



January 16, 2025  
New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

**Re: Remediation Work Plan  
Shell State 1C CTB  
Facility ID: fAPP2127031415  
Incident Number: nAPP2402456040  
32.354063°N, 103.631131°W  
Lea 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 (Work Plan)* to document the site assessment activities completed to date and propose a work plan to address impacted soil identified at the Shell State 1C CTB (Site). The purpose of the site assessment activities was to delineate the vertical and horizontal extent of impacted soil resulting from a release of produced water and oil at the Site. The following Work Plan proposes to excavate impacted soil from the top 9 feet and 13 feet below ground surface (bgs) to terminal depth within the release extent based on field screenings and laboratory analytical reports from future delineation activities.

### **SITE DESCRIPTION AND RELEASE SUMMARY**

The Site is located in Unit C, Section 36, Township 22 South, Range 32 East, in Lea County, New Mexico (32.354063°N, 103.631131°W) and is in a pasture not associated with oil and gas exploration and production operations on State Trust Land (STL) managed by the New Mexico State Land Office (SLO).

On January 23, 2024, a leak on an injection line due to equipment failure resulted in the release of 40 barrels (bbls) of produced water and 10 bbls of oil into the pasture. Approximately 2.5 bbls of produced water and approximately 2.5 bbls of oil were recovered via the use of vacuum trucks. Oxy submitted a notification of release (NOR) on the NMOCD portal on January 24, 2024. The release was subsequently assigned Incident Number nAPP2402456040.

### **SITE CHARACTERIZATION 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 desktop review are presented on NMOCD Portal of the Form C-141, Site Assessment/Characterization submitted on January 24, 2024. Potential site receptors are identified on **Figure 2 in Appendix A**.

At the time of the release and during initial remediation activities, depth to groundwater was unknown with the nearest water well (United States Geological Survey (USGS) 321952103400801) located

approximately 2.71 miles to the southwest with a total depth of 630 feet below ground surface (bgs) and a depth to groundwater of 487 feet bgs .

Upon receiving approval from the landowner, the Bureau of Land Management (BLM), on September 18, 2024 and from the New Mexico Office of the State Engineer (NMOSE) on November 8, 2024, a soil boring (C-4908-POD1) was advanced on December 9, 2024 approximately 0.19 miles north of the Site to a total depth of 110 feet bgs to confirm the presence/absence of groundwater. The soil boring was left open for 72 hours after which it was gauged with a water level meter, with no groundwater encountered. The soil boring was subsequently backfilled following the approved NMOSE plugging procedures. The Well Records for the water wells located within 0.5-mile of the Site are included in **Appendix B**.

The closest continuously flowing or significant watercourse to the Site is the Pecos River located approximately 23 miles southwest 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 and is not within a 100-year floodplain or overlying a subsurface mine. The Site is underlain by stable geology (low potential karst designation area).

Based on the results of the Site Characterization and the soil boring installed on November 19, 2024, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

Closure Criteria for Soils Impacted by a Release – groundwater >100 feet bgs (Non-Vegetative Zone)

- 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) + TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH (GRO+DRO+motor oil range organics (MRO): 2,500 mg/kg
- Chloride: 600 mg/kg

Closure Criteria for Soils Impacted by a Release – groundwater ≤50 feet bgs (Vegetative Zone)

- Benzene: 10 mg/kg
- BTEX: 50 mg/kg
- TPH (GRO+DRO+MRO): 100 mg/kg
- Chloride: 600 mg/kg

## CULTURAL PROPERTIES PROTECTION RULE

The release was identified in the pasture and as a result, the release location was assessed for determination of whether the release encroached into undisturbed areas to comply with the Cultural Properties Protection Rule (CPP) and an Archaeological Records Management System (ARMS) review was performed for the Site prior to disturbing the surface with mechanical equipment. No cultural resources were identified within and/or around the release extent requiring remediation efforts. An approved CPP Rule cover sheet showing the area was previously surveyed is attached as Supporting Documentation in **Appendix B** and will be included in the final Closure Request.

## BIOLOGICAL COMPLIANCE AND REPORTING

Ensum personnel conducted a desktop review to establish if the Site is within an area of possible threatened, endangered, and sensitive wildlife and plant species, environmentally sensitive areas, surface waters, and sensitive soils. The desktop review results can be found in the Supporting Documentation in **Appendix B**.

- The Site is not located within an area of possible threatened, endangered, and sensitive wildlife and plant species.
- No environmentally sensitive receptors were located near the Site as mentioned in the Site Characterization.
- The soil type is classified as Pyote and Maljamar fine sands (PU), according to the Web Soil Survey. PU is considered a sensitive soil by the SLO definition. The release occurred directly onto the pasture potentially containing sensitive soils and will be remediated accordingly to minimize impacts.

