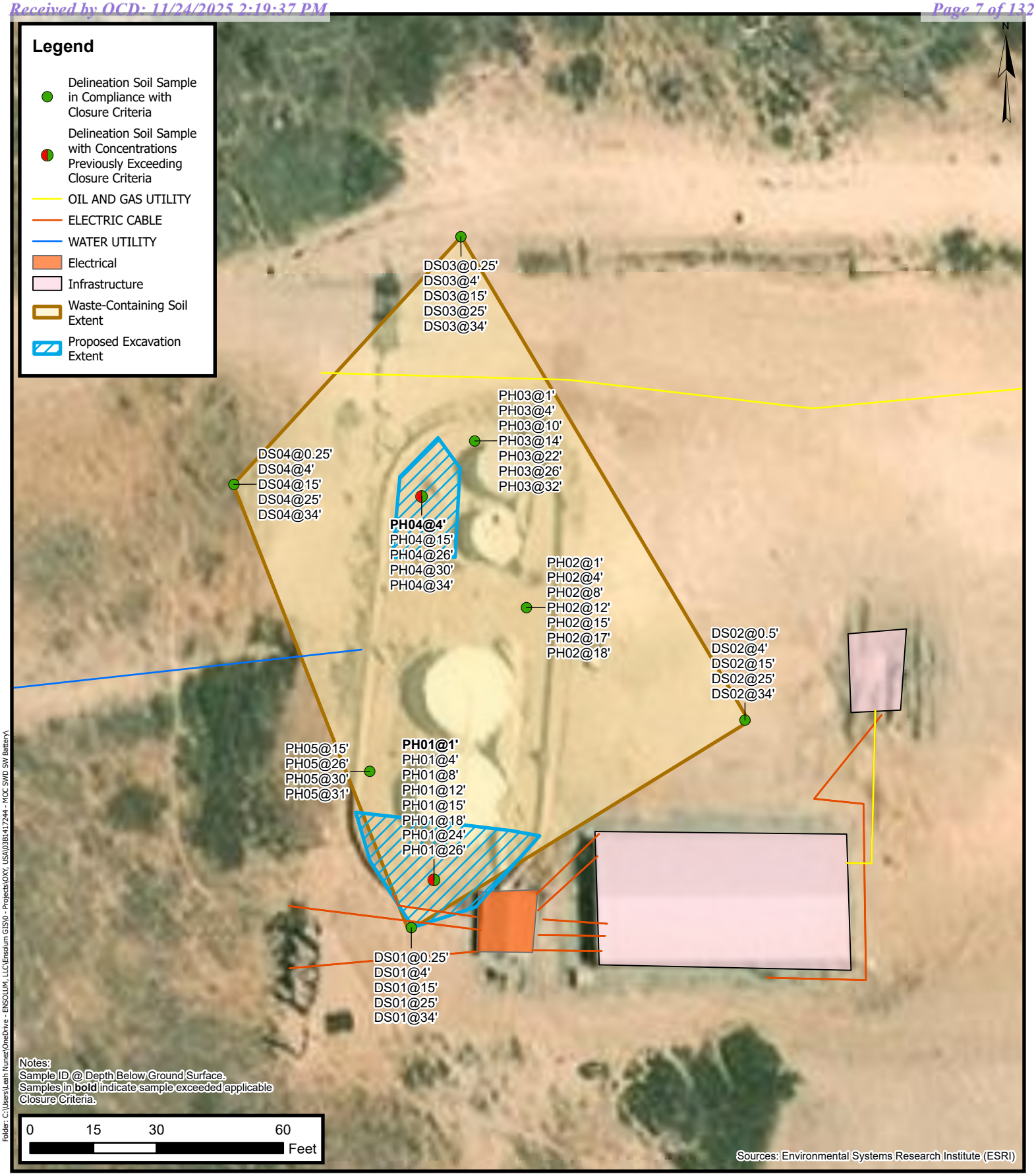
Delineation Soil Sample Locations

Oxy USA Inc.
MOC SWD SW Battery
Incident Number: NAPP2315046261
Unit K, Sec 7, T20S, R25E
Eddy County, New Mexico

FIGURE 2



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Environmental, Engineering and Hydrogeologic Consultants

Proposed Excavation Map

Oxy, USA
MOC SWD SW Battery
Incident Number: NAPP2315046261
32.586619, -103.526978
Eddy County, New Mexico

FIGURE 3

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
MOC SWD SW Battery
Oxy USA Inc.
Eddy County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**NE**	**1,000**	**10,000**
Delineation Soil Samples										
PH01	01/29/2025	1	<0.050	<0.300	<10.0	39.0	<10.0	39.0	39.0	**10,700**
		4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	7,760
		8	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	4,800
		12	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	3,760
		15	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2,680
		18	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2,120
	04/15/2025	24	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,360
		26	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	704
PH02	01/30/2025	1	<0.050	<0.300	<10.0	162	94.5	162	257	9,730
		4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	6,800
		8	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,390
		12	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,470
		15	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	416
		17	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	320
		18	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	528
PH03	02/11/2025	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
		4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
		10	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	288
		14	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	528
	04/16/2025	22	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	6,080
		26	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	6,160
		32	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	3,040

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
MOC SWD SW Battery
Oxy USA Inc.
Eddy County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**NE**	**1,000**	**10,000**
PH04	04/16/2025	4	<0.050	<0.300	38.7	1,520	342	1,559	**1,901**	**14,400**
		15	<0.050	<0.300	<10.0	23.3	13.6	23.3	36.9	6,930
		26	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	4,200
		30	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	4,000
		34	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	3,200
PH05	04/16/2025	15	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	8,560
		26	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,920
		30	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,630
		31	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	3,920
DS01	04/16/2025	0.25	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
		4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
		15	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	512
		25	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	256
		34	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	176
DS02	04/17/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208
		4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	256
		15	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	448
		25	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	228
		34	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	288
DS03	04/16/2025	0.25	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
		4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
		15	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	528
		25	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
		34	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
MOC SWD SW Battery
Oxy USA Inc.
Eddy County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**NE**	**1,000**	**10,000**
DS04	04/17/2025	0.25	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
		4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
		15	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
		25	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
		34	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0

Notes:

bgs: below ground surface
mg/kg: milligrams per kilogram
NMOCD: New Mexico Oil Conservation Division
NMAC: New Mexico Administrative Code
BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
TPH: Total Petroleum Hydrocarbon
*Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation standard where applicable.*

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APPENDIX A

Referenced Well Records

TRINITY
OILFIELD SERVICES

SOIL BORE LOG SB-15

PROJECT NAME MOC SWD SWBAT	**DRILLING DATE** 03/20/2024	**COORDINATES** 32.586715, -104.526318
CLIENT OXY USA, Inc.	**TOTAL DEPTH** 55'	**COORD SYS** NAD 83
		ULSTR K-07-20S-25E
		SURFACE ELEVATION 3552'

COMMENTS Spud on the Northeast side of the MOC SWD #001 Well Pad. Bore Hole was observed to be dry after 72 hrs.

LOGGED BY CJ
CHECKED BY DD

Depth (ft)	Moisture	Material Description	Elevation (ft)
0	D	Light Brown Soil. Dry	3550
5		Reddish Brown Soil. Dry	3545
10		Light Brown Soil. Dry	3540
15		Reddish Brown Soil. Dry	3535
20		Red Soil. Dry	3530
25		Reddish Brown Soil. Dry	3525
30		Light Reddish Brown Soil. Dry	3520
35		Reddish Brown Soil. Dry	3515
40			3510
45			3505
50		Red Soil. Dry	3500
55		Red Soil. Dry	
		Termination Depth at: 55 ft.	3495

Disclaimer This bore log is intended to evidence a depth to groundwater greater than 55'.

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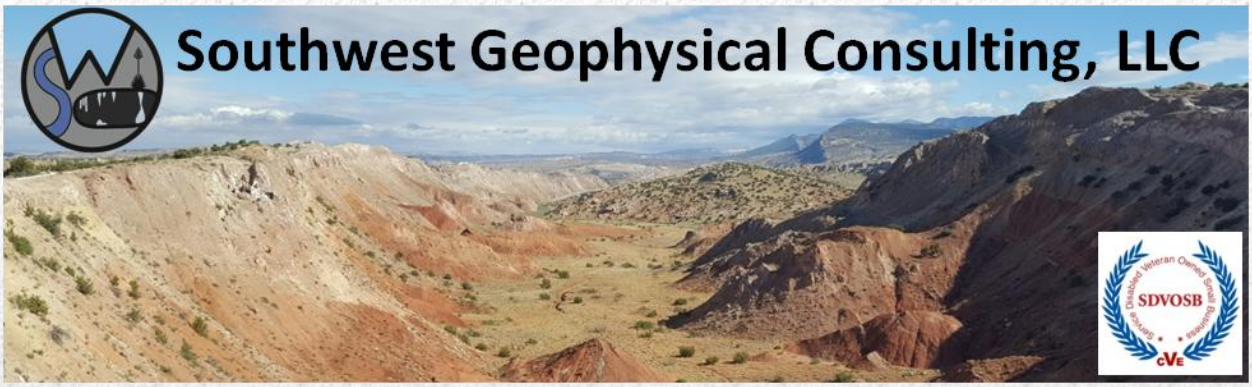
APPENDIX B

Environmental Karst Survey Report



Environmental Karst Study Report
Oxy MOC SWD SWBAT
Eddy County, New Mexico

Prepared For:

Ensolum, LLC
3122 National Parks Highway
Carlsbad, NM 88220

Within 200 feet of the spill delineation boundary:

☑ Negative ☐ Positive for surface karst

☑ Stable ☐ Unstable Ground

☐ Karst Monitor Recommended

July 7, 2025

ENS-011-20250603

Published by:
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MMXXV

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1.0 INTRODUCTION

This report was commissioned by Ensolum, LLC (hereinafter referred to as "the client"), on June 3, 2025, for the purpose of conducting an environmental karst study within an area encompassing the Oxy MOC SWD SWBAT release site (hereinafter termed “SWBAT”) centered at N 32.586497° W 104.527025°.

1.1 Goals of this Study

The goals of this study are to conduct a surface karst inventory and provide the client with the location and description of any surface karst features located within 200 feet (61 meters) of the spill delineation boundary (as defined by 19.15.29.12 NMAC[1]), and to determine whether stable ground exists (as defined by 19.15.2 NMAC Definitions[2]) within the spill delineation boundary of the Oxy MOC SWD SWBAT release as provided by the client via e-mail (**MOC SWD SWBAT Survey Area.kmz**) on June 3, 2025, using electrical resistivity imaging[3].

1.2 Summary of Findings

- **No surface karst features exist within 200 feet (61 meters) of the spill delineation boundary.**
- **No anomalies consistent with subsurface air- or water-filled voids were found within the SWBAT geophysical survey area, indicating the zone beneath the geophysical survey is not subject to collapse.**
- **Well-layered stratigraphy is interpreted to exist beneath the area where the geophysical survey was conducted, indicating stable ground within the 200-foot survey boundary.**

1.3 Affected Environment

The SWBAT project site is located in evaporite karst terrain, a landform that is characterized by underground drainage through solutionally enlarged conduits. Evaporite karst terrain may contain sinkholes, sinking streams, caves, and springs. Sinkholes leading to underground drainages and voids are common. These karst features, as well as occasional fissures and discontinuities in the bedrock, provide the primary sources for rapid recharge of the groundwater aquifers of the region. Additionally, karst may develop by hypogene processes involving dissolution by upwelling fluids from depth independent of recharge from the overlying or immediately adjacent surface. Hypogene karst systems may not be connected to the surface and can remain undiscovered unless encountered during drilling or excavation.

Karst features are delicate resources that are often of geological, hydrological, biological, and archeological importance, and should be protected. The four primary concerns in these types of terrain are environmental issues, worker safety, equipment damage, and infrastructure integrity.

The Bureau of Land Management (BLM) categorizes all areas within the Carlsbad Field Office (CFO) zone of responsibility as having either low, medium, high, or critical cave potential based on geology, occurrence of known caves, density of karst features, and potential impacts to freshwater aquifers[4]. These designations are also recognized by the New Mexico State Land Office (NMSLO). This project occurs within a **HIGH** karst occurrence zone (HKOZ)[5] (**Figure 1**).

A high karst occurrence zone is defined as an area in known soluble rock types that contains a high frequency of significant caves and karst features such as sinkholes, bedrock fractures that provide rapid recharge of karst aquifers, and springs that provide riparian habitat [4].

Due to the rapidity with which evaporite karst develops, each location within a BLM-CFO designated critical or high karst occurrence zone must be assessed on an individual basis to determine the existence of surface karst features and the possibility of sub-surface karst development each time a release occurs.

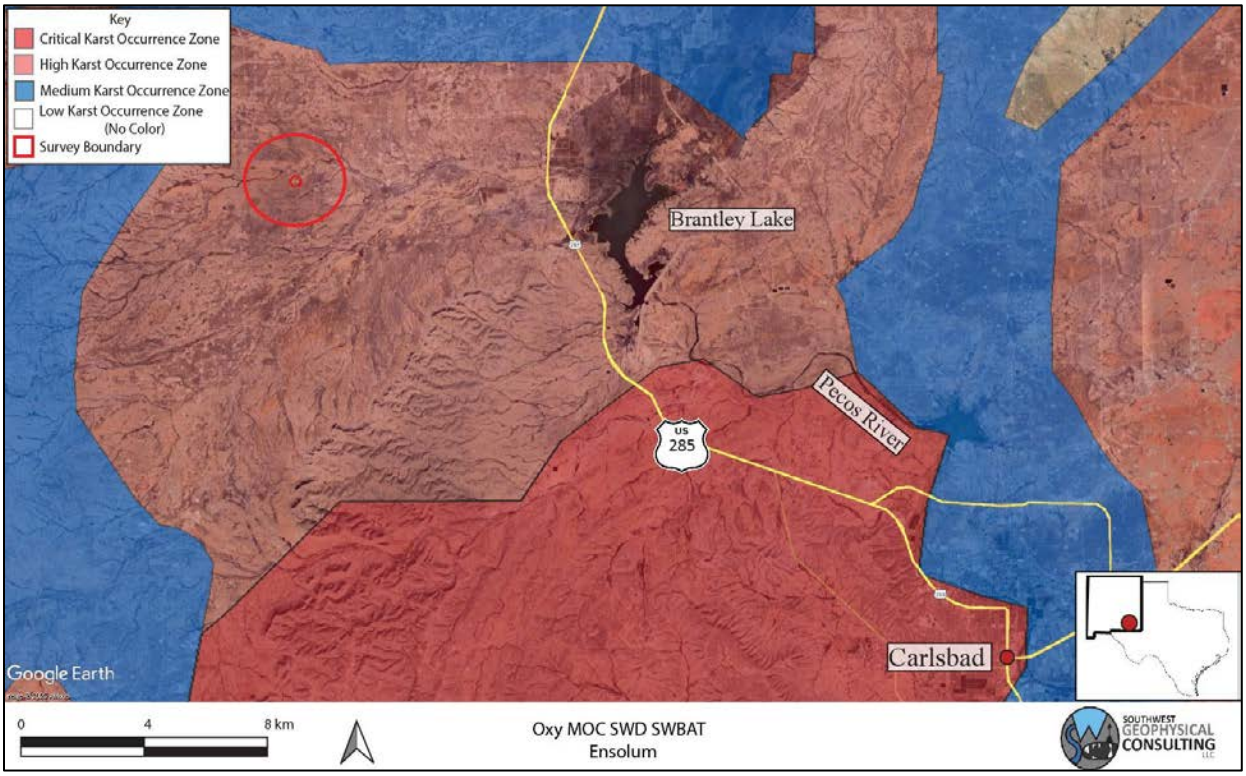

Figure 1: Karst occurrence zone overview. Background image credit: Google Earth. Image date: January 8, 2024. Image datum: WGS-84.

1.4 Limitations of Report

This report should be read in full. No responsibility is accepted for the use of any part of this report in any other context or for any other purpose or by third parties. This report does not purport to give legal advice. Legal advice can only be given by qualified legal practitioners.

This report has been prepared for the use of Ensolum, LLC, in accordance with generally accepted consulting practices. Every effort has been made to ensure the information in this report is accurate as of the time of its writing. This report has not been prepared for use by parties other than the client, their contracting party, and their respective consulting advisors. It may not contain sufficient information for the purposes of other parties or for other uses.

This report was prepared upon completion of the associated fieldwork using a standard template prepared by Southwest Geophysical Consulting and is based on information collected prior to fieldwork, conditions encountered on site, and data collected during the fieldwork and reviewed at the time of preparation. Southwest Geophysical Consulting disclaims responsibility for any changes that might have occurred at the site after this time. The interpreted results, locations, and depths noted in this report (if applicable) should be taken as an interpretation only and no decision should be based solely on this information. Physical verification of aerial imagery analysis results should be conducted in the field prior to using this information for remediation planning. Physical verification of geophysical results using geotechnical methods should be conducted.

To the best of our knowledge, the information contained in this report is accurate at the date of issue. Due to the nature of karst terrain, the information in this report shall not be used beyond two years past the date of the field work provided in section ***2.3 Description of Survey***. Large weather events can shorten this time period as areas subject to karst development can rapidly form new features subsequent to these events.

2.0 LOCATION AND DESCRIPTION OF STUDY AREA

2.1 Description of Site

The site is located 33.7 kilometers (20.9 miles) northwest of Carlsbad, New Mexico, south of Rock Daisy Road and north of Picket Road. The release area is located within the SW ¼ section of section 7, NM T23S R25E[6] (**Figure 1** and **Figure 2**). The region has rolling terrain with karstification occurring in the gypsite and caliche soils and underlying gypsum and dolomite bedrock[7] (see section ***2.2 Local Geology Summary*** for further information). The climate in this area of southeast New Mexico is semi-arid with an average annual precipitation of approximately 13 inches, of which about two-thirds falls as rain during summer thunderstorms from June to October. Summers are hot and sunny while winters are generally mild, with an average maximum temperature of 96°F in July and an average minimum temperature of 28°F in January[8]. This area is within the Chihuahuan Desert Thornscrub as defined by the Southwestern Regional ReGAP Vegetation map[9] and the vegetation consists mostly of areas of blue grama, nine-awned pappus grass, burro grass and low scrub including yucca. The spill delineation boundary is located within an HKOZ[5] (**Figure 1**) and within BLM-CFO managed land[10] (**Figure 2**).

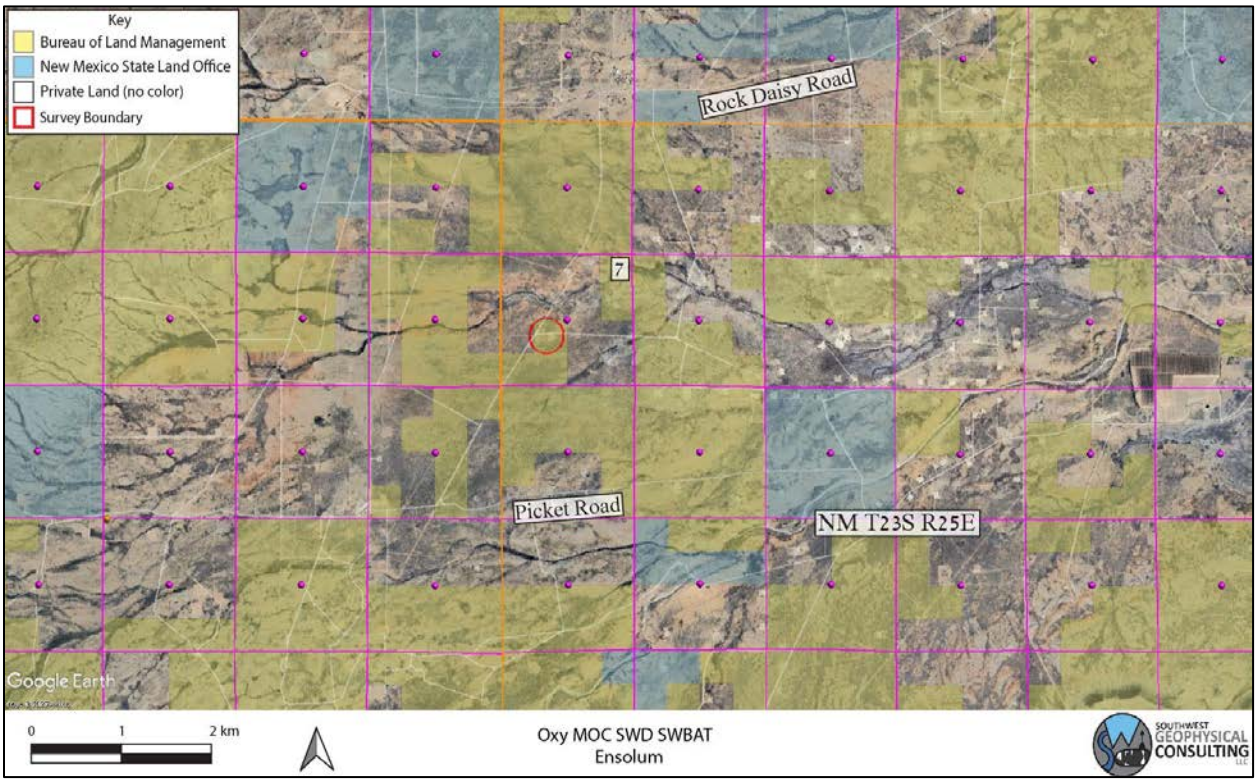

Figure 2: Land ownership and PLSS overview. Background image credit: Google Earth. Image date: January 8, 2024. Image datum: WGS-84.

2.2 Local Geology Summary

The site for the SWBAT survey is located at an elevation of 1,083 meters (3,553 feet), ± 4 meters (13.1 feet). This region is entirely underlain by the lower formations of the Permian Artesia Group. The area is mantled by thin gypsiferous soils (gypsite), carbonate soils (caliche), and Quaternary alluvial piedmont gravels (Qp)[11] up to 5 meters in depth (**Figure 3**).

The Artesia Group consists of the Grayburg and Queen Formations (Pqg), the Seven Rivers Formation (Psr), the Yates Formation (Py – not shown), and the Tansill Formation (Pt – not shown)[12]. At this location, it is most likely that the Seven Rivers Formation immediately underlies the Quaternary units.

The Seven Rivers consists of interbeds of dolomite and gypsum with occasional sandstone lenses and thickly bedded anhydrite. Both the dolomite and gypsum/anhydrite are subject to karst formation. From north to south, the Seven Rivers transitions from an evaporite facies to a basin facies near the reef escarpment[13]. The Seven Rivers overlies the Permian Queen Formation, a calcite rich siliciclastic unit[12]. Beneath the Queen lies the Grayburg, a dolomitic limestone.

The survey area is covered by the easily accessible Geologic Map of New Mexico (2003) at 1:500,000 scale[14] and the Digital Geologic Map of New Mexico in ARC/INFO Format[11].

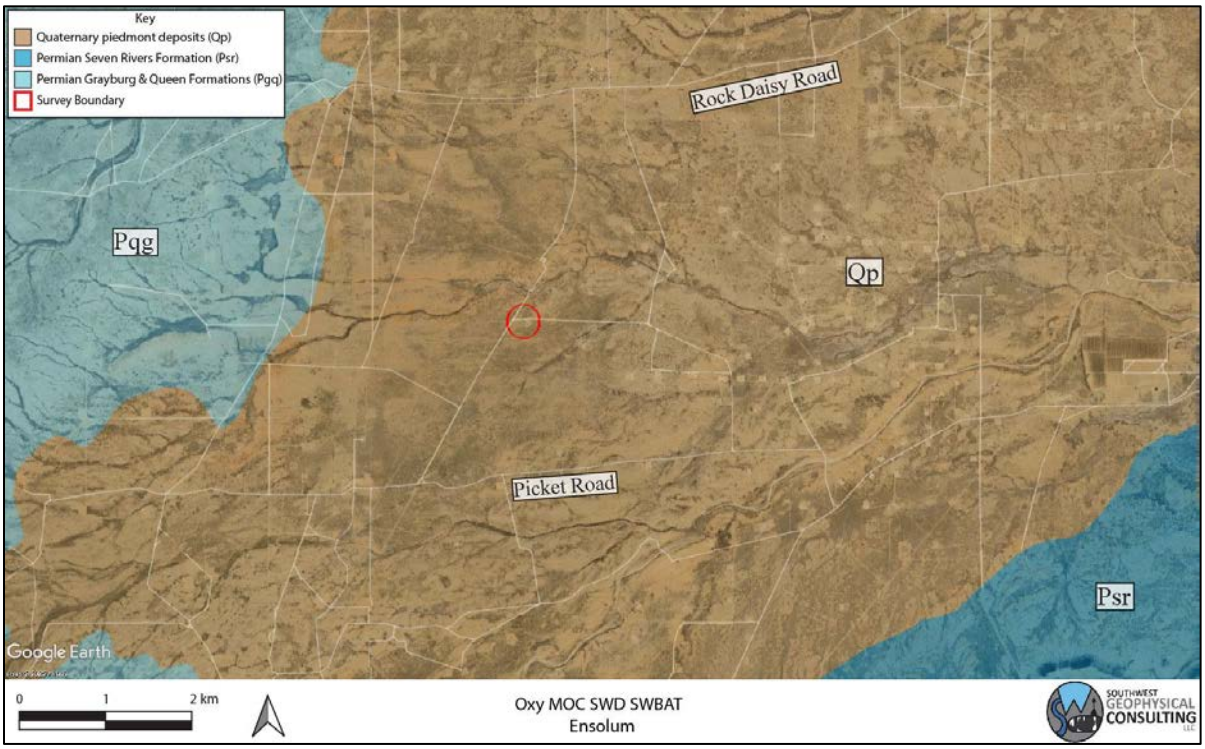

Figure 3: Geology overview. Geology map credit: The Digital Geologic Map of New Mexico in ARC/INFO Format. Background image credit: Google Earth. Image date: January 8, 2024. Image datum: WGS-84.

2.3 Description of Survey

2.3.1 Surface Karst Survey

Southwest Geophysical Consulting, in partnership with SWCA Environmental Consultants, provides surface karst surveys using small, uncrewed aerial systems (sUAS) that are flown by qualified, FAA licensed drone pilots and that meet the stringent Bureau of Land Management – Carlsbad Field Office requirements for both pedestrian and aerial karst surveys.

The surface karst survey includes a desk study prior to the flight which allows us to provide client feedback in the event of any previously known karst features in the area. The desk study is performed out to 305 meters (1,000 feet) from the spill delineation boundary per New Mexico Oil Conservation Division guidance [1] (**Figure 4**). The study was performed using satellite and aerial imagery from Google Earth Pro dated January 8, 2024 (please note features less than one meter in diameter are generally not visible using this method); the Southwest Geophysical Cave and Karst Database dated May 22, 2025[15]; the Foster Ranch, NM, 1:24,000 quad, 1957, USGS topographic map; and the latest lidar imagery from CalTopo.com. Please note that we use older topographic maps because newer maps have had caves removed from them. These searches and queries returned no results within the survey boundary.

Surface karst surveys are conducted by sUAS at low elevation within 200 meters of the spill delineation boundary[4] (**Figure 4**) following a preplanned raster pattern flightpath designed for the purpose of generating at least 75% imagery overlap. The collected high-resolution, georeferenced imagery is stitched together to develop orthomosaic imagery which is further developed into a digital elevation model (DEM); the DEM is then processed into a local relief model (LRM) (**Figure 6**). This LRM is color coded to enhance differences in elevation of as little as five centimeters. The orthoimagery, DEM, and LRM are uploaded to a server where they are analyzed by an experienced karst geologist. Finally, the data is reviewed by a senior karst geologist for quality assurance and downloaded into a table for inclusion in a written report[16].

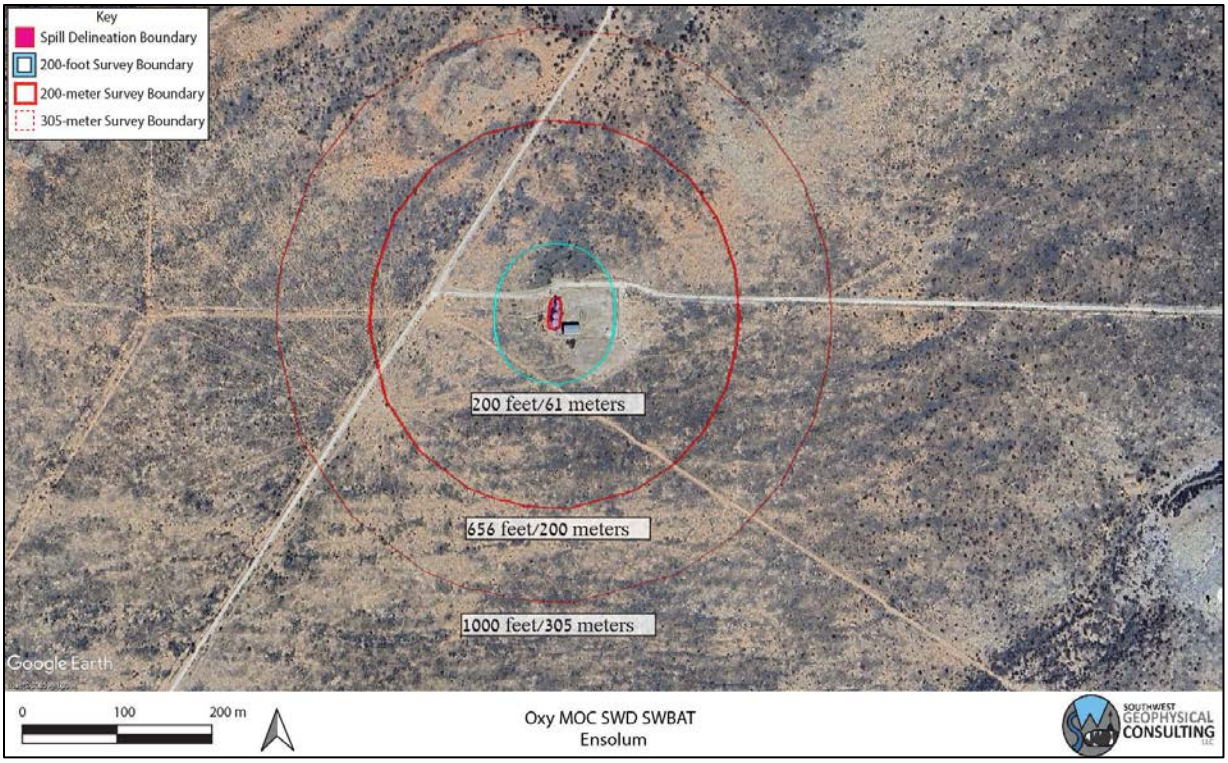

Figure 4: Surface survey overview. Background image credit: Google Earth. Image date: January 8, 2024. Datum: WGS-84.

The resolution of the orthoimagery is clear enough that features as small as 10 centimeters can be positively identified in most circumstances. Occasionally there are ambiguous features identified during an aerial survey that will need to be checked in the field if they are impacted by the proposed remediation efforts. Specifically, it is difficult to tell the difference between solution tubes, abandoned uncased well bores, and some burrows in drone imagery. If an ambiguous feature is located during imagery analysis, it is marked with a yellow dot in **Figure 6**. If a feature of any likelihood is subsequently verified in the field prior to publication of the report, the dot will be changed to a red triangle if confirmed as a karst feature or deleted if not.

The imagery for this study was collected via aerial survey by Pat Lagodney of SWCA on June 5, 2025. Surface karst features may have developed after this date and will not be noted in this report. Imagery analysis was completed by Britt Bommer of Southwest Geophysical Consulting on June 30, 2025.

2.3.2 Geophysical Survey

For this survey, a Guideline Geo Terrameter LS 2 and a 28-electrode array of 40-centimeter-long electrodes were used to image the subsurface. This survey consisted of two resistivity lines in a dipole-dipole configuration; line one is laid out south to north while line two is laid out west to east. Both lines consisted of 28 electrodes at 5-meter spacing, resulting in 135-meter-long arrays (**Figure 5**, **Table 1**). A preconfigured protocol file was used to run the data collection (DipoleDipole2x14). This electrode configuration provided a depth of investigation of 27 meters (89 feet) and a resolution of 2.5 to 3.0 meters (8.2 to 9.8 feet) within the first 5 to 8 meters (16 to 26 feet) from the surface. A Leica GS18 GPS was used to record electrode locations and elevations.

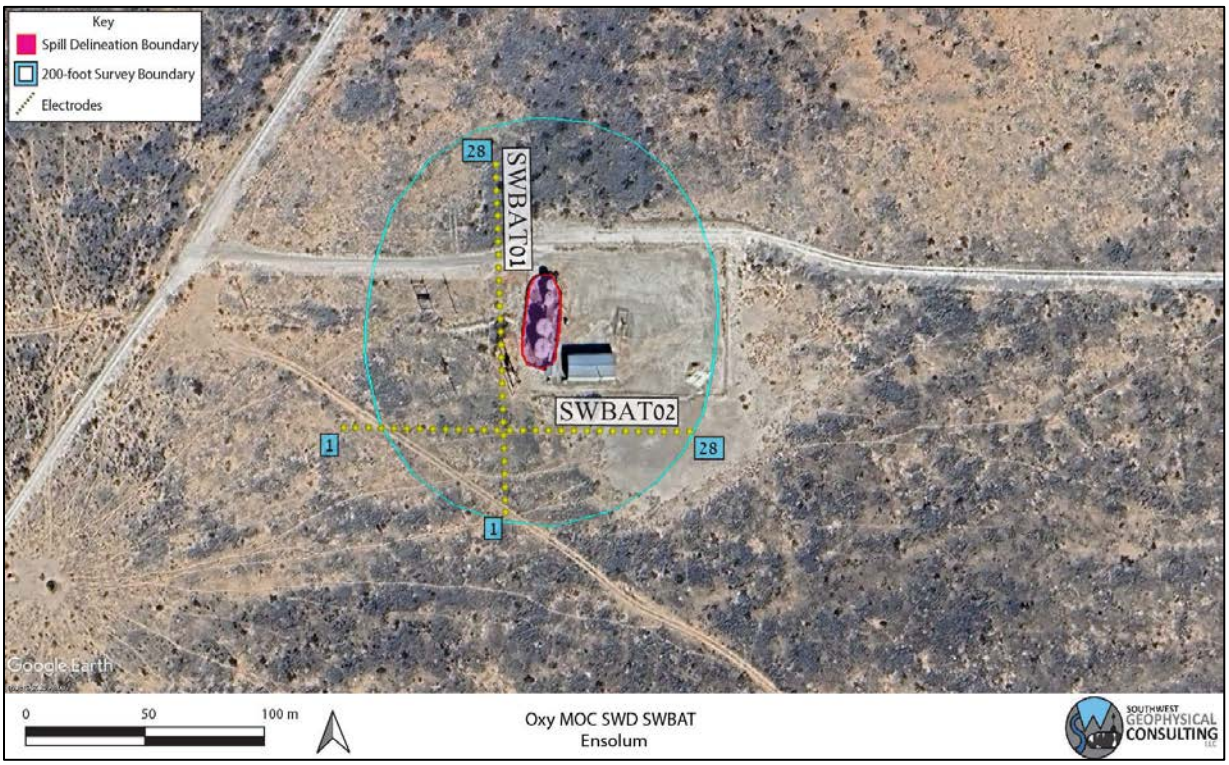

Figure 5: Geophysical survey overview. Two survey lines were conducted with 28 electrodes each at 5-meter spacing (yellow dots denoted with blue numbers). Background image credit: Google Earth. Image date: January 8, 2024. Image datum: WGS-84.