## SITE ASSESSMENT AND DELINEATION ACTIVITIES

On March 20, 2024, Ensum personnel conducted a Site visit to evaluate the release extent based on information provided on the C-141 and visual observations. At this time, initial delineation pothole samples were advanced by SDR Enterprises (SDR) and were collected by Ensum throughout the release extent with the use of a trackhoe. Based on these delineation results, the entire release extent was initially excavated down to depths varying from 9 feet to 13 feet bgs.

On October 10, 2024, subsequent to excavation activities, Ensum personnel collected 32 composite excavation floor soil samples (FS01 through FS32) and 26 composite excavation sidewall soil samples from 14 locations (SW01 through SW14). The soil samples were field screened for volatile organics compounds (VOCs) utilizing a calibrated photonization detector (PID) and chloride utilizing Hach® chloride QuanTab® test strips. The excavation extent and soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on **Figure 1 (Appendix A)**. Photographic documentation was completed during the Site visit and a Photographic Log is included in **Appendix C**.

## LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for the composite excavation floor and excavation sidewall soil samples (FS01 through FS32 and SW01 through SW14) indicated that chloride concentrations exceeded the applicable Closure Criteria at depths ranging from 9 feet to 13 feet bgs for various excavation floor and excavation sidewall soil sample locations. The soil sample analytical results are located in **Table 1 (Non-Vegetative Zone)** and **Table 2 (Vegetative Zone)** and the field screening results are located in **Table A (Appendix D)**.

Based on the soil sample analytical results, further remediation is warranted to accurately define the terminal depths and range for the horizontal and vertical extents of the Site.

## VARIANCE REQUEST

### Sampling Variance

Based on a desktop review of the surrounding area along with the recently drilled soil boring (C-4908-POD1) indicating depth to groundwater is greater than 110 feet bgs for the Site, Ensum, on behalf of

Oxy USA, Inc.  
Remediation Work Plan  
Shell State 1C CTB

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Oxy, would like to request an alternative of 400 square feet, five-point composite samples collected from the floor of the excavation. The current excavation extent is approximately 6,281 square feet, which would roughly equal 32 composite samples per the 200 square foot requirement in 19.15.29.12 (D)(1)(c) NMAC. If approved, the 400 square foot variance would decrease the number of samples collected from the excavation floor to 16 composite floor samples. The total amount of floor samples may change dependent on the below proposed Remediation Work Plan. The sidewalls will still be collected every 200 square feet.

## PROPOSED REMEDIATION WORK PLAN

The soil sampling results indicate soils containing elevated chloride concentrations exist across an approximate 6,281 square foot area and currently extend to a maximum depth of 13 feet bgs. Oxy proposes to complete the following remediation activities:

- SDR and Ensolum will pothole within each 200 square foot soil sample grid to determine a terminal vertical depth utilizing a track hoe and/or backhoe.
- Once a terminal depth is reached and confirmed by either field screenings and/or laboratory analytical results, the horizontal extents of the current excavation extent will be delineated utilizing a track hoe and/or backhoe.
- Excavation will proceed vertically and laterally until the excavation floor and sidewall samples confirm benzene, total BTEX, TPH, and chloride concentrations are compliant with their applicable Closure Criteria.
- Once excavation activities are completed, official excavation composite floor and sidewall soil samples will be collected every 400 square feet, dependent on variance approval, and every 200 square feet respectively. Samples will be placed in pre-cleaned glass jars labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The samples will be 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-MRO following EPA Method 8015M/D; and chloride following Standard Method SM-4500 Cl-B.
- An estimated 8,208 cubic yards (cy) of impacted soil will be excavated. The excavated soil will be transferred to 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 Work Plan by the SLO and NMOCD.

If you have any questions or comments, please contact Ms. Kelly Lowery at (214) 733-3165 or [klowery@ensolum.com](mailto:klowery@ensolum.com).

Sincerely,  
**Ensolum, LLC**



Kelly Lowery, GIT  
Project Geologist



Beaux Jennings  
Associate Principal



Oxy USA, Inc.  
Remediation Work Plan  
Shell State 1C CTB

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cc: Wade Dittrich, Oxy USA, Inc.  
Tyson Pierce, Oxy USA, Inc.  
SLO

Appendices:

Appendix A Figures  
Appendix B Supporting Documentation  
Appendix C Photographic Log  
Appendix D Soil Sample Results Table  
Appendix E Laboratory Analytical Reports



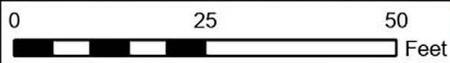
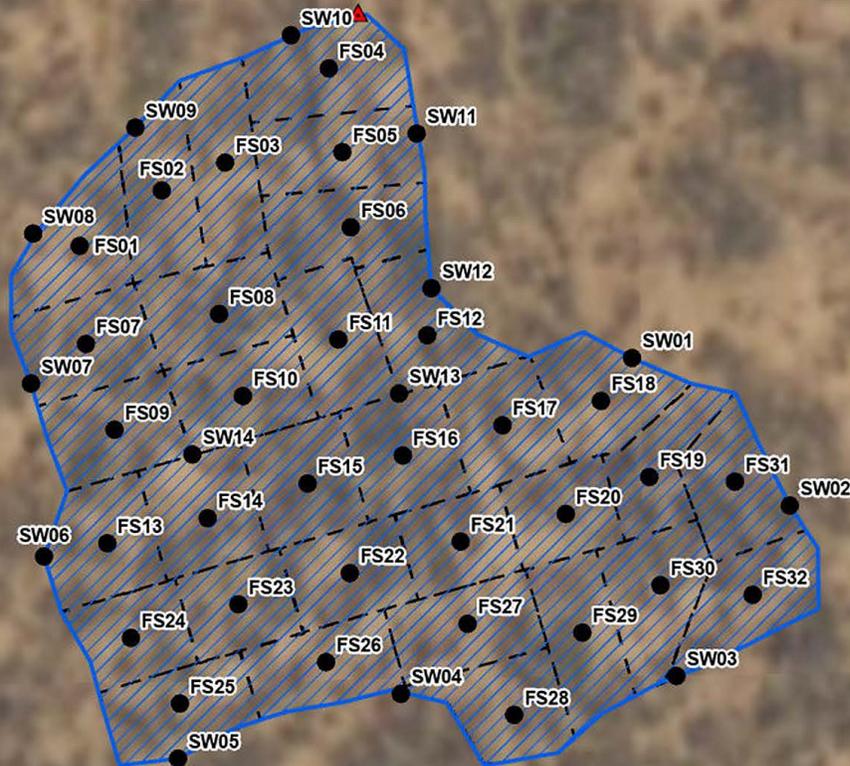
## APPENDIX A

### Figures

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### Legend

- ▲ Release Point
- Confirmation Soil Sample Location
- Excavation Extent
- - Composite Soil
- - Sampling Grid Boundary



Sources: Environmental Systems Research Institute (ESRI)