Table 1 provides basic line data. Detailed information including electrode number, location in latitude/longitude (decimal degree format), and elevation in meters can be found in the accompanying data files.

Table 1: Survey Line Data Table. The .kmz file contains all the points for the survey line listed in the file name. These data are available in the accompanying files SWBAT_ERI_Points.xlsx and ENS-011-20250603_SWBAT_Data_Files.kmz.

File Name:	Completed By:	Date:
SWBAT01.kmz	Garrett Jorgensen Olague – Senior Field Geologist Britt Bommer – Field Geologist Steven Kesler – Field Geologist	7/1/2025
SWBAT02.kmz		

EarthImager™ 2D software was used to download and process the data and to provide the model used to make our interpretations. The design of the survey and the orientation of each of the lines provides the information necessary to make the determination of "stable" or "unstable" ground at this site.

A typical starting model was used for the data processing due to the two-layer model of the geology in the area; specifically, generally high-resistivity gypsum and dolomite at the surface and low-resistivity saturated gypsum and dolomite bedrock at depth. The starting model used was "average apparent resistivity" and a default inversion setting of "surface," with a minimum apparent resistivity set to 0.1 Ohm-meters (Ohm-m or Ω-m) and a max apparent resistivity set to 100,000 Ω-m (**Table 2**).

Table 2: Software Information and Settings

Software Name:	EarthImager™ 2D
Version:	2.4.4.649
Starting Model:	Average Apparent Resistivity
Default Inversion Settings:	Surface
Changes to Default Inversion Settings:	Max Apparent Resistivity = 100 kΩ-m Min Apparent Resistivity = 0.1 Ω-m

Note: Raw data files (.dat files for EarthImager™ 2D) and processed data (.trn files, terrain files for surface correction in EarthImager™ 2D and .out files, the processed .dat files) are available upon request.

All field work, including setup, stow, and travel, was completed by Garrett Jorgensen Olague, Britt Bommer, and Steven Kesler on July 1, 2025.

3.0 RESULTS

3.1 Surface Karst Survey

The desk study and surface karst survey showed no surface karst features located within the 200-foot (61-meter)[1] survey area surrounding the spill delineation boundary (**Figure 6**).

No springs or other karst features exist within the 305-meter (1,000-foot)[1] survey boundary (**Figure 6**).

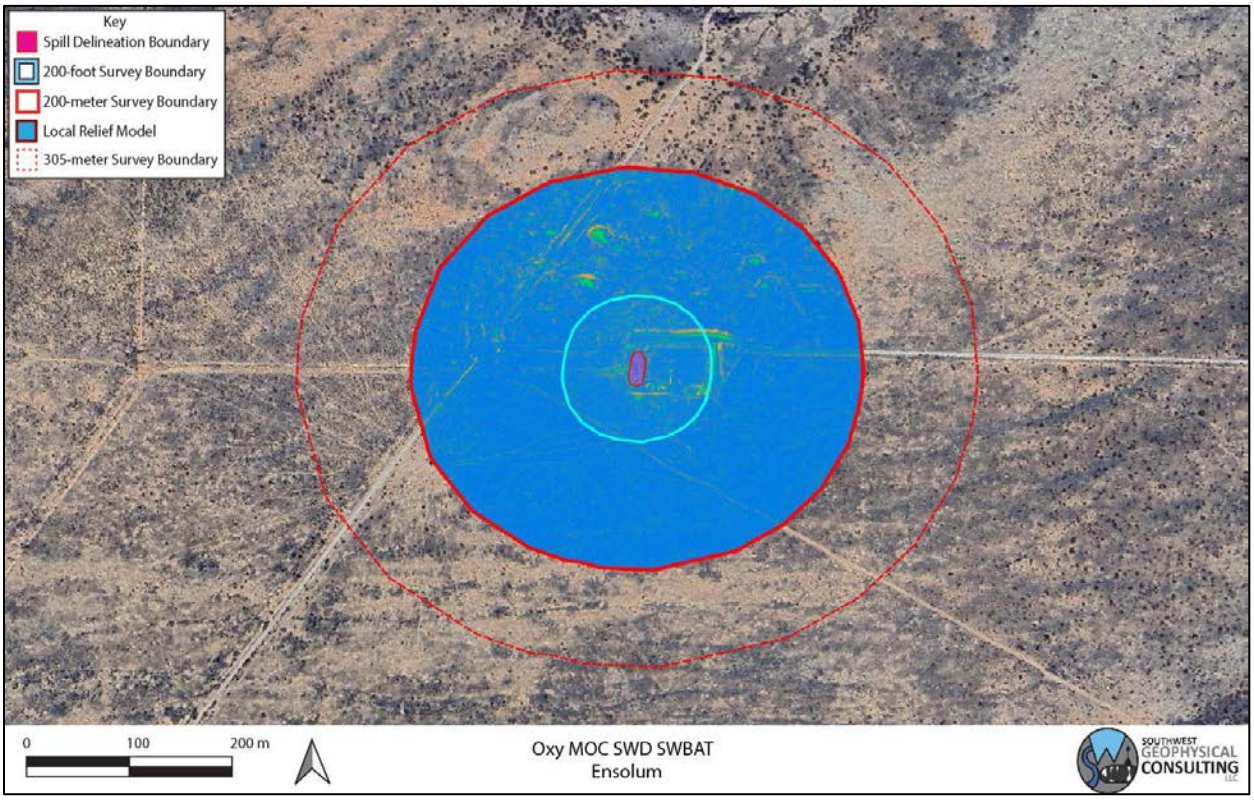

Figure 6: Surface karst survey results. Background image credit: Google Earth. Image date: January 8, 2024. Image datum: WGS-84.

3.2 Geophysical Survey

Electrical resistivity tomography forms images of the subsurface by causing a current to flow through the rock and soil and then measuring the resistance of these materials as the current flows through them. This measurement is taken many times and the resulting data, once processed, is used to produce a model of the subsurface (**Figure 7**). This model is produced using "non-unique" solutions, which means that there are many models and interpretations which will satisfy the data. Using experience and knowledge of the local geology, a high-confidence model can be established and used to develop an accurate understanding of what lies below the surface. This survey was conducted with the express purpose of locating subsurface voids and does not purport to find paleokarst (old, non-active karst features that have been filled in with sand and sediment) or nascent karst features below the resolution limit of the survey.

The results of this study indicate a well-layered geologic system with low resistivities between 2.0 and 129 Ohm-m (**Figure 7**). Please keep in mind when viewing the 2D inverted resistivity sections that color maps can be widely different for each view. Always check the color map located on the right side of the image when viewing the 2D images to ensure you understand the range of resistivities presented. Distances along the top and depths along the left side are in meters. The color map along the right side is in Ohm-m. Due to the nature of the survey, shallower zones have higher resolution between electrodes than deeper zones; therefore, small features at depth will not be visible.

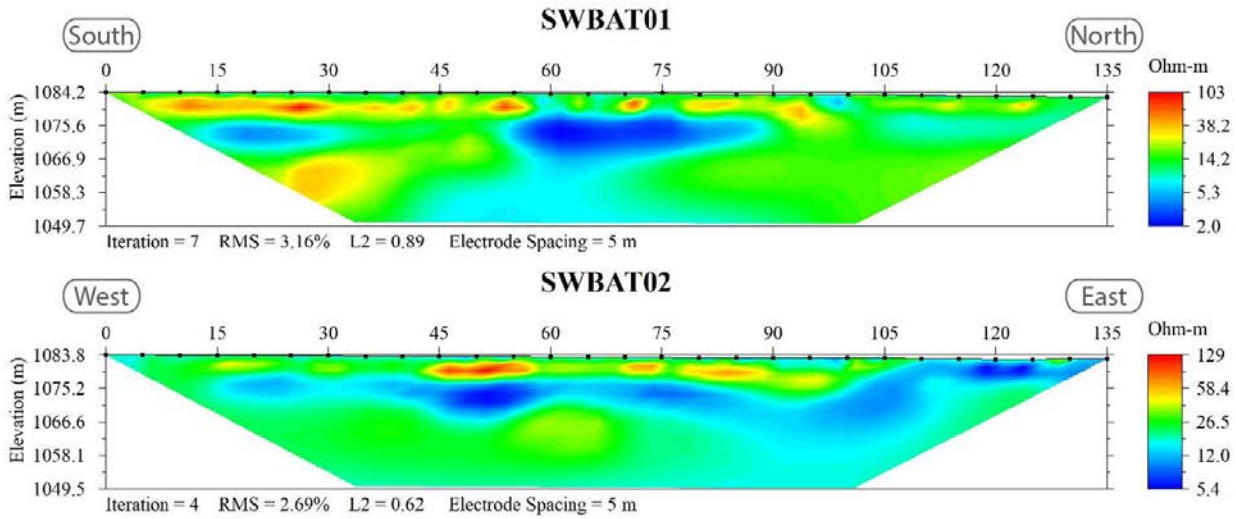

Figure 7: 2D inverted resistivity section. Reds and oranges indicate higher resistivity values. Yellows and greens are medium-resistivity values. Blues are low-resistivity values. Please note that the color scale is relative.

4.0 DISCUSSION

No surface karst features and no anomalies consistent with air-filled subsurface voids are found within the SWBAT survey area. However, small solutionally enlarged voids or fractures at or near the resolution limit of the survey (2.5 – 3.0 meters) may be present. (**Figure 7** and **Figure 8**).

Very low-resistivity areas between 2 – 10 Ohm-m may either represent fluid from the brine release, surface-to-subsurface hydrologic pathways, or a layer of either clays and halite lenses or moist to saturated layers within the Seven Rivers Formation (**Figure 7**).

Please remember that these are interpretations made from knowledge of the local subsurface materials and experience. **They remain interpretations until verified by geotechnical methods.** Employing a BLM-CFO approved karst monitor on site during any drilling and/or remediation activities that require excavation below four feet in depth should be considered.

Fracture sets within the subsurface can act as hydrologic pathways to the water table. Rapid dissolution of gypsum can occur along these pathways creating solution-enlarged fractures, and in some cases, voids within months to years. For this reason, this survey is valid only for this remediation event.

Within karst terrains like the project site, small air- or sediment-filled voids and/or brecciated zones and solutionally enlarged fractures that are below the resolution limit of the survey (2.5 – 3.0 meters) may exist; these may be encountered during excavation, and if so, should be evaluated by a karst specialist prior to continued work.

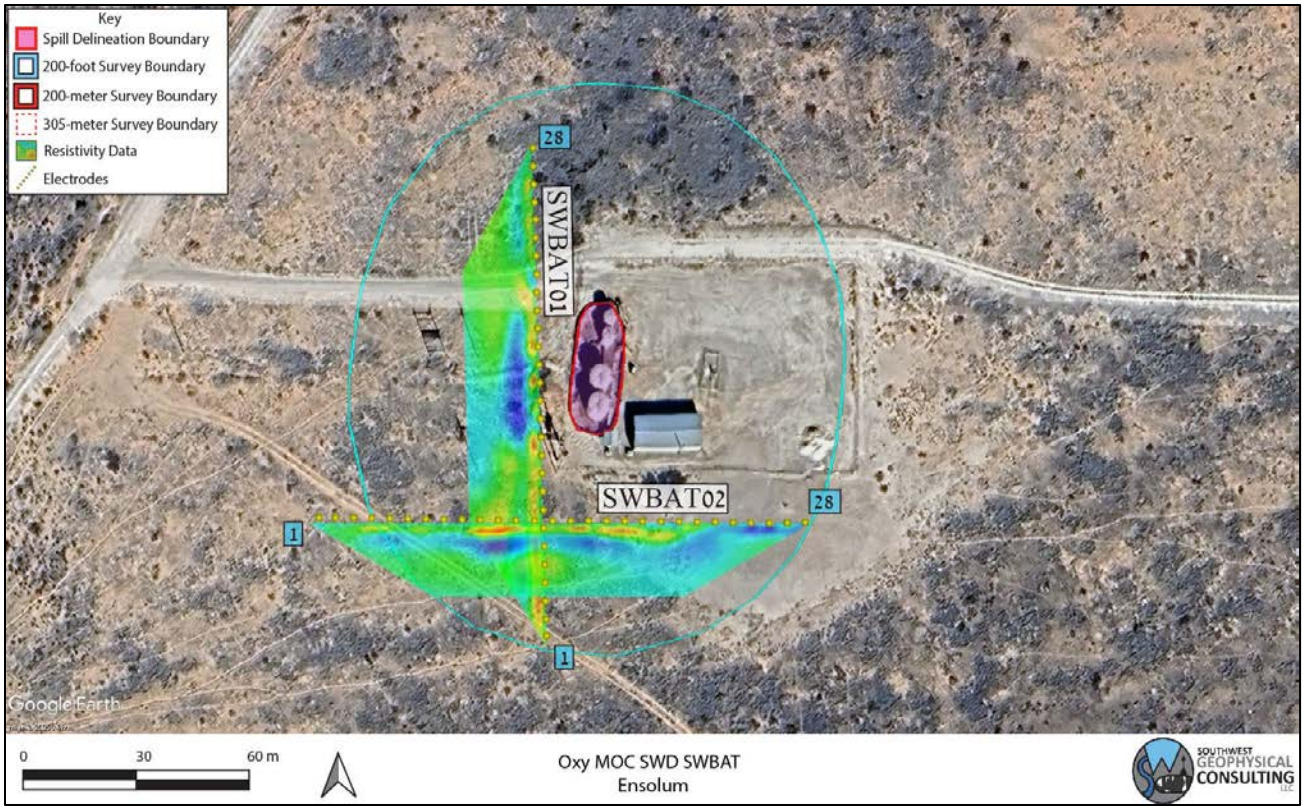

Figure 8: Data overlay. Colored trapezoids are the 2D inverted resistivity lines. Background image credit: Google Earth. Image date: January 8, 2024.

5.0 SUMMARY

- **The SWBAT survey contains no surface karst features within 200 feet (61 meters) of the spill delineation boundary.**
- **No shallow anomalies interpreted as large voids or related karst features that would present a danger to equipment operators are located within the geophysical survey area.**
- Intercepting a void during remediation is unlikely, but still possible. Small voids or solutionally enlarged fractures below the resolution limit of the survey may be encountered.
- **Well-layered stratigraphy is interpreted to exist beneath the geophysical survey line, indicating stable ground in the area of the subsurface investigation.**
- When conducting any remediation activities in this area, employing a BLM-CFO approved karst monitor on site should be considered.

6.0 DISCLOSURE STATEMENT

Karst occurrence zones are prone to rapid karst formation and warrant careful planning and engineering to mitigate karst-forming processes that could be accelerated by removal of surface cover or the vibrations associated with heavy equipment used in the remediation process.

Mitigation measures for any karst features revealed during excavation shall be approved by the Bureau of Land Management – Carlsbad Field Office and follow the Natural Resources Conservation Service Conservation Practice Standard for Karst Sinkhole Treatment, Code 527, or the Bureau of Land Management Cave and Karst Management Handbook, H-8380-1.

Vigilance during remediation activities is paramount. If voids are encountered during excavation, contact the Bureau of Land Management Karst Division at (575) 234-5972, the New Mexico State Land Office Surface Resources Division at (505) 827-5768, or a BLM-CFO approved karst contractor and request an on-site investigation from a karst expert if one is not already on site. A karst consultant can generally be available in Eddy County within five hours.

Approved karst monitors should have karst feature identification training, at least two years of supervised experience identifying karst features, wilderness first aid training, SRT training, confined space training, gas monitor training, and a minimum of SPAR cave rescue training through NCRC. They should have with them the proper gear and be prepared both physically and mentally to enter a collapse feature within minutes to perform a rescue if needed. Monitoring services with qualified karst monitors, as well as cave surveys and geophysical surveys, are available from Southwest Geophysical Consulting.

Under no circumstances should an untrained, inexperienced person enter a cave, pit, sinkhole, or collapse feature. All field employees of Southwest Geophysical Consulting have extensive caving experience and the ability to determine whether entry into a karst feature is safe or presents a hazard. In the event it is necessary to enter a karst feature, Southwest Geophysical Consulting can provide these services on request.

Cave and karst resource inventory reports, karst feature investigations, and geophysical reports (along with the associated data files) commissioned at the request of the land manager should be submitted to BLM-CFO at blm_nm_karst@blm.gov.

Cave and karst resource inventory reports for the NMSLO should be submitted to the respective project manager.

Environmental karst reports should be submitted to the appropriate project manager at the New Mexico Oil Conservation Division.

7.0 REFERENCES

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8.0 GLOSSARY OF TERMS

AGI	Advanced Geosciences Inc.
BLM-CFO	Bureau of Land Management - Carlsbad Field Office
brecciated	Fractured rock caused by faulting or collapse.
caprock-collapse sinkhole	Collapse of roof-spanning rock into a cave or void.
cave	Natural opening at the surface large enough for a person to enter.
cover-collapse sinkhole	Collapse of roof-spanning soil or clay ground cover into a subsurface void.
ERI	Electrical Resistivity Imaging
GPS	Global Positioning System
grike	A solutionally enlarged, vertical, or sub-vertical joint or fracture.
(H)	High confidence modifier for a PKF. This is typically reserved for a feature that is definitely karst but has not been confirmed in the field.
HKOZ	High Karst Occurrence Zone
karst	A landscape containing solutional features such as caves, sinkholes, swallets, and springs.
(L)	Low confidence modifier for a PKF. This is typically a feature that cannot be ruled out as karst but is most likely NOT karst related. This modifier may also be used for pseudokarst features.
(M)	Medium confidence modifier for PKF. This is an ambiguous feature that can't be positively identified as karst without a field visit (e.g., burrows, abandoned unlined wells, solution tubes, pseudokarst).
MKOZ	Medium Karst Occurrence Zone
NCRC	National Cave Rescue Commission
NKF	Non-karst feature. Used for features originally identified as PKF that have been subsequently identified in the field as non-karst related. This term may also be used for pseudokarst features.
NMSLO	New Mexico State Land Office
Ohm-m	Ohm-meter, a unit of measurement for resistivity. Sometimes abbreviated Ω-m.
paleokarst	Previously formed karst features that have been filled in by erosion and/or deposition of minerals.
Pat	Permian Artesia Group
Pc	Permian Capitan Formation
Pcs	Permian Castile Formation
Pdl	Permian Dewey Lake Formation
PKF	Possible karst feature. This term is reserved for features identified in satellite or aerial imagery that have NOT been visited in the

	field. Further modifiers include (H) for high confidence, (M) for medium confidence, and (L) for low confidence. These confidence levels are based on field experience.
PLSS	Public Land Survey System
Pqg	Permian Queen/Greyburg Formation
Pru	Permian Rustler Formation
pseudokarst	Karst-like features (sinkholes, conduits, voids etc.) that are not formed by dissolution. These types of features include soil piping, lava tubes, and some cover-collapse and suffosion sinkholes.
Psl	Permian Salado Formation
Psr	Permian Seven Rivers Formation
Pt	Permian Tansill Formation
Py	Permian Yates Formation
Qal	Quaternary alluvium
Qe	Quaternary eolian deposits
Qp	Quaternary piedmont deposits
Qpl	Quaternary playa lake deposits
RKF	Recognized karst feature. This term is reserved for karst features that have been physically verified in the field.
SPAR	Small Party Assisted Rescue
sUAS	Small, uncrewed aerial system
suffosion sinkhole	Raveling of soil into a pre-existing void or fracture.
swallet	A natural opening in the surface, too small for a person, that drains water to an aquifer. Some are "open," meaning a void can be seen below; some are "closed, "meaning they are full of sediment.
SWG	Southwest Geophysical Consulting, LLC
UTM	Universal Transverse Mercator (projected coordinates)
(V)	Field verified modifier for a RKF. This indicates that the feature has been visited by a qualified karst professional in the field and fully identified
WGS	World Geodetic System (geographic coordinates)

9.0 ATTESTATION

David D. Decker, PhD, PG, CPG
Chief Executive Officer, Principal Geologist
Southwest Geophysical Consulting, LLC
5117 Fairfax Dr. NW
Albuquerque, NM 87114
dave@swgeophys.com
(505) 585-2550

CERTIFICATE OF AUTHOR

I, David D. Decker, a Licensed Professional Geologist and a Certified Professional Geologist, do certify that:

- I am currently employed as a consulting geologist in the specialty of caves and karst with an office address of 5117 Fairfax Dr. NW, Albuquerque, NM, USA, 87114.
- I graduated with a Master of Science in Applied Physics with a specialization in Sensor Systems from the Naval Post Graduate School in Monterey, California, in 2003, and a Doctor of Philosophy in Earth and Planetary Sciences from the University of New Mexico, Albuquerque, New Mexico, in 2018.
- I am a Licensed Professional Geologist in the State of Texas, USA (PG-15242) and have been since 2021. I am a Certified Professional Geologist through the American Institute of Professional Geologists (CPG-12123) and have been since 2021.
- I have been employed as a geologist continuously since 2016. I was previously employed as a Fire Controlman, Naval Flight Officer, and Aerospace Engineering Duty Officer in the U.S. Navy and operated, maintained, and installed various sensor systems including magnetic, electromagnetic, radar, communications, and acoustic systems in various capacities from 1986 through 2010.
- I have been involved in various aspects of cave and karst studies continuously since 1985, including exploration, mapping, and scientific studies.
- I have read the definition of “qualified karst professional” set out in the ASTM Standard Practice for Preliminary Karst Terrain Assessment for Site Development (ASTM E-1527). I meet the definition of “qualified professional” for the purposes of this standard.
- I am responsible for the content, compilation, and editing of all sections of report number ENS-011-20250603 entitled, “Environmental Karst Study Report, Oxy MOC SWD SWBAT, Eddy County, New Mexico.” I or a duly authorized and qualified representative of Southwest Geophysical Consulting, LLC, have personally visited this site and/or reviewed the aerial imagery on the date or dates mentioned in section ***2.3 Description of Survey***.

- I have no prior involvement nor monetary interest in the described property or project, save for my fee for conducting this investigation and providing the report.

Dated in Albuquerque, New Mexico, July 23, 2025.

David D. Decker
PhD, CPG-12123

ENSOLUM

APPENDIX C

Lithologic Soil Sampling Logs

ENSOLUM

Sample Name: PH01	Date:01/29/2025	
Site Name:MOC SWD SW Battery		
Incident Number: nAPP2315046261		
Job Number: 03B1417244		
LITHOLOGIC / SOIL SAMPLING LOG	Logged By:KS	Method: HA/Geoprobe
Coordinates:32.586346, -104.527037	Hole Diameter:4"	Total Depth: 18'

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. 40% correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)		USCS/Rock Symbol	Lithologic Descriptions
						0		
D	>3,589	11.1	N	PH01	1		SC	Sandy clay, red, dry, no odor
D	>3,589	1.1	N	PH01	4	4	SC	Sandy clay, red, dry, no odor
D	>3,589	0.5	N	PH01	8	8	SC	Sandy clay, red, dry, no odor
D	3,589	0.3	N	PH01	12	12	ML	Silty clay, red, no odor
D	1,842	0.0	N	PH01	15	15	SP	Sand, very fine grained, red, no odor
						16		
D	997	0.0	N	PH01	18		SP	Sand, very fine grained, red, no odor
D	1,994	0.0	N			20	SC	Sandy clay, reddish, brown, no odor
D	812	0.0	N	PH01	24	24	SC	Sandy clay, red brown, no odor
D	812	0.0	N	PH01	26	26	SC	Sandy clay, red brown, no odor

Total depth: 26' bgs

ENSOLUM

Sample Name: PH02	Date:01/30/2025	
Site Name:MOC SWD SW Battery		
Incident Number: nAPP2315046261		
Job Number: 03B1417244		
LITHOLOGIC / SOIL SAMPLING LOG	Logged By:KS	Method: HA/Geoprobe
Coordinates: 32.586524, -104.526964	Hole Diameter:4"	Total Depth: 18'

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. 40% correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)		USCS/Rock Symbol	Lithologic Descriptions
						0		
D	>3,589	0.8	N	PH02	1		SC	Sandy clay, red, dry, no odor
						2		
D	>3,589	0.3	N	PH02	4	4	SC	Sandy clay, red, dry, no odor
						6	SC	Sandy, clay, yellowish, red, dry , no odor
D	1,080	0.0	N	PH02	8	8	SC	Sandy, clay, redish, brown, no odor
						10		
D	1,366	0.0	N	PH02	12	12	SC	Sandy, clay, redish, brown, no odor
						14		
D	515	0.0	N	PH02	15		ML	Clayey silt, red, no odor
						16		
D	364	0.0	N	PH02	17		ML	Clayey silt, red, no odor
D	694	0.0	N	PH02	18	18	ML	Clayey silt, red, no odor

Total depth 18' bgs

ENSOLUM

Sample Name: PH03	Date:2/11/2025	
Site Name:MOC SWD SW Battery		
Incident Number: nAPP2315046261		
Job Number: 03B1417244		
LITHOLOGIC / SOIL SAMPLING LOG	Logged By:KS	Method: HA/Geoprobe
Coordinates: 32.586632, -104.527004	Hole Diameter:4"	Total Depth: 18'

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. 40% correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)		USCS/Rock Symbol	Lithologic Descriptions
						0		
D	<167	0.0	N	PH03	1		SC	Brown, clayey sand, fine to very fine, dry, no odor, non-plastic, non-cohesive
D	414	0.0	N			2	SC	Brown, clayey sand with little gravel, fine to very fine, dry, no odor, non-plastic, non-cohesive
D	515	0.0	N				SC	Brown, clayey sand with little gravel, fine to very fine, dry, no odor, non-plastic, non-cohesive
D	196	0.0	N	PH03	4	4	SC	Light brown, clayey-sand, fine to very fine, no odor, non-plastic, non-cohesive, few gravel
D	196	0.0	N				SC	Light brown, clayey-sand, fine to very fine, no odor, non-plastic, non-cohesive, few gravel
D	196	0.0	N			6	SC	Light brown, clayey-sand, fine to very fine, no odor, non-plastic, non-cohesive, few gravel
D	196	0.0	N				SC	Brown, sandy clay, fine to very fine, no odor, non-plastic, non-cohesive
D	<167	0.0	N			8	SC	Brown, sandy clay with little white clay, fine to very fine, no odor, non-plastic, non-cohesive
D	319	0.0	N				SC	Brown, sandy clay with little white clay, fine to very fine, no odor, non-plastic, non-cohesive
D	319	0.0	N	PH03	10	10	SC	Brown, sandy clay with little white clay, fine to very fine, no odor, non-plastic, non-cohesive
D	700	0.0	N				SC	Reddish brown, sandy clay with little white clay, fine to very fine, no odor, non-plastic, non-cohesive
D	364	0.0	N			12	SC	Reddish brown, sandy clay with white clay clumps, dry, no odor, non-plastic, non-cohesive
D	319	0.0	N				SC	Reddish brown, sandy clay with white clay clumps, dry, no odor, non-plastic, non-cohesive
D	196	0.0	N	PH03	14	14	SC	Reddish brown, sandy clay with few oxidized clay, dry, no odor, non-plastic, non-cohesive

Total depth: 14' bgs

ENSOLUM

	Sample Name: PH04	Date: 4/16/2025
	Site Name:MOC SWD SW Battery	
	Incident Number: nAPP2315046261	
	Job Number: 03B1417244	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: SD	Method: Geoprobe
Coordinates: 32.586596, -104.527045	Hole Diameter: 3.5'	Total Depth: 34'

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. 40% correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)		USCS/Rock Symbol	Lithologic Descriptions
						2		
D	14,930	59.1	N	PH04	4	4	SM	Silty sand, reddish brown, no odor
D	4,878	91.0	N			6	SM	Silty sand, reddish brown, no odor
D	4,088	17.3	N			8	SC	Sandy clay, red, no odor
						10		
D	4,088	11.0	N			12	SC	Sandy clay, red, no odor
			N			14		
D	2,240	4.7	N	PH04	15		ML	Silty clay, red, no odor
						16		
D	3,012	0.0	N			18	SC	Sandy clay, red, no odor
D	4,088	0.4	N			20	ML	Silty clay, red, no odor
D	1,775	2.7	N			22	SC	Sandy clay, red, no odor
D	812	6.6	N			24	ML	Silty clay, red, no odor
D	667	8.0	N	PH04	26	26	ML	Silty clay, red, no odor
D	1,383	0.0	N			28	ML	Silty clay, red, no odor
D	969	0.0	N	PH04	30	30	SC	Sandy clay, red, no odor
D	1,059	3.0	N			32	SC	Sandy clay, red, no odor
D	1,059	0.0	N	PH04	34	34	SC	Sandy clay, red, no odor

Total depth: 34' bgs

ENSOLUM

Sample Name: PH05	Date: 4/16/2025
Site Name:MOC SWD SW Battery	
Incident Number: nAPP2315046261	
Job Number: 03B1417244	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: SD	Method: Geoprobe	
Coordinates: 32.586417, -104.527085	Hole Diameter: 3.5'	Total Depth: 34'

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. 40% correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)		USCS/Rock Symbol	Lithologic Descriptions
						2		
D	12,712	2.4	N				SC	Sandy, clay, red, dry , no odor
						4		
D	3,393.60	1.5	N			6	SC	Sandy, clay, yellowish, red, dry , no odor
						8		
D	4,088	0.7	N				SC	Sandy, clay, redish, brown, no odor
						10		
D	4088	0.0	N			12	SC	Sandy, clay, redish, brown, no odor
						14		
D	4,088	0.0	N	PH05	15		ML	clayey silt, red, no odor
						16		
D	2,240	0.0	N			18	ML	clayey silt, red, no odor
D	1,657.60	0.0	N			20	SC	Clay w/ sand, red, no ordor
D	6,260.80	0.9	N			22	SC	Clay w/ sand, red, no ordor
D	2,469.60	0.0	N			24	SC	Clay w/ sand, red, no ordor
D	1,775.20	1.7	N	PH05	26	26	SC	Clay w/ sand, red, no ordor
D	2,637.60	0.6	N			28	SP	Sand coarse, yellowish, red
D	476	2.5	N	PH05	30	30	ML	Silty clay, red, slightly moisture, no odor
D			N	PH05	31		ML	Silty clay, red, slightly moisture, no odor

Total depth: 31' bgs

ENSOLUM

Sample Name: DS01	Date: 4/16/2025
Site Name:MOC SWD SW Battery	
Incident Number: nAPP2315046261	
Job Number: 03B1417244	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: SD	Method: Geoprobe
Hole Diameter: 3.5'	Total Depth: 34'

Coordinates: 32.5863164, -104.5270548

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. 40% correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)		USCS/Rock Symbol	Lithologic Descriptions
D	<168	0.7	N	DS01	0.25	0.25	SC	Sandy, clay, red, dry , no odor
D	<168	0.8	N	DS01	4	4	SC	Sandy, clay, red, dry, no odor
D	<168	0.3	N			6	SC	Sandy, clay, yellowish, red, dry , no odor
D	<168	0.7	N			8	SC	Sandy, clay, redish, brown, no odor
						10		
D	476	0.0	N			12	SC	Sandy, clay, redish, brown, no odor
D	476	0.2	N	DS01	15	14	ML	clayey silt, red, no odor
						16		
D		0.1	N			18	ML	clayey silt, red, no odor
D		0.0	N			20	SC	Clay w/ sand, red, no ordor
						22		
D	364	0.0	N	DS01	25	24	SC	Clay w/ sand, red, no ordor
						26		
D	196	0.4	N			28	SP	Sand coarse, yellowish, red
D	<168	0.0	N			30	ML	Silty clay, red, no odor
D	<168	0.0	N	DS01	34	34	ML	Silty, clay, red, no odor

Total Depth: 34 ft bgs

ENSOLUM

Sample Name: DS02	Date: 4/17/2025
Site Name:MOC SWD SW Battery	
Incident Number: nAPP2315046261	
Job Number: 03B1417244	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: SD	Method: Geoprobe
Hole Diameter: 3.5'	Total Depth: 34'

Coordinates: 32.5864503, -104.5267953

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. 40% correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)		USCS/Rock Symbol	Lithologic Descriptions
D	196	0.0	N	DS02	0.5	0.5	SC	Sandy, clay, red, dry , no odor
D	196	0.0	N	DS02	4	4	SC	Sandy, clay, red, dry, no odor
D	<168	0.3	N			6	SC	Sandy, clay, yellowish, red, dry , no odor
D	225	0.2	N			8	SC	Sandy, clay, redish, brown, no odor
D	476	0.0	N			10	SC	Sandy, clay, redish, brown, no odor
D	476	0.2	N	DS02	15	12	SC	Sandy, clay, redish, brown, no odor
						14		
						16		
						18	SC	Sandy, clay, redish, brown, no odor
D	196	0.0	N			20	SC	Sandy, clay, redish, brown, no odor
						22		
D	225	0.0	N	DS02	25	24	SC	Clay w/ sand, red, no ordor
						26		
D	196	0.1	N			28	SP	Sand coarse, yellowish, red
D	196	0.0	N			30	ML	Silty clay, red, no odor
D	225	0.1	N	DS02	34	34	ML	Silty, clay, red, no odor