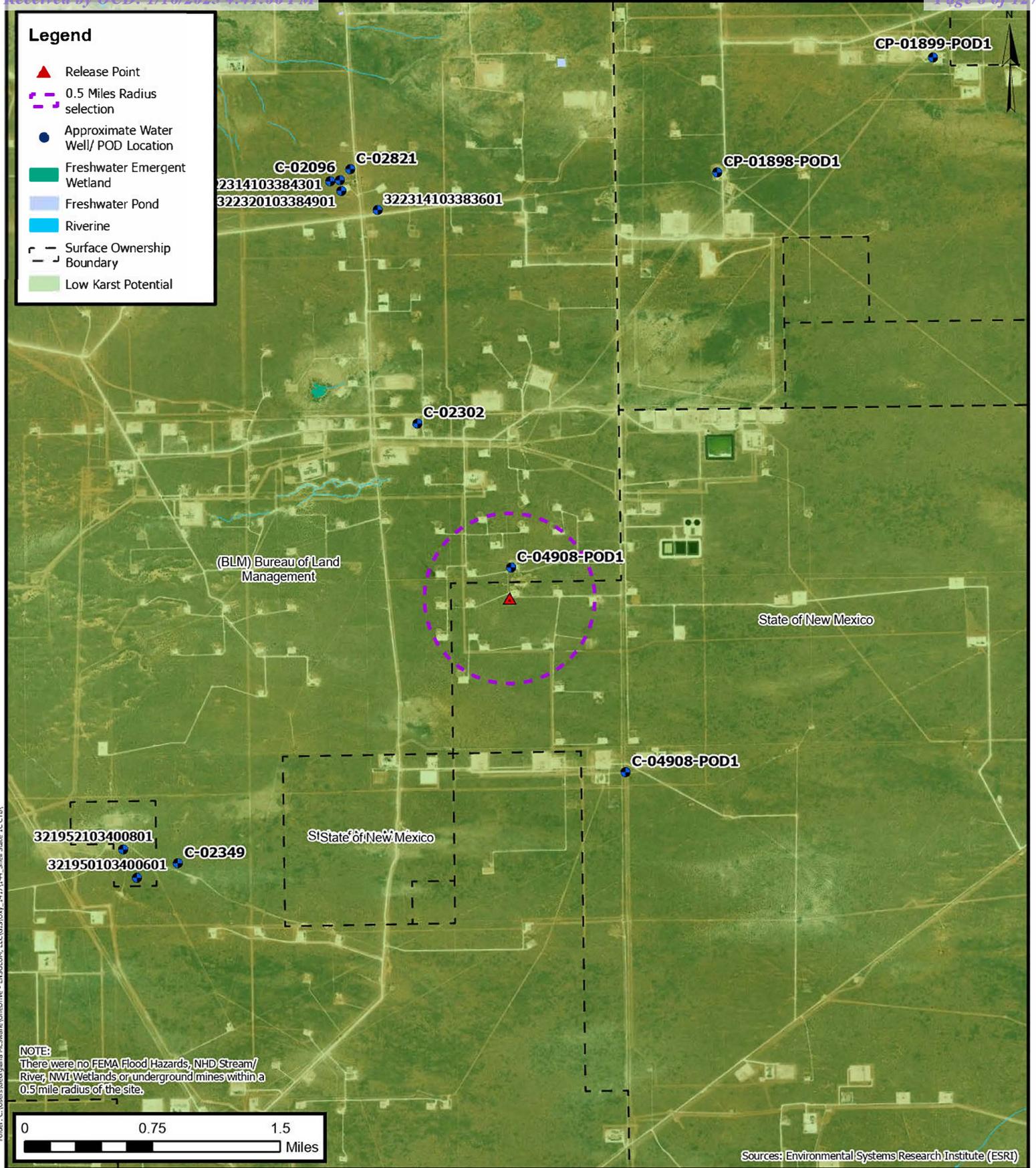
## Site Map

Oxy USA Inc.  
 Shell State 1C CTB  
 32.354063° N, 103.631131° W  
 Lea County, New Mexico

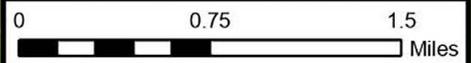
PROJECT NUMBER: 03B1417144

## FIGURE

# 1



NOTE:  
 There were no FEMA Flood Hazards, NHD Stream/  
 River, NWI Wetlands or underground mines within a  
 0.5 mile radius of the site.



**Closure Criteria Map**  
 Oxy USA Inc.  
 Shell State 1C CTB  
 32.354063° N, 103.631131° W  
 Lea County, New Mexico

**FIGURE**  
**2**

PROJECT NUMBER: 03B1417144



## APPENDIX B

### Supporting Documentation

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**Kelly Lowery**

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**From:** Raina Hanley <RHanley@bcarch.org>  
**Sent:** Thursday, June 20, 2024 10:36 AM  
**To:** Kelly Lowery; Beaux Jennings; Wade Burns; Marc Seamands  
**Subject:** Fw: Remediation negative survey Report submission for Ensolum- NMCRIS Activity 155399 (BCA24-1718)

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

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**From:** Curry, Anne R. <acurry@slo.state.nm.us>  
**Sent:** Thursday, June 20, 2024 9:13 AM  
**To:** Raina Hanley <RHanley@bcarch.org>; CRO Info <croinfo@slo.state.nm.us>  
**Subject:** RE: Remediation negative survey Report submission for Ensolum- NMCRIS Activity 155399 (BCA24-1718)

Good morning Raina,

Thank you for the submission of the attached Cover Sheet. Since the proposed remediation activities will take place in an area that has been covered by archaeological survey (NMCRIS 155399), Ensolum is free to move forward with remediation. Please reach out if you have additional questions-



**Anne Curry**

*Archaeologist*  
*Cultural Resources Office*  
Office: 505.827.1276  
Cell: 505.469.5582

New Mexico State Land Office  
310 Old Santa Fe Trail

 P.O. Box 1148  
Santa Fe, NM 87504-1148  
acurry@slo.state.nm.us  
[nmstatelands.org](http://nmstatelands.org)

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**From:** Raina Hanley <RHanley@bcarch.org>  
**Sent:** Wednesday, April 24, 2024 4:34 PM  
**To:** CRO Info <croinfo@slo.state.nm.us>  
**Subject:** [EXTERNAL] Remediation negative survey Report submission for Ensolum- NMCRIS Activity 155399 (BCA24-1718)

Good Afternoon,

Attached please find the negative report NIAF for NMCRIS Activity 155399 and the associated cultural resources cover sheet for the following project for Ensolum on behalf of Oxy USA for proposed remediation activities.

- A Class III Cultural Resource Inventory for Oxy USA's Shell State 1C CTB Remediation in Lea County, New Mexico

The NIAF materials were submitted through NMCRIS, but the NIAF form itself was not. Please let me know if you would like to open the project so I can upload the PDF version of the information onto NMCRIS.

Thank you!  
Raina

**Raina Hanley**  
*Chief Operating Officer*

Beaver Creek Archaeology & Environmental  
1632 Capitol Way  
Bismarck, ND 58501  
Ph: (701) 663-5521 | Fx: (701) 663-5589

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712 West Quay Avenue  
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## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
New Mexico Ecological Services Field Office  
2105 Osuna Road Ne  
Albuquerque, NM 87113-1001  
Phone: (505) 346-2525 Fax: (505) 346-2542

In Reply Refer To:  
Project Code: 2025-0039407  
Project Name: Shell State 1C CTB

01/09/2025 14:32:25 UTC

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

Thank you for your recent request for information on federally listed species and important wildlife habitats that may occur in your project area. The U.S. Fish and Wildlife Service (Service) has responsibility for certain species of New Mexico wildlife under the Endangered Species Act (ESA) of 1973 as amended (16 USC 1531 et seq.), the Migratory Bird Treaty Act as amended (16 USC 701-715), and the Bald and Golden Eagle Protection Act as amended (16 USC 668-668(c)). We are providing the following guidance to assist you in determining which federally imperiled species may or may not occur within your project area, and to recommend some conservation measures that can be included in your project design.