Total Depth: 34 ft bgs

ENSOLUM

Sample Name: DS03	Date: 4/16/2025
Site Name:MOC SWD SW Battery	
Incident Number: nAPP2315046261	
Job Number: 03B1417244	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: SD	Method: Geoprobe
Hole Diameter: 3.5'	Total Depth: 34'

Coordinates: 32.5867650, -104.5270146

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. 40% correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)		USCS/Rock Symbol	Lithologic Descriptions
D	<167	0.1	N	DS03	0.25	0.25	SC	Sandy, clay, red, dry , no odor
D	<167	0.1	N	DS03	4	4	SC	Sandy, clay, red, dry, no odor
D	<167	0.0	N			6	SC	Sandy, clay, yellowish, red, dry , no odor
D	225	0.0	N			8	SC	Sandy, clay, redish, brown, no odor
						10		
D	476	0.0	N			12	SC	Sandy, clay, redish, brown, no odor
D	476	0.2	N	DS03	15	14	SC	Sandy, clay, redish, brown, no odor
						16		
						18	SC	Sandy, clay, redish, brown, no odor
D	196	0.0	N			20	SC	Sandy, clay, redish, brown, no odor
						22		
D	<167	0.0	N	DS03	25	24	SC	Clay w/ sand, red, no ordor
						26		
D	<167	0.2	N			28	SP	Sand coarse, yellowish, red
D	<167	0.1	N			30	ML	Silty clay, red, no odor
D	<167	0.0	N	DS03	34	34	ML	Silty, clay, red, no odor

Total Depth: 34 ft bgs

ENSOLUM

Sample Name: DS04	Date: 4/16/2025
Site Name:MOC SWD SW Battery	
Incident Number: nAPP2315046261	
Job Number: 03B1417244	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: SD	Method: Geoprobe
Hole Diameter: 3.5'	Total Depth: 34'

Coordinates: 32.5866051, -104.5271903

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. 40% correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)		USCS/Rock Symbol	Lithologic Descriptions
D	<167	0.0	N	DS04	0.25	0.25	SC	Sandy, clay, red, dry , no odor
D	<167	0.0	N	DS04	4	4	SC	Sandy, clay, red, dry, no odor
D	<167	0.0	N			6	SC	Sandy, clay, yellowish, red, dry , no odor
D	<167	0.0	N			8	SC	Sandy, clay, redish, brown, no odor
D	476	0.0	N			10	SC	Sandy, clay, redish, brown, no odor
D	476	0.0	N	DS04	15	12	SC	Sandy, clay, redish, brown, no odor
						14	SC	Sandy, clay, redish, brown, no odor
D	196	0.1	N			16	SC	Sandy, clay, redish, brown, no odor
D	<167	0.1	N	DS04	25	18	SC	Clay w/ sand, red, no ordor
D	<167	0.0	N			20	SP	Sand coarse, yellowish, red
D	<167	0.0	N			22	ML	Silty clay, red, no odor
D	<167	0.0	N	DS04	34	24	ML	Silty, clay, red, no odor
						26		
						28		
						30		
						34		

Total Depth: 34 ft bgs

ENSOLUM

APPENDIX D

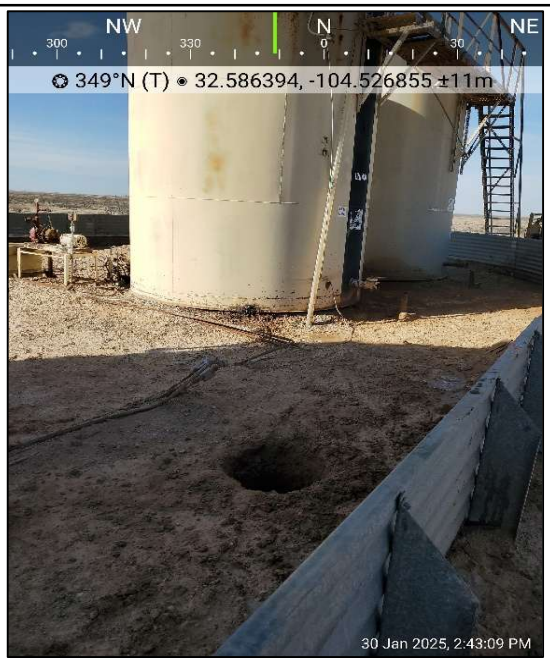
Photographic Log

ENSOLUM

Photographic Log
Oxy USA Inc.
MOC SWD SW Battery
Incident Number NAPP231546261

Photograph: 1 Date: 5/19/2023
Description: Soil staining in release footprint
View: South

Photograph: 2 Date: 1/29/2025
Description: Delineation activities (PH01)
View: Southeast



Photograph: 3 Date: 1/30/2025
Description: Delineation activities (PH02)
View: North

Photograph: 4 Date: 9/29/2022
Description: Delineation activities (DS-04)
View: Northwest

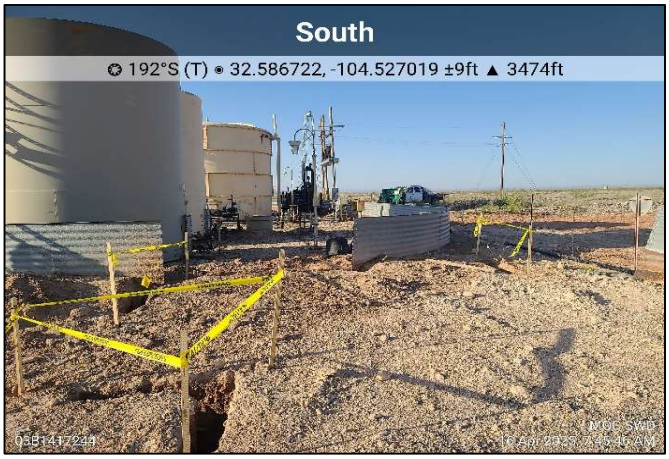
ENSOLUM

Photographic Log
Oxy USA Inc.
MOC SWD SW Battery
Incident Number NAPP231546261

Photograph: 5 Date: 4/17/2025
Description: Delineation activities (DS-02)
View: South

Photograph: 6 Date: 4/16/2025
Description: Delineation activities (PH05)
View: North

Photograph: 7 Date: 4/17/2025
Description: Delineation activities (DS-04)
View: West



Photograph: 8 Date: 4/16/2025
Description: PH04 delineation location
View: South

ENSOLUM

APPENDIX E

Laboratory Analytical Reports & Chain of Custody Documentation

CARDINAL Laboratories

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

February 06, 2025

HADLIE GREEN

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: MOC SWD SW BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 02/03/25 12:00.

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

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

Accreditation applies to public drinking water matrices.

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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	02/03/2025	Sampling Date:	01/29/2025
Reported:	02/06/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Tamara Oldaker
Project Location:	32.586619, -104.526978		

Sample ID: PH 01 1 (H250612-01)

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	02/05/2025	ND	2.04	102	2.00	1.56	
Toluene*	<0.050	0.050	02/05/2025	ND	2.21	111	2.00	4.15	
Ethylbenzene*	<0.050	0.050	02/05/2025	ND	2.26	113	2.00	4.72	
Total Xylenes*	<0.150	0.150	02/05/2025	ND	6.66	111	6.00	5.16	
Total BTEX	<0.300	0.300	02/05/2025	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**10700**	16.0	02/04/2025	ND	432	108	400	0.00	

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	02/04/2025	ND	199	99.4	200	0.790	
DRO >C10-C28*	**39.0**	10.0	02/04/2025	ND	184	92.2	200	3.39	
EXT DRO >C28-C36	<10.0	10.0	02/04/2025	ND					

Surrogate: 1-Chlorooctane *90.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *100 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	02/03/2025	Sampling Date:	01/29/2025
Reported:	02/06/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Tamara Oldaker
Project Location:	32.586619, -104.526978		

Sample ID: PH 01 4 (H250612-02)

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	02/04/2025	ND	2.04	102	2.00	1.56	
Toluene*	<0.050	0.050	02/04/2025	ND	2.21	111	2.00	4.15	
Ethylbenzene*	<0.050	0.050	02/04/2025	ND	2.26	113	2.00	4.72	
Total Xylenes*	<0.150	0.150	02/04/2025	ND	6.66	111	6.00	5.16	
Total BTEX	<0.300	0.300	02/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *118 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**7760**	16.0	02/04/2025	ND	432	108	400	0.00	

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	02/04/2025	ND	199	99.4	200	0.790	
DRO >C10-C28*	<10.0	10.0	02/04/2025	ND	184	92.2	200	3.39	
EXT DRO >C28-C36	<10.0	10.0	02/04/2025	ND					

Surrogate: 1-Chlorooctane *94.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *95.2 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	02/03/2025	Sampling Date:	01/29/2025
Reported:	02/06/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Tamara Oldaker
Project Location:	32.586619, -104.526978		

Sample ID: PH 01 8 (H250612-03)

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	02/04/2025	ND	2.04	102	2.00	1.56	
Toluene*	<0.050	0.050	02/04/2025	ND	2.21	111	2.00	4.15	
Ethylbenzene*	<0.050	0.050	02/04/2025	ND	2.26	113	2.00	4.72	
Total Xylenes*	<0.150	0.150	02/04/2025	ND	6.66	111	6.00	5.16	
Total BTEX	<0.300	0.300	02/04/2025	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**4800**	16.0	02/04/2025	ND	432	108	400	0.00	

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	02/04/2025	ND	199	99.4	200	0.790	
DRO >C10-C28*	<10.0	10.0	02/04/2025	ND	184	92.2	200	3.39	
EXT DRO >C28-C36	<10.0	10.0	02/04/2025	ND					

Surrogate: 1-Chlorooctane *94.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *96.0 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	02/03/2025	Sampling Date:	01/29/2025
Reported:	02/06/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Tamara Oldaker
Project Location:	32.586619, -104.526978		

Sample ID: PH 01 12 (H250612-04)

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	02/04/2025	ND	2.04	102	2.00	1.56	
Toluene*	<0.050	0.050	02/04/2025	ND	2.21	111	2.00	4.15	
Ethylbenzene*	<0.050	0.050	02/04/2025	ND	2.26	113	2.00	4.72	
Total Xylenes*	<0.150	0.150	02/04/2025	ND	6.66	111	6.00	5.16	
Total BTEX	<0.300	0.300	02/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *117 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3760**	16.0	02/04/2025	ND	432	108	400	0.00	

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	02/04/2025	ND	199	99.4	200	0.790	
DRO >C10-C28*	<10.0	10.0	02/04/2025	ND	184	92.2	200	3.39	
EXT DRO >C28-C36	<10.0	10.0	02/04/2025	ND					

Surrogate: 1-Chlorooctane *91.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *91.3 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	02/03/2025	Sampling Date:	01/29/2025
Reported:	02/06/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Tamara Oldaker
Project Location:	32.586619, -104.526978		

Sample ID: PH 01 15 (H250612-05)

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	02/04/2025	ND	2.04	102	2.00	1.56	
Toluene*	<0.050	0.050	02/04/2025	ND	2.21	111	2.00	4.15	
Ethylbenzene*	<0.050	0.050	02/04/2025	ND	2.26	113	2.00	4.72	
Total Xylenes*	<0.150	0.150	02/04/2025	ND	6.66	111	6.00	5.16	
Total BTEX	<0.300	0.300	02/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *117 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2680**	16.0	02/04/2025	ND	432	108	400	0.00	

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	02/04/2025	ND	199	99.4	200	0.790	
DRO >C10-C28*	<10.0	10.0	02/04/2025	ND	184	92.2	200	3.39	
EXT DRO >C28-C36	<10.0	10.0	02/04/2025	ND					

Surrogate: 1-Chlorooctane *94.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *96.2 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	02/03/2025	Sampling Date:	01/29/2025
Reported:	02/06/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Tamara Oldaker
Project Location:	32.586619, -104.526978		

Sample ID: PH 01 18 (H250612-06)

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	02/04/2025	ND	2.04	102	2.00	1.56	
Toluene*	<0.050	0.050	02/04/2025	ND	2.21	111	2.00	4.15	
Ethylbenzene*	<0.050	0.050	02/04/2025	ND	2.26	113	2.00	4.72	
Total Xylenes*	<0.150	0.150	02/04/2025	ND	6.66	111	6.00	5.16	
Total BTEX	<0.300	0.300	02/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *118 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2120**	16.0	02/04/2025	ND	432	108	400	0.00	

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	02/04/2025	ND	199	99.4	200	0.790	
DRO >C10-C28*	<10.0	10.0	02/04/2025	ND	184	92.2	200	3.39	
EXT DRO >C28-C36	<10.0	10.0	02/04/2025	ND					

Surrogate: 1-Chlorooctane *92.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *92.1 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: Hadlie Green	P.O. #:
Address: 3122 National Parks Hwy, Carlsbad, NM 88220	Company: Oxy USA, inc.
City: Carlsbad State: NM Zip: 88220	Attn: Wade Dittrich
Phone #: 432-557-8895 Email: hgreen@ensolum.com	Address:
Project #: 03B1417244 Project Owner:	City:
Project Name: MOC SWD SW Battery	State: Zip:
Project Location: 32.586619, -104.526978	Phone #:
Sampler Name: Kaoru Shimada	Email:

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX 8021 B	TPH 8015 M	Chloride 4500
H250612																		
1	PH01	1	G	1			X					X		1/29/25	1000	X	X	X
2	PH01	4	G	1			X					X		1/29/25	1020	X	X	X
3	PH01	8	G	1			X					X		1/29/25	1109	X	X	X
4	PH01	12	G	1			X					X		1/29/25	1158	X	X	X
5	PH01	15	G	1			X					X		1/29/25	1352	X	X	X
6	PH01	18	G	1			X					X		1/29/25	1424	X	X	X

RUSH 1-29-2025

Relinquished By:	Date: 1-30-25	Received By:	Verbal Result: ☐ Yes ☒ No Add'l Phone #:
	Time: 1200		All Results are emailed. Please provide Email address: hgreen@ensolum.com
Relinquished By:	Date:	Received By:	REMARKS: Paykey/AFE/NonAFE:
	Time:		

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 1.3 Corrected Temp. °C 1.6	Sample Condition Cool Intact ☑ Yes ☐ Yes ☐ No ☐ No	CHECKED BY: (Initials)	Turnaround Time: Standard ☐ Bacteria (only) Sample Condition ☒ Rush ☐ Cool Intact Observed Temp. °C Thermometer ID #140 Correction Factor ~~0.5°C~~ +0.3°C ☐ Yes ☐ Yes ☐ No ☐ No Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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

CARDINAL Laboratories

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

February 06, 2025

HADLIE GREEN

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: MOC SWD SW BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 02/03/25 12:00.

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

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

Accreditation applies to public drinking water matrices.

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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	02/03/2025	Sampling Date:	01/30/2025
Reported:	02/06/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Tamara Oldaker
Project Location:	OXY 32.586619, -104.526978		

Sample ID: PH 02 1 (H250613-01)

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	02/04/2025	ND	2.04	102	2.00	1.56	
Toluene*	<0.050	0.050	02/04/2025	ND	2.21	111	2.00	4.15	
Ethylbenzene*	<0.050	0.050	02/04/2025	ND	2.26	113	2.00	4.72	
Total Xylenes*	<0.150	0.150	02/04/2025	ND	6.66	111	6.00	5.16	
Total BTEX	<0.300	0.300	02/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *113 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**9730**	16.0	02/04/2025	ND	432	108	400	0.00	

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	02/04/2025	ND	199	99.4	200	0.790	
DRO >C10-C28*	**162**	10.0	02/04/2025	ND	184	92.2	200	3.39	
EXT DRO >C28-C36	**94.5**	10.0	02/04/2025	ND					

Surrogate: 1-Chlorooctane *88.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *94.5 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	02/03/2025	Sampling Date:	01/30/2025
Reported:	02/06/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Tamara Oldaker
Project Location:	OXY 32.586619, -104.526978		

Sample ID: PH 02 4 (H250613-02)

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	02/04/2025	ND	2.04	102	2.00	1.56	
Toluene*	<0.050	0.050	02/04/2025	ND	2.21	111	2.00	4.15	
Ethylbenzene*	<0.050	0.050	02/04/2025	ND	2.26	113	2.00	4.72	
Total Xylenes*	<0.150	0.150	02/04/2025	ND	6.66	111	6.00	5.16	
Total BTEX	<0.300	0.300	02/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *117 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6800**	16.0	02/04/2025	ND	432	108	400	0.00	

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	02/04/2025	ND	199	99.4	200	0.790	
DRO >C10-C28*	<10.0	10.0	02/04/2025	ND	184	92.2	200	3.39	
EXT DRO >C28-C36	<10.0	10.0	02/04/2025	ND					

Surrogate: 1-Chlorooctane *85.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *89.2 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	02/03/2025	Sampling Date:	01/30/2025
Reported:	02/06/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Tamara Oldaker
Project Location:	OXY 32.586619, -104.526978		

Sample ID: PH 02 8 (H250613-03)

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	02/04/2025	ND	2.09	105	2.00	0.527	
Toluene*	<0.050	0.050	02/04/2025	ND	2.21	111	2.00	0.852	
Ethylbenzene*	<0.050	0.050	02/04/2025	ND	2.25	113	2.00	1.30	
Total Xylenes*	<0.150	0.150	02/04/2025	ND	6.85	114	6.00	1.38	
Total BTEX	<0.300	0.300	02/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *109 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1390**	16.0	02/04/2025	ND	432	108	400	0.00	

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	02/04/2025	ND	199	99.4	200	0.790	
DRO >C10-C28*	<10.0	10.0	02/04/2025	ND	184	92.2	200	3.39	
EXT DRO >C28-C36	<10.0	10.0	02/04/2025	ND					

Surrogate: 1-Chlorooctane *95.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *96.4 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	02/03/2025	Sampling Date:	01/30/2025
Reported:	02/06/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Tamara Oldaker
Project Location:	OXY 32.586619, -104.526978		

Sample ID: PH 02 12 (H250613-04)

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	02/04/2025	ND	2.09	105	2.00	0.527	
Toluene*	<0.050	0.050	02/04/2025	ND	2.21	111	2.00	0.852	
Ethylbenzene*	<0.050	0.050	02/04/2025	ND	2.25	113	2.00	1.30	
Total Xylenes*	<0.150	0.150	02/04/2025	ND	6.85	114	6.00	1.38	
Total BTEX	<0.300	0.300	02/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *110 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1470**	16.0	02/04/2025	ND	432	108	400	0.00	

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	02/04/2025	ND	199	99.4	200	0.790	
DRO >C10-C28*	<10.0	10.0	02/04/2025	ND	184	92.2	200	3.39	
EXT DRO >C28-C36	<10.0	10.0	02/04/2025	ND					

Surrogate: 1-Chlorooctane *91.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *91.9 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	02/03/2025	Sampling Date:	01/30/2025
Reported:	02/06/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Tamara Oldaker
Project Location:	OXY 32.586619, -104.526978		

Sample ID: PH 02 15 (H250613-05)

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	02/04/2025	ND	2.09	105	2.00	0.527	
Toluene*	<0.050	0.050	02/04/2025	ND	2.21	111	2.00	0.852	
Ethylbenzene*	<0.050	0.050	02/04/2025	ND	2.25	113	2.00	1.30	
Total Xylenes*	<0.150	0.150	02/04/2025	ND	6.85	114	6.00	1.38	
Total BTEX	<0.300	0.300	02/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *109 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**416**	16.0	02/04/2025	ND	432	108	400	0.00	

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	02/04/2025	ND	199	99.4	200	0.790	
DRO >C10-C28*	<10.0	10.0	02/04/2025	ND	184	92.2	200	3.39	
EXT DRO >C28-C36	<10.0	10.0	02/04/2025	ND					

Surrogate: 1-Chlorooctane *89.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *89.3 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: Hadlie Green	P.O. #:
Address: 3122 National Parks Hwy, Carlsbad, NM 88220	Company: Oxy USA, inc.
City: Carlsbad State: NM Zip: 88220	Attn: Wade Dittrich
Phone #: 432-557-8895 Email: hgreen@ensolum.com	Address:
Project #: 03B1417244 Project Owner:	City:
Project Name:MOC SWD SW Battery	State: Zip:
Project Location: 32.586619, -104.526978	Phone #:
Sampler Name: Kaoru Shimada, Nicolas Christakos	Email:

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	BTEX 8021 B	TPH 8015 M	Chloride 4500
H250613																		
1	PH02	1	G	1			X					X		1/30/25	853	X	X	X
2	PH02	4	G	1			X					X		1/30/25	911	X	X	X
3	PH02	8	G	1			X					X		1/30/25	948	X	X	X
4	PH02	12	G	1			X					X		1/30/25	1145	X	X	X
5	PH02	15	G	1			X					X		1/30/25	1313	X	X	X

AFE SK 30, 2025

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 2.3.25 Time: 1300	Received By:	Verbal Result: ☐ Yes x No Add'l Phone #: All Results are emailed. Please provide Email address: hgreen@ensolum.com
Relinquished By:	Date: Time:	Received By:	REMARKS: Paykey/AFE/NonAFE:

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 1.3 Corrected Temp. °C 1.6	Sample Condition Cool: Yes Intact: Yes / No No	CHECKED BY: (Initials)	Turnaround Time: Standard Rush ☐ Bacteria (only) Sample Condition Cool Intact Observed Temp. °C Thermometer ID ~~#113~~ #140 Correction Factor ~~-0.5°C~~ +0.3°C Yes Yes / No No Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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

CARDINAL Laboratories

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

February 06, 2025

HADLIE GREEN

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: MOC SWD SW BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 02/03/25 12:00.

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

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

Accreditation applies to public drinking water matrices.

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

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	02/03/2025	Sampling Date:	01/30/2025
Reported:	02/06/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Tamara Oldaker
Project Location:	OXY 32.586619, -104.526978		

Sample ID: PH 02 17 (H250614-01)

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	02/04/2025	ND	2.09	105	2.00	0.527	
Toluene*	<0.050	0.050	02/04/2025	ND	2.21	111	2.00	0.852	
Ethylbenzene*	<0.050	0.050	02/04/2025	ND	2.25	113	2.00	1.30	
Total Xylenes*	<0.150	0.150	02/04/2025	ND	6.85	114	6.00	1.38	
Total BTEX	<0.300	0.300	02/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *107 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**320**	16.0	02/04/2025	ND	432	108	400	0.00	

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	02/04/2025	ND	199	99.4	200	0.790	
DRO >C10-C28*	<10.0	10.0	02/04/2025	ND	184	92.2	200	3.39	
EXT DRO >C28-C36	<10.0	10.0	02/04/2025	ND					

Surrogate: 1-Chlorooctane *95.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *95.2 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	02/03/2025	Sampling Date:	01/30/2025
Reported:	02/06/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Tamara Oldaker
Project Location:	OXY 32.586619, -104.526978		

Sample ID: PH 02 18 (H250614-02)

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	02/04/2025	ND	2.09	105	2.00	0.527	
Toluene*	<0.050	0.050	02/04/2025	ND	2.21	111	2.00	0.852	
Ethylbenzene*	<0.050	0.050	02/04/2025	ND	2.25	113	2.00	1.30	
Total Xylenes*	<0.150	0.150	02/04/2025	ND	6.85	114	6.00	1.38	
Total BTEX	<0.300	0.300	02/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *108 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**528**	16.0	02/04/2025	ND	432	108	400	0.00	

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	02/04/2025	ND	199	99.4	200	0.790	
DRO >C10-C28*	<10.0	10.0	02/04/2025	ND	184	92.2	200	3.39	
EXT DRO >C28-C36	<10.0	10.0	02/04/2025	ND					

Surrogate: 1-Chlorooctane *96.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *94.9 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: Hadlie Green	P.O. #:
Address: 3122 National Parks Hwy, Carlsbad, NM 88220	Company: Oxy USA, inc.
City: Carlsbad State: NM Zip: 88220	Attn: Wade Dittrich
Phone #: 432-557-8895 Email: hgreen@ensolum.com	Address:
Project #: 03B1417244 Project Owner:	City:
Project Name:MOC SWD SW Battery	State: Zip:
Project Location: 32.586619, -104.526978	Phone #:
Sampler Name: Kaoru Shimada, Nicolas Christakos	Email:

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX 8021 B	TPH 8015 M	Chloride 4500
H250614																		
1	PH02	17	G	1			X					X		1/30/25	1401	X	X	X
2	PH02	18	G	1			X					X		1/30/25	1423	X	X	X

Relinquished By:	Date: 2.3.25	Received By:	Verbal Result: ☐ Yes X No Add'l Phone #:
	Time: 1300		All Results are emailed. Please provide Email address: hgreen@ensolum.com
Relinquished By:	Date:	Received By:	REMARKS: Paykey/AFE/NonAFE:
	Time:		

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 1.3 Corrected Temp. °C 1.6	Sample Condition Cool Intact ☒ Yes ☒ Yes ☐ No ☐ No	CHECKED BY: (Initials) AO	Turnaround Time: Standard ☒ Rush ☐ Bacteria (only) Sample Condition Cool Intact Observed Temp. °C Thermometer ID ~~#113~~ #140 Correction Factor ~~-0.3°C~~ +0.3°C ☐ Yes ☐ Yes ☐ No ☐ No Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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

CARDINAL Laboratories

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

February 19, 2025

HADLIE GREEN

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: MOC SWD SW BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 02/13/25 13:35.

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

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

Accreditation applies to public drinking water matrices.

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

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	02/13/2025	Sampling Date:	02/11/2025
Reported:	02/19/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shari Cisneros
Project Location:	OXY 32.586619-104.526978		

Sample ID: PH 03 1' (H250892-01)

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	02/14/2025	ND	2.04	102	2.00	2.97	
Toluene*	<0.050	0.050	02/14/2025	ND	2.23	112	2.00	8.30	
Ethylbenzene*	<0.050	0.050	02/14/2025	ND	2.40	120	2.00	11.7	
Total Xylenes*	<0.150	0.150	02/14/2025	ND	7.40	123	6.00	11.0	
Total BTEX	<0.300	0.300	02/14/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *121 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	02/14/2025	ND	480	120	400	0.00	

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	02/14/2025	ND	195	97.6	200	3.05	
DRO >C10-C28*	<10.0	10.0	02/14/2025	ND	184	92.1	200	3.76	
EXT DRO >C28-C36	<10.0	10.0	02/14/2025	ND					

Surrogate: 1-Chlorooctane *71.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *70.7 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	02/13/2025	Sampling Date:	02/11/2025
Reported:	02/19/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shari Cisneros
Project Location:	OXY 32.586619-104.526978		

Sample ID: PH 03 4' (H250892-02)

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	02/14/2025	ND	2.04	102	2.00	2.97	
Toluene*	<0.050	0.050	02/14/2025	ND	2.23	112	2.00	8.30	
Ethylbenzene*	<0.050	0.050	02/14/2025	ND	2.40	120	2.00	11.7	
Total Xylenes*	<0.150	0.150	02/14/2025	ND	7.40	123	6.00	11.0	
Total BTEX	<0.300	0.300	02/14/2025	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	02/14/2025	ND	480	120	400	0.00	

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	02/14/2025	ND	195	97.6	200	3.05	
DRO >C10-C28*	<10.0	10.0	02/14/2025	ND	184	92.1	200	3.76	
EXT DRO >C28-C36	<10.0	10.0	02/14/2025	ND					

Surrogate: 1-Chlorooctane *86.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *86.3 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	02/13/2025	Sampling Date:	02/11/2025
Reported:	02/19/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shari Cisneros
Project Location:	OXY 32.586619-104.526978		

Sample ID: PH 03 10' (H250892-03)

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	02/14/2025	ND	2.04	102	2.00	2.97	
Toluene*	<0.050	0.050	02/14/2025	ND	2.23	112	2.00	8.30	
Ethylbenzene*	<0.050	0.050	02/14/2025	ND	2.40	120	2.00	11.7	
Total Xylenes*	<0.150	0.150	02/14/2025	ND	7.40	123	6.00	11.0	
Total BTEX	<0.300	0.300	02/14/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *117 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**288**	16.0	02/14/2025	ND	480	120	400	0.00	

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	02/14/2025	ND	195	97.6	200	3.05	
DRO >C10-C28*	<10.0	10.0	02/14/2025	ND	184	92.1	200	3.76	
EXT DRO >C28-C36	<10.0	10.0	02/14/2025	ND					

Surrogate: 1-Chlorooctane *82.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *84.4 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	02/13/2025	Sampling Date:	02/11/2025
Reported:	02/19/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shari Cisneros
Project Location:	OXY 32.586619-104.526978		

Sample ID: PH 03 14' (H250892-04)

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	02/14/2025	ND	2.04	102	2.00	2.97	
Toluene*	<0.050	0.050	02/14/2025	ND	2.23	112	2.00	8.30	
Ethylbenzene*	<0.050	0.050	02/14/2025	ND	2.40	120	2.00	11.7	
Total Xylenes*	<0.150	0.150	02/14/2025	ND	7.40	123	6.00	11.0	
Total BTEX	<0.300	0.300	02/14/2025	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**528**	16.0	02/14/2025	ND	480	120	400	0.00	

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	02/14/2025	ND	195	97.6	200	3.05	
DRO >C10-C28*	<10.0	10.0	02/14/2025	ND	184	92.1	200	3.76	
EXT DRO >C28-C36	<10.0	10.0	02/14/2025	ND					

Surrogate: 1-Chlorooctane *91.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *91.5 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: Hadlie Green	P.O. #:
Address: 601 N. Marienfeld St. STE 400	Company: OXY USA, Inc.
City: Midland State: TX Zip: 79701	Attn: Wade Dittrich
Phone #: 432-557-8895 Email: hgreen@ensolum.com	Address:
Project #: 03B1417244 Project Owner	City:
Project Name:MOC SWD SW Battery	State: Zip:
Project Location: 32.586619, -104.526978	Phone #:
Sampler Name: Kaoru Shimada	Email:

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	BTEX 8021 B	TPH 8015 M	Chloride 4500
H250892																		
1	PH03	1	C	1			X					X		2/11/25	1104	X	X	X
2	PH03	4	C	1			X					X		2/11/25	1124	X	X	X
3	PH03	10	C	1			X					X		2/11/25	1234	X	X	X
4	PH03	14	C	1			X					X		2/11/25	1346	X	X	X

NF NF SK Feb 11, 2025

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 2/13/25 Time: 1335	Received By: Nani Cisneros	Verbal Result: ☐ Yes X No Add'l Phone #: All Results are emailed. Please provide Email address: hgreen@ensolum.com
Relinquished By:	Date: Time:	Received By:	REMARKS: Paykey/AFE/NonAFE:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 5.6 Corrected Temp. °C 5.9	Sample Condition Cool: Yes Intact: Yes / No No	CHECKED BY: (Initials) SC

Turnaround Time: Standard X Bacteria (only) Sample Condition
Rush ☐ Cool Intact Observed Temp. °C
Thermometer ID #113 #140
Correction Factor -0.5°C +0.3°C
☐ Yes ☐ Yes ☐ No ☐ No Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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

CARDINAL Laboratories

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

April 24, 2025

HADLIE GREEN

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: MOC SWD SW BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 04/17/25 15:02.

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

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

Accreditation applies to public drinking water matrices.

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

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/16/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: DS 03 0.25' (H252338-01)

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	04/22/2025	ND	2.08	104	2.00	6.50	
Toluene*	<0.050	0.050	04/22/2025	ND	2.03	102	2.00	6.21	
Ethylbenzene*	<0.050	0.050	04/22/2025	ND	2.09	105	2.00	6.49	
Total Xylenes*	<0.150	0.150	04/22/2025	ND	6.26	104	6.00	8.06	
Total BTEX	<0.300	0.300	04/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.2 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: KV

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	202	101	200	1.70	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	198	98.9	200	1.61	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *100 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *98.0 %* *40.6-153*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/16/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: DS 03 4' (H252338-02)

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	04/22/2025	ND	2.08	104	2.00	6.50	
Toluene*	<0.050	0.050	04/22/2025	ND	2.03	102	2.00	6.21	
Ethylbenzene*	<0.050	0.050	04/22/2025	ND	2.09	105	2.00	6.49	
Total Xylenes*	<0.150	0.150	04/22/2025	ND	6.26	104	6.00	8.06	
Total BTEX	<0.300	0.300	04/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.4 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: KV

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**192**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	202	101	200	1.70	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	198	98.9	200	1.61	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *102 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *101 %* *40.6-153*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/16/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: DS 03 15' (H252338-03)

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	04/22/2025	ND	2.08	104	2.00	6.50	
Toluene*	<0.050	0.050	04/22/2025	ND	2.03	102	2.00	6.21	
Ethylbenzene*	<0.050	0.050	04/22/2025	ND	2.09	105	2.00	6.49	
Total Xylenes*	<0.150	0.150	04/22/2025	ND	6.26	104	6.00	8.06	
Total BTEX	<0.300	0.300	04/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.4 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: KV

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**528**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	202	101	200	1.70	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	198	98.9	200	1.61	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *104 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *103 %* *40.6-153*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/16/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: DS 03 25' (H252338-04)

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	04/22/2025	ND	2.08	104	2.00	6.50	
Toluene*	<0.050	0.050	04/22/2025	ND	2.03	102	2.00	6.21	
Ethylbenzene*	<0.050	0.050	04/22/2025	ND	2.09	105	2.00	6.49	
Total Xylenes*	<0.150	0.150	04/22/2025	ND	6.26	104	6.00	8.06	
Total BTEX	<0.300	0.300	04/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.0 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: KV

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	202	101	200	1.70	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	198	98.9	200	1.61	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *104 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *104 %* *40.6-153*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/16/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: DS 03 34' (H252338-05)

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	04/22/2025	ND	2.08	104	2.00	6.50	
Toluene*	<0.050	0.050	04/22/2025	ND	2.03	102	2.00	6.21	
Ethylbenzene*	<0.050	0.050	04/22/2025	ND	2.09	105	2.00	6.49	
Total Xylenes*	<0.150	0.150	04/22/2025	ND	6.26	104	6.00	8.06	
Total BTEX	<0.300	0.300	04/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.0 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: KV

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	199	99.4	200	0.915	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	195	97.7	200	0.0522	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *76.4 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *75.5 %* *40.6-153*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/17/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: DS 04 0.25' (H252338-06)