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the ESA of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the ESA is to provide a means whereby threatened and endangered species and

the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the ESA and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (NEPA; 42 USC 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at <https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>.

### **Candidate Species and Other Sensitive Species**

A list of candidate and other sensitive species in your area is also attached. Candidate species and other sensitive species are species that have no legal protection under the ESA, although we recommend that candidate and other sensitive species be included in your surveys and considered for planning purposes. The Service monitors the status of these species. If significant declines occur, these species could potentially be listed. Therefore, actions that may contribute to their decline should be avoided.

Lists of sensitive species including State-listed endangered and threatened species are compiled by New Mexico State agencies. These lists, along with species information, can be found at the following websites.

Biota Information System of New Mexico (BISON-M): [www.bison-m.org](http://www.bison-m.org)

New Mexico State Forestry. The New Mexico Endangered Plant Program:  
<https://www.emnrd.nm.gov/sfd/rare-plants/>

New Mexico Rare Plant Technical Council, New Mexico Rare Plants: [nmrareplants.unm.edu](http://nmrareplants.unm.edu)

Natural Heritage New Mexico, online species database: [nhnm.unm.edu](http://nhnm.unm.edu)

## WETLANDS AND FLOODPLAINS

Under Executive Orders 11988 and 11990, Federal agencies are required to minimize the destruction, loss, or degradation of wetlands and floodplains, and preserve and enhance their natural and beneficial values. These habitats should be conserved through avoidance, or mitigated to ensure that there would be no net loss of wetlands function and value.

We encourage you to use the National Wetland Inventory (NWI) maps in conjunction with ground-truthing to identify wetlands occurring in your project area. The Service's NWI program website, [www.fws.gov/wetlands/Data/Mapper.html](http://www.fws.gov/wetlands/Data/Mapper.html), integrates digital map data with other resource information. We also recommend you contact the U.S. Army Corps of Engineers for permitting requirements under section 404 of the Clean Water Act if your proposed action could impact floodplains or wetlands.

## MIGRATORY BIRDS

In addition to responsibilities to protect threatened and endangered species under the ESA, there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the Service (50 CFR 10.12 and 16 USC 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a Federal nexus) or a Bird/Eagle Conservation Plan (when there is no Federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>. We also recommend review of the Birds of Conservation Concern list (<https://www.fws.gov/media/birds-conservation-concern-2021>) to fully evaluate the effects to the birds at your site. This list identifies migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent top conservation priorities for the Service, and are potentially threatened by disturbance, habitat impacts, or other project development activities.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 thereby provides additional protection for both migratory birds and migratory bird habitat. Please visit <https://www.fws.gov/partner/council-conservation-migratory-birds> for information regarding the implementation of Executive Order 13186.

Project code: 2025-0039407

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We suggest you contact the New Mexico Department of Game and Fish, and the New Mexico Energy, Minerals, and Natural Resources Department, Forestry Division for information regarding State protected and at-risk species fish, wildlife, and plants.

For further consultation with the Service we recommend submitting inquiries or assessments electronically to our incoming email box at [nmesfo@fws.gov](mailto:nmesfo@fws.gov), where it will be more promptly routed to the appropriate biologist for review.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

## OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

### **New Mexico Ecological Services Field Office**

2105 Osuna Road Ne  
Albuquerque, NM 87113-1001  
(505) 346-2525

Project code: 2025-0039407

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## PROJECT SUMMARY

Project Code: 2025-0039407

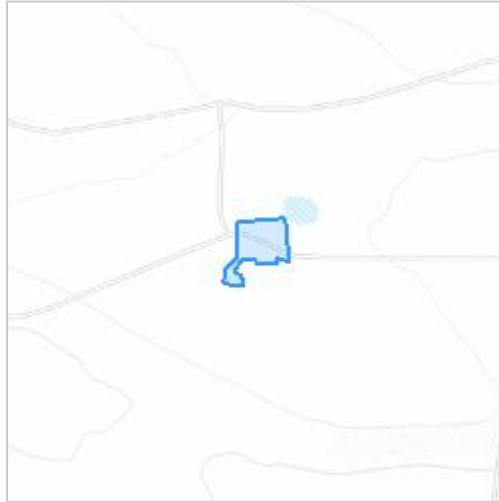
Project Name: Shell State 1C CTB

Project Type: Oil&Gas Extraction - Onshore

Project Description: A remediation project at the Shell State 1C CTB well pad. Excavation activities are ongoing and should end within the year.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@32.35433655,-103.63053318667232,14z>