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	04/22/2025	ND	2.08	104	2.00	6.50	
Toluene*	<0.050	0.050	04/22/2025	ND	2.03	102	2.00	6.21	
Ethylbenzene*	<0.050	0.050	04/22/2025	ND	2.09	105	2.00	6.49	
Total Xylenes*	<0.150	0.150	04/22/2025	ND	6.26	104	6.00	8.06	
Total BTEX	<0.300	0.300	04/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.1 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: KV

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	199	99.4	200	0.915	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	195	97.7	200	0.0522	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *77.5 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *73.9 %* *40.6-153*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/17/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: DS 04 4' (H252338-07)

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	04/22/2025	ND	2.08	104	2.00	6.50	
Toluene*	<0.050	0.050	04/22/2025	ND	2.03	102	2.00	6.21	
Ethylbenzene*	<0.050	0.050	04/22/2025	ND	2.09	105	2.00	6.49	
Total Xylenes*	<0.150	0.150	04/22/2025	ND	6.26	104	6.00	8.06	
Total BTEX	<0.300	0.300	04/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.8 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: KV

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	199	99.4	200	0.915	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	195	97.7	200	0.0522	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *91.1 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *87.0 %* *40.6-153*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/17/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: DS 04 15' (H252338-08)

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	04/22/2025	ND	2.08	104	2.00	6.50	
Toluene*	<0.050	0.050	04/22/2025	ND	2.03	102	2.00	6.21	
Ethylbenzene*	<0.050	0.050	04/22/2025	ND	2.09	105	2.00	6.49	
Total Xylenes*	<0.150	0.150	04/22/2025	ND	6.26	104	6.00	8.06	
Total BTEX	<0.300	0.300	04/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.5 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: KV

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	199	99.4	200	0.915	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	195	97.7	200	0.0522	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *95.3 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *96.3 %* *40.6-153*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/17/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: DS 04 25' (H252338-09)

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	04/22/2025	ND	2.08	104	2.00	6.50	
Toluene*	<0.050	0.050	04/22/2025	ND	2.03	102	2.00	6.21	
Ethylbenzene*	<0.050	0.050	04/22/2025	ND	2.09	105	2.00	6.49	
Total Xylenes*	<0.150	0.150	04/22/2025	ND	6.26	104	6.00	8.06	
Total BTEX	<0.300	0.300	04/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.1 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: KV

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	199	99.4	200	0.915	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	195	97.7	200	0.0522	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *94.2 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *94.2 %* *40.6-153*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/17/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: DS 04 34' (H252338-10)

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	04/22/2025	ND	2.08	104	2.00	6.50	
Toluene*	<0.050	0.050	04/22/2025	ND	2.03	102	2.00	6.21	
Ethylbenzene*	<0.050	0.050	04/22/2025	ND	2.09	105	2.00	6.49	
Total Xylenes*	<0.150	0.150	04/22/2025	ND	6.26	104	6.00	8.06	
Total BTEX	<0.300	0.300	04/22/2025	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: KV

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	199	99.4	200	0.915	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	195	97.7	200	0.0522	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *79.7 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *79.8 %* *40.6-153*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/16/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: DS 01 0.25' (H252338-11)

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	04/22/2025	ND	2.08	104	2.00	6.50	
Toluene*	<0.050	0.050	04/22/2025	ND	2.03	102	2.00	6.21	
Ethylbenzene*	<0.050	0.050	04/22/2025	ND	2.09	105	2.00	6.49	
Total Xylenes*	<0.150	0.150	04/22/2025	ND	6.26	104	6.00	8.06	
Total BTEX	<0.300	0.300	04/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.3 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: KV

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	199	99.4	200	0.915	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	195	97.7	200	0.0522	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *98.5 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *96.9 %* *40.6-153*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/17/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: DS 01 4' (H252338-12)

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	04/22/2025	ND	2.08	104	2.00	6.50	
Toluene*	<0.050	0.050	04/22/2025	ND	2.03	102	2.00	6.21	
Ethylbenzene*	<0.050	0.050	04/22/2025	ND	2.09	105	2.00	6.49	
Total Xylenes*	<0.150	0.150	04/22/2025	ND	6.26	104	6.00	8.06	
Total BTEX	<0.300	0.300	04/22/2025	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: KV

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	199	99.4	200	0.915	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	195	97.7	200	0.0522	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *92.6 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *92.6 %* *40.6-153*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/17/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: DS 01 15' (H252338-13)

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	04/22/2025	ND	2.08	104	2.00	6.50	
Toluene*	<0.050	0.050	04/22/2025	ND	2.03	102	2.00	6.21	
Ethylbenzene*	<0.050	0.050	04/22/2025	ND	2.09	105	2.00	6.49	
Total Xylenes*	<0.150	0.150	04/22/2025	ND	6.26	104	6.00	8.06	
Total BTEX	<0.300	0.300	04/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.5 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: KV

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**512**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	199	99.4	200	0.915	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	195	97.7	200	0.0522	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *98.5 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *99.7 %* *40.6-153*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/17/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: DS 01 25' (H252338-14)

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	04/22/2025	ND	2.08	104	2.00	6.50	
Toluene*	<0.050	0.050	04/22/2025	ND	2.03	102	2.00	6.21	
Ethylbenzene*	<0.050	0.050	04/22/2025	ND	2.09	105	2.00	6.49	
Total Xylenes*	<0.150	0.150	04/22/2025	ND	6.26	104	6.00	8.06	
Total BTEX	<0.300	0.300	04/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *95.1 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: KV

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**256**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	199	99.4	200	0.915	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	195	97.7	200	0.0522	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *98.5 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *98.9 %* *40.6-153*

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CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/17/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: DS 01 34' (H252338-15)

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	04/22/2025	ND	2.08	104	2.00	6.50	
Toluene*	<0.050	0.050	04/22/2025	ND	2.03	102	2.00	6.21	
Ethylbenzene*	<0.050	0.050	04/22/2025	ND	2.09	105	2.00	6.49	
Total Xylenes*	<0.150	0.150	04/22/2025	ND	6.26	104	6.00	8.06	
Total BTEX	<0.300	0.300	04/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.0 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: KV

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**176**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	199	99.4	200	0.915	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	195	97.7	200	0.0522	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *87.0 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *87.6 %* *40.6-153*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/17/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: DS 02 0.5' (H252338-16)

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	04/22/2025	ND	2.08	104	2.00	6.50	
Toluene*	<0.050	0.050	04/22/2025	ND	2.03	102	2.00	6.21	
Ethylbenzene*	<0.050	0.050	04/22/2025	ND	2.09	105	2.00	6.49	
Total Xylenes*	<0.150	0.150	04/22/2025	ND	6.26	104	6.00	8.06	
Total BTEX	<0.300	0.300	04/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**208**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	199	99.4	200	0.915	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	195	97.7	200	0.0522	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *87.2 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *84.5 %* *40.6-153*

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CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/17/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: DS 02 4' (H252338-17)

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	04/22/2025	ND	2.08	104	2.00	6.50	
Toluene*	<0.050	0.050	04/22/2025	ND	2.03	102	2.00	6.21	
Ethylbenzene*	<0.050	0.050	04/22/2025	ND	2.09	105	2.00	6.49	
Total Xylenes*	<0.150	0.150	04/22/2025	ND	6.26	104	6.00	8.06	
Total BTEX	<0.300	0.300	04/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**256**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	199	99.4	200	0.915	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	195	97.7	200	0.0522	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *93.0 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *92.6 %* *40.6-153*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/17/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: DS 02 15' (H252338-18)

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	04/22/2025	ND	2.27	113	2.00	7.02	
Toluene*	<0.050	0.050	04/22/2025	ND	2.22	111	2.00	7.67	
Ethylbenzene*	<0.050	0.050	04/22/2025	ND	2.31	116	2.00	8.07	
Total Xylenes*	<0.150	0.150	04/22/2025	ND	5.91	98.5	6.00	7.28	
Total BTEX	<0.300	0.300	04/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**448**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	199	99.4	200	0.915	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	195	97.7	200	0.0522	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *95.0 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *95.6 %* *40.6-153*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/17/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: DS 02 25' (H252338-19)

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	04/23/2025	ND	2.27	113	2.00	7.02	
Toluene*	<0.050	0.050	04/23/2025	ND	2.22	111	2.00	7.67	
Ethylbenzene*	<0.050	0.050	04/23/2025	ND	2.31	116	2.00	8.07	
Total Xylenes*	<0.150	0.150	04/23/2025	ND	5.91	98.5	6.00	7.28	
Total BTEX	<0.300	0.300	04/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**288**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	199	99.4	200	0.915	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	195	97.7	200	0.0522	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *95.3 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *95.1 %* *40.6-153*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/17/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: DS 02 34' (H252338-20)

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	04/23/2025	ND	2.27	113	2.00	7.02	
Toluene*	<0.050	0.050	04/23/2025	ND	2.22	111	2.00	7.67	
Ethylbenzene*	<0.050	0.050	04/23/2025	ND	2.31	116	2.00	8.07	
Total Xylenes*	<0.150	0.150	04/23/2025	ND	5.91	98.5	6.00	7.28	
Total BTEX	<0.300	0.300	04/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**288**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	199	99.4	200	0.915	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	195	97.7	200	0.0522	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *96.7 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *95.3 %* *40.6-153*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/16/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: PH 03 22' (H252338-21)

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	04/23/2025	ND	2.27	113	2.00	7.02	
Toluene*	<0.050	0.050	04/23/2025	ND	2.22	111	2.00	7.67	
Ethylbenzene*	<0.050	0.050	04/23/2025	ND	2.31	116	2.00	8.07	
Total Xylenes*	<0.150	0.150	04/23/2025	ND	5.91	98.5	6.00	7.28	
Total BTEX	<0.300	0.300	04/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6080**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	199	99.4	200	0.915	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	195	97.7	200	0.0522	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *98.7 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *98.8 %* *40.6-153*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/16/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: PH 03 26' (H252338-22)

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	04/23/2025	ND	2.27	113	2.00	7.02	
Toluene*	<0.050	0.050	04/23/2025	ND	2.22	111	2.00	7.67	
Ethylbenzene*	<0.050	0.050	04/23/2025	ND	2.31	116	2.00	8.07	
Total Xylenes*	<0.150	0.150	04/23/2025	ND	5.91	98.5	6.00	7.28	
Total BTEX	<0.300	0.300	04/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.5 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6160**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	199	99.4	200	0.915	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	195	97.7	200	0.0522	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *96.5 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *95.4 %* *40.6-153*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/16/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: PH 03 32' (H252338-23)

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	04/23/2025	ND	2.27	113	2.00	7.02	
Toluene*	<0.050	0.050	04/23/2025	ND	2.22	111	2.00	7.67	
Ethylbenzene*	<0.050	0.050	04/23/2025	ND	2.31	116	2.00	8.07	
Total Xylenes*	<0.150	0.150	04/23/2025	ND	5.91	98.5	6.00	7.28	
Total BTEX	<0.300	0.300	04/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3040**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	199	99.4	200	0.915	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	195	97.7	200	0.0522	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *94.3 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *94.4 %* *40.6-153*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/16/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: PH 05 15' (H252338-24)

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	04/23/2025	ND	2.27	113	2.00	7.02	
Toluene*	<0.050	0.050	04/23/2025	ND	2.22	111	2.00	7.67	
Ethylbenzene*	<0.050	0.050	04/23/2025	ND	2.31	116	2.00	8.07	
Total Xylenes*	<0.150	0.150	04/23/2025	ND	5.91	98.5	6.00	7.28	
Total BTEX	<0.300	0.300	04/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.4 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**8560**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/21/2025	ND	199	99.4	200	0.915	
DRO >C10-C28*	<10.0	10.0	04/21/2025	ND	195	97.7	200	0.0522	
EXT DRO >C28-C36	<10.0	10.0	04/21/2025	ND					

Surrogate: 1-Chlorooctane *98.2 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *97.9 %* *40.6-153*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/16/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: PH 05 26' (H252338-25)

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	04/23/2025	ND	2.27	113	2.00	7.02	
Toluene*	<0.050	0.050	04/23/2025	ND	2.22	111	2.00	7.67	
Ethylbenzene*	<0.050	0.050	04/23/2025	ND	2.31	116	2.00	8.07	
Total Xylenes*	<0.150	0.150	04/23/2025	ND	5.91	98.5	6.00	7.28	
Total BTEX	<0.300	0.300	04/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1920**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/22/2025	ND	206	103	200	0.937	
DRO >C10-C28*	<10.0	10.0	04/22/2025	ND	201	101	200	1.44	
EXT DRO >C28-C36	<10.0	10.0	04/22/2025	ND					

Surrogate: 1-Chlorooctane *82.2 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *74.3 %* *40.6-153*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/16/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: PH 05 30' (H252338-26)

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	04/23/2025	ND	2.27	113	2.00	7.02	
Toluene*	<0.050	0.050	04/23/2025	ND	2.22	111	2.00	7.67	
Ethylbenzene*	<0.050	0.050	04/23/2025	ND	2.31	116	2.00	8.07	
Total Xylenes*	<0.150	0.150	04/23/2025	ND	5.91	98.5	6.00	7.28	
Total BTEX	<0.300	0.300	04/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1630**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/22/2025	ND	206	103	200	0.937	
DRO >C10-C28*	<10.0	10.0	04/22/2025	ND	201	101	200	1.44	
EXT DRO >C28-C36	<10.0	10.0	04/22/2025	ND					

Surrogate: 1-Chlorooctane *85.2 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *75.0 %* *40.6-153*

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Celey D. Keene, Lab Director/Quality Manager

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/16/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: PH 04 4' (H252338-27)

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	04/23/2025	ND	2.27	113	2.00	7.02	
Toluene*	<0.050	0.050	04/23/2025	ND	2.22	111	2.00	7.67	
Ethylbenzene*	**0.261**	0.050	04/23/2025	ND	2.31	116	2.00	8.07	GC-NC1
Total Xylenes*	<0.150	0.150	04/23/2025	ND	5.91	98.5	6.00	7.28	
Total BTEX	<0.300	0.300	04/23/2025	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**14400**	16.0	04/22/2025	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**38.7**	10.0	04/22/2025	ND	206	103	200	0.937	
DRO >C10-C28*	**1520**	10.0	04/22/2025	ND	201	101	200	1.44	
EXT DRO >C28-C36	**342**	10.0	04/22/2025	ND					

Surrogate: 1-Chlorooctane *91.5 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *88.2 %* *40.6-153*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/16/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: PH 04 15' (H252338-28)

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	04/23/2025	ND	2.27	113	2.00	7.02	
Toluene*	<0.050	0.050	04/23/2025	ND	2.22	111	2.00	7.67	
Ethylbenzene*	<0.050	0.050	04/23/2025	ND	2.31	116	2.00	8.07	
Total Xylenes*	<0.150	0.150	04/23/2025	ND	5.91	98.5	6.00	7.28	
Total BTEX	<0.300	0.300	04/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.6 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6930**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/22/2025	ND	206	103	200	0.937	
DRO >C10-C28*	**23.3**	10.0	04/22/2025	ND	201	101	200	1.44	
EXT DRO >C28-C36	**13.6**	10.0	04/22/2025	ND					

Surrogate: 1-Chlorooctane *85.4 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *79.4 %* *40.6-153*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/16/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: PH 04 26' (H252338-29)

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	04/23/2025	ND	2.27	113	2.00	7.02	
Toluene*	<0.050	0.050	04/23/2025	ND	2.22	111	2.00	7.67	
Ethylbenzene*	<0.050	0.050	04/23/2025	ND	2.31	116	2.00	8.07	
Total Xylenes*	<0.150	0.150	04/23/2025	ND	5.91	98.5	6.00	7.28	
Total BTEX	<0.300	0.300	04/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**4200**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/22/2025	ND	206	103	200	0.937	
DRO >C10-C28*	<10.0	10.0	04/22/2025	ND	201	101	200	1.44	
EXT DRO >C28-C36	<10.0	10.0	04/22/2025	ND					

Surrogate: 1-Chlorooctane *84.9 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *78.4 %* *40.6-153*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/16/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: PH 04 30' (H252338-30)

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	04/23/2025	ND	2.27	113	2.00	7.02	
Toluene*	<0.050	0.050	04/23/2025	ND	2.22	111	2.00	7.67	
Ethylbenzene*	<0.050	0.050	04/23/2025	ND	2.31	116	2.00	8.07	
Total Xylenes*	<0.150	0.150	04/23/2025	ND	5.91	98.5	6.00	7.28	
Total BTEX	<0.300	0.300	04/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.1 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**4000**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/22/2025	ND	206	103	200	0.937	
DRO >C10-C28*	<10.0	10.0	04/22/2025	ND	201	101	200	1.44	
EXT DRO >C28-C36	<10.0	10.0	04/22/2025	ND					

Surrogate: 1-Chlorooctane *85.5 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *79.0 %* *40.6-153*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/15/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: PH 01 24' (H252338-31)

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	04/23/2025	ND	2.27	113	2.00	7.02	
Toluene*	<0.050	0.050	04/23/2025	ND	2.22	111	2.00	7.67	
Ethylbenzene*	<0.050	0.050	04/23/2025	ND	2.31	116	2.00	8.07	
Total Xylenes*	<0.150	0.150	04/23/2025	ND	5.91	98.5	6.00	7.28	
Total BTEX	<0.300	0.300	04/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1360**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/22/2025	ND	206	103	200	0.937	
DRO >C10-C28*	<10.0	10.0	04/22/2025	ND	201	101	200	1.44	
EXT DRO >C28-C36	<10.0	10.0	04/22/2025	ND					

Surrogate: 1-Chlorooctane *86.5 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *78.3 %* *40.6-153*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/15/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: PH 01 26' (H252338-32)

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	04/23/2025	ND	2.27	113	2.00	7.02	
Toluene*	<0.050	0.050	04/23/2025	ND	2.22	111	2.00	7.67	
Ethylbenzene*	<0.050	0.050	04/23/2025	ND	2.31	116	2.00	8.07	
Total Xylenes*	<0.150	0.150	04/23/2025	ND	5.91	98.5	6.00	7.28	
Total BTEX	<0.300	0.300	04/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**704**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/22/2025	ND	206	103	200	0.937	
DRO >C10-C28*	<10.0	10.0	04/22/2025	ND	201	101	200	1.44	
EXT DRO >C28-C36	<10.0	10.0	04/22/2025	ND					

Surrogate: 1-Chlorooctane *86.4 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *77.7 %* *40.6-153*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Ensolum, LLC
Project Manager:	Hadlie Green
Address:	601 N. Marienfeld St. STE 400
City:	Midland State: TX Zip: 79701
Phone #:	432-557-8895 Fax #:
Project #:	03B1417244 Project Owner: Oxy
Project Name:	MDC SWD SW Battery
Project Location:	Eddy Co. NM
Sampler Name:	Nicolas Christinas, Shane Miller

BILL TO

P.O. #:	
Company:	Oxy USA, Inc.
Attn:	Wade Dittrich
Address:	
City:	
State:	Zip:
Phone #:	575-390-2828
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING DATE	TIME	BTEX	TPH	Chloride
H252338																		
1	DS03	0.25	G	1			✓					✓		04/16/25	13:51	✓	✓	✓
2	DS03	4'	G	1			✓								15:47	✓	✓	✓
3	DS03	15'	G	1			✓								16:04	✓	✓	✓
4	DS03	25'	G	1			✓								16:32	✓	✓	✓
5	DS03	34'	G	1			✓								17:00	✓	✓	✓
6	DS04	0.25	G	1			✓							04/17/25	10:45	✓	✓	✓
7	DS04	4'	G	1			✓								10:48	✓	✓	✓
8	DS04	15'	G	1			✓								10:55	✓	✓	✓
9	DS04	25'	G	1			✓								11:03	✓	✓	✓
10	DS04	34'	G	1			✓								11:24	✓	✓	✓

Relinquished By:	Date: 4.17.25 Time: 1502	Received By:	Verbal Result: ☐ Yes ☑ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address: Hgreen@ensolum.com
			REMARKS:

Delivered By: (Circle One) Sampler - UPS - Bus - Other:

Observed Temp. °C 4.1 Corrected Temp. °C 4.4

Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No

CHECKED BY: (Initials) SR

Turnaround Time: Standard ☑ Rush ☐

Thermometer ID ~~#113~~ #140 Correction Factor ~~-0.5°C~~ +0.3

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No

Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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

CARDINAL Laboratories

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(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

2 of 4

Page 36 of 38

Company Name: Ensolum, LLC
Project Manager: Hadlie Green
Address: 601 N. Marienfeld St. STE 400
City: Midland State: TX Zip: 79701
Phone #: 432-557-8895 Fax #:
Project #: 03B1417244 Project Owner: OXY
Project Name: MOC SWD SW Battery
Project Location: Eddy Co, NM
Sampler Name: Shane Butler, Nicolas Christakos

BILL TO
P.O. #:
Company: Oxy USA, Inc.
Attn: Wade Dittrich
Address:
City:
State: Zip:
Phone #: 575-390-2828
Fax #:

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	MATRIX: WASTEWATER	MATRIX: SOIL	MATRIX: OIL	MATRIX: SLUDGE	MATRIX: OTHER:	PRESERV.: ACID/BASE:	PRESERV.: ICE / COOL	PRESERV.: OTHER:	SAMPLING: DATE	SAMPLING: TIME	BTEX	TPH	Chloride
H252338																		
11	DS01	0.25'	G	1			✓					✓		04/16/25	17:00	✓	✓	✓
12	DS01	4'	G	1			✓					✓		04/17/25	07:43	✓	✓	✓
13	DS01	15'	G	1			✓					✓			08:01	✓	✓	✓
14	DS01	25'	G	1			✓					✓			08:22	✓	✓	✓
15	DS01	34'	G	1			✓					✓			08:44	✓	✓	✓
16	DS02	~~0.25'~~ 0.5'	G	1			✓					✓			07:45	✓	✓	✓
17	DS02	4'	G	1			✓					✓			09:1[illegible]	✓	✓	✓
18	DS02	15'	G	1			✓					✓			09:15	✓	✓	✓
19	DS02	25'	G	1			✓					✓			09:40	✓	✓	✓
20	DS02	34'	G	1			✓					✓			09:55	✓	✓	✓

ANALYSIS REQUEST: NFE 04/17/2025 NC

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Nicolas Christakos Date: 4-17-25 Time: 1502 Received By: S Rodriguez

Relinquished By: Date: Time: Received By:

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Observed Temp. °C 4.1
Corrected Temp. °C 4.4

Sample Condition: Cool ☒ Yes ☐ No; Intact ☒ Yes ☐ No

CHECKED BY: (Initials) SR

Verbal Result: ☐ Yes ☒ No Add'l Phone #:
All Results are emailed. Please provide Email address:
Hgreen@ensolum.com

REMARKS:

Turnaround Time: Standard ☒ Rush ☐
Thermometer ID ~~#113~~ #140
Correction Factor ~~-0.5°C~~ +0.3

Bacteria (only) Sample Condition
Cool ☐ Yes ☐ No; Intact ☐ Yes ☐ No
Observed Temp. °C
Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Ensolum, LLC
Project Manager:	Hadlie Green
Address:	601 N. Marienfeld St. STE 400
City:	Midland State: TX Zip: 79701
Phone #:	432-557-8895 Fax #:
Project #:	03B1417244 Project Owner: OXY
Project Name:	MOC SWD SW Battery
Project Location:	Eddy Co NM
Sampler Name:	Shane Dittrich, Nicolas Chrisbacos

BILL TO

P.O. #:	
Company:	Oxy USA, Inc.
Attn:	Wade Dittrich
Address:	
City:	
State:	Zip:
Phone #:	575-390-2828
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	BTEX	TPH	Chloride
H252338																		
21	PH03	22'	G	1			✓					✓		4/16/25	11:03	✓	✓	✓
22	PH03	26'	G	1			✓					✓			11:08	✓	✓	✓
23	PH03	32'	G	1			✓					✓			11:51	✓	✓	✓
24	PH05	15'	G	1			✓					✓			09:00	✓	✓	✓
25	PH05	26'	G	1			✓					✓			~~26~~ 09:25	✓	✓	✓
26	PH05	30'	G	1			✓					✓			~~30~~ 09:35	✓	✓	✓
27	~~PH05~~ PH04	4'	G	1			✓					✓			13:45	✓	✓	✓
28	~~PH05~~ PH04	15'	G	1			✓					✓			13:59	✓	✓	✓
29	~~PH05~~ PH04	26'	G	1			✓					✓			14:20	✓	✓	✓
30	~~PH05~~ PH04	30'	G	1			✓					✓			14:28	✓	✓	✓

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Relinquished By:	Date: 4.17.25	Received By:	
	Time: 1500		
Relinquished By:	Date:	Received By:	
	Time:		

Verbal Result: ☐ Yes ☑ No Add'l Phone #:
All Results are emailed. Please provide Email address:
Hgreen@ensolum.com
REMARKS:

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Observed Temp. °C 4.1
Corrected Temp. °C 4.4

Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No
CHECKED BY: (Initials) SR

Turnaround Time: Standard ☑ Rush ☐
Thermometer ID #113 #140
Correction Factor -0.5 °C 10.3

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No
Observed Temp. °C
Corrected Temp. °C

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FORM-006 R 3.2 10/07/21

CARDINAL Laboratories

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC
Project Manager: Hadlie Green
Address: 601 N. Marienfeld St, STE 400
City: Midland State: TX Zip: 79701
Phone #: 432-557-8895 Fax #:
Project #: 03D1417244 Project Owner: Oxy
Project Name: MDC SWD SW Battery
Project Location: Eddy Co, NM
Sampler Name: Shane Ditter, Nicolas Christofalos

BILL TO
P.O. #:
Company: OXY USA, Inc
Attn: Wade Dittrich
Address:
City:
State: Zip:
Phone #: 575-390-2828
Fax #:

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME	BTEX	TPH	Chloride
H252338 31	PH01 24'	G	1			✓					✓		04/15/25	13:35	✓	✓	✓
32	PH01 26'	G	1			✓					✓		04/15/25	13:50	✓	✓	✓

NFE NC 04/17/25

NC NFE 04/17/25

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Relinquished By: Nicolas Christofalos Date: 4-17-25 Time: 1502 Received By: SRodriguez
Relinquished By: Date: Time: Received By:

Verbal Result: ☐ Yes ☑ No Add'l Phone #:
All Results are emailed. Please provide Email address: Hgreen@ensolum.com
REMARKS:

Delivered By: (Circle One) Sampler - UPS - Bus - Other:
Observed Temp. °C 4.1
Corrected Temp. °C 4.4
Sample Condition Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No
CHECKED BY: (Initials) SR

Turnaround Time: Standard ☑ Rush ☐
Thermometer ID ~~#140~~ #140
Correction Factor ~~+0.3°C~~ +0.3

Bacteria (only) Sample Condition Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.0 02/12/25

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4 of 4

CARDINAL Laboratories

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

April 24, 2025

HADLIE GREEN

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: MOC SWD SW BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 04/17/25 15:02.

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

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

Accreditation applies to public drinking water matrices.

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

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/16/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: PH 04 34' (H252339-01)

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	04/23/2025	ND	2.27	113	2.00	7.02	
Toluene*	<0.050	0.050	04/23/2025	ND	2.22	111	2.00	7.67	
Ethylbenzene*	<0.050	0.050	04/23/2025	ND	2.31	116	2.00	8.07	
Total Xylenes*	<0.150	0.150	04/23/2025	ND	5.91	98.5	6.00	7.28	
Total BTEX	<0.300	0.300	04/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3200**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/22/2025	ND	206	103	200	0.937	
DRO >C10-C28*	<10.0	10.0	04/22/2025	ND	201	101	200	1.44	
EXT DRO >C28-C36	<10.0	10.0	04/22/2025	ND					

Surrogate: 1-Chlorooctane *85.5 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *77.8 %* *40.6-153*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	04/17/2025	Sampling Date:	04/16/2025
Reported:	04/24/2025	Sampling Type:	Soil
Project Name:	MOC SWD SW BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03B1417244	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY 32.586619-104.526978		

Sample ID: PH 05 31' (H252339-02)

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	04/23/2025	ND	2.27	113	2.00	7.02	
Toluene*	<0.050	0.050	04/23/2025	ND	2.22	111	2.00	7.67	
Ethylbenzene*	<0.050	0.050	04/23/2025	ND	2.31	116	2.00	8.07	
Total Xylenes*	<0.150	0.150	04/23/2025	ND	5.91	98.5	6.00	7.28	
Total BTEX	<0.300	0.300	04/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3920**	16.0	04/22/2025	ND	432	108	400	0.00	

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	04/22/2025	ND	206	103	200	0.937	
DRO >C10-C28*	<10.0	10.0	04/22/2025	ND	201	101	200	1.44	
EXT DRO >C28-C36	<10.0	10.0	04/22/2025	ND					

Surrogate: 1-Chlorooctane *86.3 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *78.3 %* *40.6-153*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Ensolum, LLC
Project Manager:	Hadlie Green
Address:	601 N. Marienfeld St. STE 400
City:	Midland State: TX Zip: 79701
Phone #:	432-557-8895 Fax #:
Project #:	03B1417244 Project Owner: OXY
Project Name:	MDC SWD SW Battery
Project Location:	Eddy Co, NM
Sampler Name:	Shane Miller, Nicolas Christancos

BILL TO

P.O. #:	
Company:	Oxy USA, Inc.
Attn:	Wade Dittrich
Address:	
City:	
State:	Zip:
Phone #:	575-390-2828
Fax #:	

ANALYSIS REQUEST

BTEX
TPH
Chloride

04/17/25 NFE NC

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING DATE	SAMPLING TIME
H252339-1	PH04	34'	G	1			✓					✓		4/16/25	14:49
2	PH05	31'	G	1			✓					✓		4/16/25	0940

04/17/25 NFE NC

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 4/17/25	Received By:	Verbal Result: ☐ Yes ☑ No Add'l Phone #:
Relinquished By:	Time: 1502	Received By:	All Results are emailed. Please provide Email address: Hgreen@ensolum.com
	Date:		REMARKS:
	Time:		

Delivered By: (Circle One) Sampler - UPS - Bus - Other:

Observed Temp. °C 4.1 Corrected Temp. °C 4.4

Sample Condition: Cool ☐ Yes ☑ ~~Yes~~ Intact ☐ No ☐ No

CHECKED BY: (Initials) SR

Turnaround Time: Standard ☑ Rush ☐

Thermometer ID #113 ~~#140~~ Correction Factor ~~-0.6°C~~ +0.3

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ Yes Intact ☐ No ☐ No

Observed Temp. °C

Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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

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

QUESTIONS

Action 529563

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 529563
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2315046261**
Incident Name	**NAPP2315046261 MOC SWD SWBAT @ 30-015-21669**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Received**
Incident Well	**[30-015-21669] MOC SWD #001**

Location of Release Source *Please answer all the questions in this group.*	
Site Name	MOC SWD SWBAT
Date Release Discovered	05/17/2023
Surface Owner	Federal

Incident Details *Please answer all the questions in this group.*	
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 *Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.*	
Crude Oil Released (bbls) Details	Cause: Lightning | Tank (Any) | Crude Oil | Released: 20 BBL | Recovered: 10 BBL | Lost: 10 BBL.
Produced Water Released (bbls) Details	Cause: Lightning | Tank (Any) | Produced Water | Released: 80 BBL | Recovered: 40 BBL | Lost: 40 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 (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 529563
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

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	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**

With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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

I hereby agree and sign off to the above statement	Name: Ensolum Company Email: Oxy_Midland@ensolum.com Date: 11/24/2025

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QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 529563
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

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	Direct Measurement
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between ½ and 1 (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	Zero feet, overlying, or within area
Categorize the risk of this well / site being in a karst geology	High
A 100-year floodplain	Between 500 and 1000 (ft.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan		
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
Requesting a remediation plan approval with this submission		Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.		
Have the lateral and vertical extents of contamination been fully delineated		Yes
Was this release entirely contained within a lined containment area		No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)		
Chloride	(EPA 300.0 or SM4500 Cl B)	14400
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	1901
GRO+DRO	(EPA SW-846 Method 8015M)	1559
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		05/17/2023
On what date will (or did) the final sampling or liner inspection occur		02/24/2026
On what date will (or was) the remediation complete(d)		02/24/2026
What is the estimated surface area (in square feet) that will be reclaimed		0
What is the estimated volume (in cubic yards) that will be reclaimed		0
What is the estimated surface area (in square feet) that will be remediated		1030
What is the estimated volume (in cubic yards) that will be remediated		155
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.		
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.		

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QUESTIONS (continued)

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	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

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	fEEM0112342028 LEA LAND LANDFILL
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: Ensolum Company Email: Oxy_Midland@ensolum.com Date: 11/24/2025
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

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	Action Number: 529563
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

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

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QUESTIONS (continued)

Operator:	OGRID:
OXY USA INC P.O. Box 4294 Houston, TX 772104294	16696
	Action Number: 529563
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**451245**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**04/18/2025**
What was the (estimated) number of samples that were to be gathered	**15**
What was the sampling surface area in square feet	**4610**

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

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 529563
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is Conditionally Approved. The “Environmental Karst Study Report – Oxy MOC SWD SWBAT” will be accepted for record and placed in the incident files for future reference. The SDNP survey area contains no surface karst features within 200 feet (61 meters) of the spill delineation boundary provided by the client. Karst occurrence zones are prone to rapid karst formation and warrant careful planning and engineering to mitigate karst-forming processes that could be accelerated by removal of surface cover or the vibrations associated with heavy equipment used in the remediation process. In New Mexico, karst surveys are generally valid for a period of three years due to the dynamic and unpredictable nature of karst areas.	12/23/2025
rhamlet	Any area designated as a “release area” will need to have 5-point composite confirmation soil samples conducted within the entire boundary of that area. Please collect confirmation closure samples, representing no more than 200 ft2. All samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Floor confirmation samples should be delineated/excavated to meet closure criteria standards from Table 1 of the OCD Spill Rule for site receptor characterization/proven depth to water determination. Step-out samples are not allowed if any part of the release is considered off-pad. Please make sure that the edge of the release extent is accurately defined. Sidewall/edge samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. All off-pad areas must meet reclamation standards in the OCD Spill Rule. The work will need to be completed in 90 days after the report has been reviewed.	12/23/2025