Counties: Lea County, New Mexico

## ENDANGERED SPECIES ACT SPECIES

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

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**BIRDS**

NAME	STATUS
Lesser Prairie-chicken <i>Tympanuchus pallidicinctus</i> Population: Southern DPS No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1924">https://ecos.fws.gov/ecp/species/1924</a>	Endangered
Northern Aplomado Falcon <i>Falco femoralis septentrionalis</i> Population: U.S.A (AZ, NM) No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1923">https://ecos.fws.gov/ecp/species/1923</a>	Experimental Population, Non- Essential

**CLAMS**

NAME	STATUS
Texas Hornshell <i>Popenaias popeii</i> There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/919">https://ecos.fws.gov/ecp/species/919</a>	Endangered

**INSECTS**

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Proposed Threatened

**CRITICAL HABITATS**

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

Project code: 2025-0039407

01/09/2025 14:32:25 UTC

## **IPAC USER CONTACT INFORMATION**

Agency: Private Entity  
Name: Trevor Hartwig  
Address: 11049 West 44th Avenue  
City: Wheat Ridge  
State: CO  
Zip: 80033  
Email: thartwig@ensolum.com  
Phone: 3038172989



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**PROJECT INFORMATION**

**Project Title:** Shell State 1C CTB  
**Project Type:** (NO PROJECT REVIEW) SPECIES LIST ONLY  
**Latitude/Longitude (DMS):** 32.354433 / -103.630610  
**County(s):** LEA  
**Project Description:** The site is currently excavating a release from a leaking pipeline. The current extent of the excavation is approximately 6,281 square feet.

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**REQUESTOR INFORMATION**

**Project Organization:**  
**Contact Name:** Trevor Hartwig  
**Email Address:** thartwig@ensolum.com  
**Organization:** Ensolum, LLC  
**Address:** 11049 West 44th Avenue, Wheat Ridge CO 80033  
**Phone:** 3038172989

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**OVERALL STATUS**

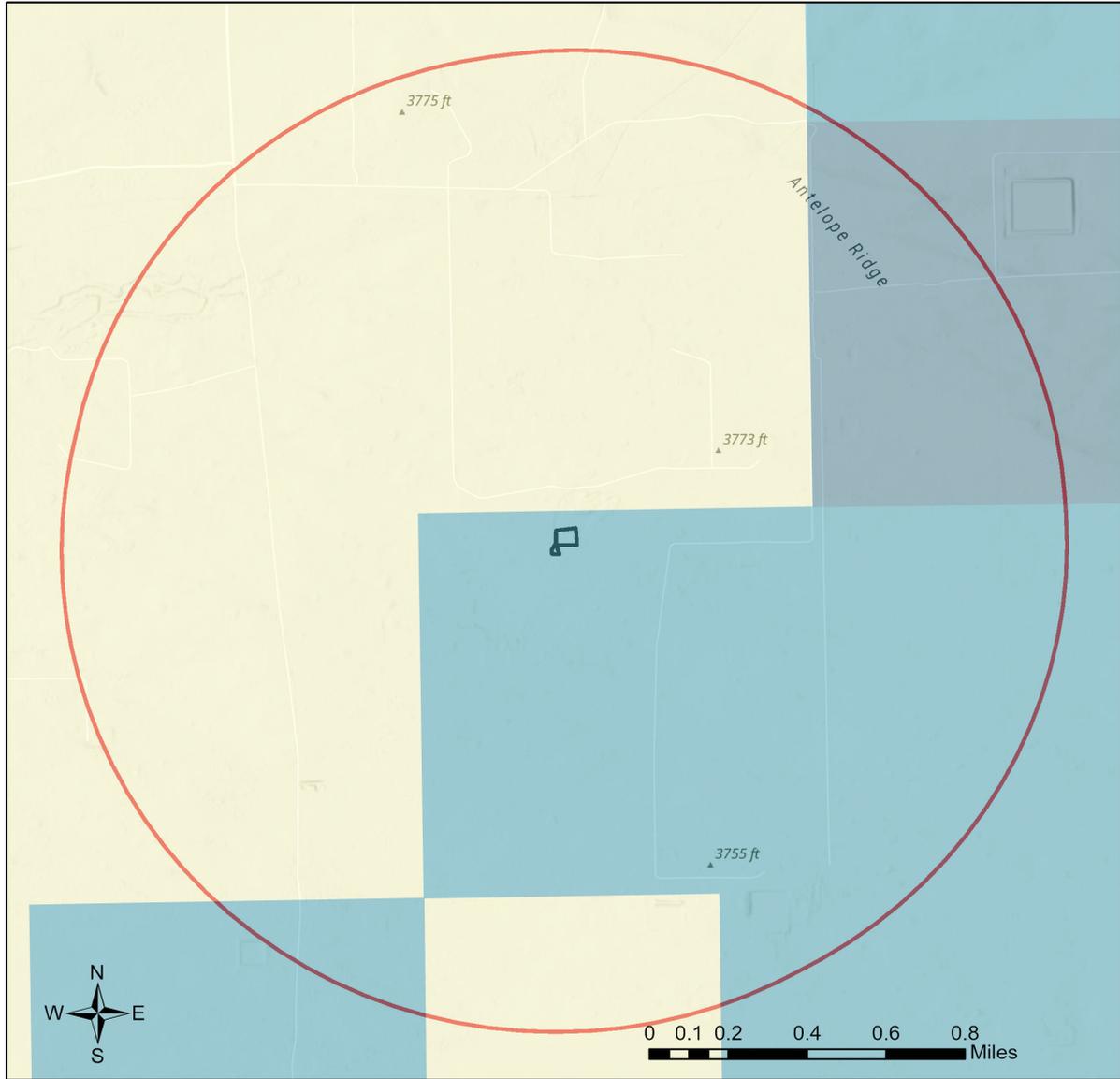
The information contained within this report comprises the recommendations of the New Mexico Department of Game and Fish (Department) for management and mitigation of proposed project impacts to wildlife and habitat resources; see the Project Recommendations section below for further details. No further consultation with the Department is required based on the project's location and, with implementation of mitigation measures described in the Project Recommendations section below, no adverse effects to wildlife or important habitats are anticipated. However, a Department biologist may be in touch within 30 days if they determine that further review is required.

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**About this report:**

- This environmental review is based on the project description and location that was entered. The report must be updated if the project type, area, or operational components are modified.
- This is a preliminary environmental screening assessment and report. It is not a substitute for the potential wildlife knowledge gained by having a biologist conduct a field survey of the project area. Federal status and plant data are provided as a courtesy to users. The review is also not intended to replace consultation required under the federal Endangered Species Act (ESA), including impact analyses for federal resources from the U.S. Fish and Wildlife Service (USFWS) using their [Information for Planning and Consultation tool](#).
- This report contains information on wildlife species protected under the ESA and the [Wildlife Conservation Act \(WCA\)](#), [Species of Greatest Conservation Need \(SGCN\)](#), and Species of Economic and Recreational Importance (SERI). Species listed under the ESA are protected from take at the federal level and under the WCA are protected from take at the state level. SGCN are identified in the [State Wildlife Action Plan \(SWAP\) for New Mexico](#); all of these species are considered to be of conservation concern but not all of them are protected from take at the state or federal level. The harvest of all SERI is regulated at the state level. The Department has no authority to designate critical habitat for species listed under the WCA; only the USFWS can designate critical habitat for species listed under the ESA.
- The New Mexico Environmental Review Tool (ERT) utilizes species observation locations and species habitat suitability models, both of which are subject to ongoing change and refinement. Inclusion or omission of a species within a report cannot guarantee species presence or absence within your project area. To determine occurrence of any species listed in this report, or other wildlife that may be present within your project area, onsite surveys conducted by a qualified biologist during appropriate, species-specific survey timelines may be necessary.
- The Department encourages use of the ERT to modify proposed projects for avoidance, minimization, or mitigation of wildlife impacts. However, the ERT is not intended to be used in a repeatedly iterative fashion to adjust project attributes until a previously determined recommendation is generated. The ERT serves to assess impacts once project details are developed. The [New Mexico Crucial Habitat Assessment Tool](#), the data layers from which are included in the ERT, is the appropriate system for advising early-stage project planning and design to avoid areas of anticipated wildlife concerns and associated regulatory requirements.

### Shell State 1C CTB



- |                              |                            |   |
|------------------------------|----------------------------|---|
| Buffered Project Boundary    | NM State Forestry Division | U.S. Army Corps of Engineers                |
| Project_Boundary             | NM State Parks             | U.S. Bureau of Reclamation                  |
| Bureau of Land Management    | National Park Service      | U.S. Department of Agriculture              |
| City Land                    | Other Federal Agency       | U.S. Fish and Wildlife Service              |
| County Land                  | Other Federal Agency       | U.S. Forest Service                         |
| Department of Defense        | State Land Office          | U.S. Natural Resources Conservation Service |
| Department of Energy         | State of New Mexico        |   |
| NM Department of Game & Fish | Tribal Land                |   |

NHNM, USGS, USFS, US Census Bureau, NMDGF  
 Esri, NASA, NGA, USGS, FEMA  
 Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

**Special Status Animal Species Potentially within 2000 Meters of Project Area**

Common Name	Scientific Name	USFWS (ESA)	NMDGF (WCA)	NMDGF SGCN/SERI	USFS	USFS SCC	BLM
<a href="#">Plains Leopard Frog</a>	<a href="#">Lithobates blairi</a>			SGCN			BLM WATCH
<a href="#">Aplomado Falcon</a>	<a href="#">Falco femoralis</a>		E	SGCN			
<a href="#">Western Burrowing Owl</a>	<a href="#">Athene cunicularia hypugaea</a>			SGCN	Sensitive Species	USFS R3 SCC	BLM SENSITIVE
<a href="#">Common Nighthawk</a>	<a href="#">Chordeiles minor</a>			SGCN			
<a href="#">Sprague's Pipit</a>	<a href="#">Anthus spragueii</a>			SGCN			BLM SENSITIVE
<a href="#">Loggerhead Shrike</a>	<a href="#">Lanius ludovicianus</a>			SGCN		USFS R3 SCC	BLM WATCH
<a href="#">Bell's Vireo</a>	<a href="#">Vireo bellii</a>		T	SGCN			BLM SENSITIVE
<a href="#">Varied Bunting</a>	<a href="#">Passerina versicolor</a>		T	SGCN	Sensitive Species		
<a href="#">Vesper Sparrow</a>	<a href="#">Poocetes gramineus</a>			SGCN			
<a href="#">Thick-billed Longspur</a>	<a href="#">Rhynchophanes mccownii</a>			SGCN			BLM SENSITIVE
<a href="#">Chestnut-Collared Longspur</a>	<a href="#">Calcarius ornatus</a>			SGCN			BLM SENSITIVE
<a href="#">Black-Tailed Prairie Dog</a>	<a href="#">Cynomys ludovicianus</a>			SGCN	Sensitive Species		BLM SENSITIVE
<a href="#">Mule Deer</a>	<a href="#">Odocoileus hemionus</a>			SGCN			
<a href="#">Pronghorn</a>	<a href="#">Antilocapra americana</a>			SGCN			
<a href="#">Desert Massasauga</a>	<a href="#">Sistrurus catenatus edwardsii</a>			SGCN			

Common Name hyperlink takes you to species account in [bison-m.org](http://bison-m.org); Scientific Name hyperlink takes you to information in [NatureServe Explorer](#); ESA = Endangered Species Act, C = Candidate, LE = Listed Endangered, LT = Listed Threatened, XN = Non-essential Experimental Population, for other ESA codes see this [website](#); WCA = Wildlife Conservation Act, E = Endangered, T = Threatened; SERI = Species of Economic and Recreational Importance; SGCN = Species of Greatest Conservation Need; USFS = U.S. Forest Service, Sensitive Species = A species likely to occur on USFS lands that is of concern for a potential reduction in population viability; SCC = Species of Conservation Concern; BLM = Bureau of Land Management, BLM SENSITIVE = A species that occurs on BLM lands and whose viability is at risk, BLM WATCH = Species that may be added to the sensitive species list in future pending new information regarding species status.

## Project Recommendations

This report includes a preliminary species list that may be used during early stages of project or conservation planning. Even if this report indicates that your proposed project location would require a custom review from a biologist, **no review will be returned** until additional project details are provided. **To obtain a project review**, please submit additional details regarding the **type** of project, project **objectives**, anticipated project **duration**, **timing** of project construction, the composition and dimensions/quantities of **materials** that will be utilized for project implementation, any **equipment** that will be used, anticipated **ground disturbance** that will occur, wildlife surveys or observations that have occurred on or near the project site, and **any other relevant details** regarding potential effects of project activities on wildlife or wildlife habitat. **Photographs** of the project site are especially useful.

Although this project report may include management recommendations based on the project location, additional conservation measures may be needed. The Department can not fully assess potential effects and associated management recommendations until a **project type and description** have been submitted and an appropriate **impact buffer** for that project type has been applied. Also, the species list within this report represents an estimation of special status species that could be present at the site of a small-scale project. Species lists for projects that occur across **broader geographic scales** (e.g., one or more counties, multiple habitat types) are more appropriately obtained from the **Department's Biota Information System of New Mexico (BISON-M) database**. Species lists generated by the ERT may contain modeled species distributions in order to predict species occurrences within areas that lack previous wildlife inventories or surveys. This list can be refined using occurrence-based information within BISON-M regarding wildlife-habitat relationships and biological needs for species that might be present within the project footprint.

Our preliminary assessment indicates your project occurs in Lesser Prairie-chicken Crucial Habitat Category 3 (Modeled Habitat Zone).

The Lesser Prairie-chicken (*Tympanuchus pallidicinctus*) (LPC) was designated as a SGCN in New Mexico and the southern Distinct Population Segment, including populations in New Mexico and Texas, is federally listed as Endangered. The LPC Interstate Working Group has developed the Southern Great Plains Crucial Habitat Assessment Tool ([SGP-CHAT](#)) to designate and prioritize areas for LPC conservation activities and development. Our preliminary assessment indicates your project occurs in LPC habitat. For more information on the SGP-CHAT, contact Chanda Pettie, Industry LPC Program Contact with the Western Association of Fish and Wildlife Agencies, at (719) 207-5053 or [chanda.pettie@wafwa.org](mailto:chanda.pettie@wafwa.org).

If your project has potential to lead to take (including harassment, harm, pursuit, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to engage in these activities) of a LPC and you entered into the Candidate Conservation Agreement (CCA) or CCA with Assurances (CCAA) for the LPC with [CEHMM](#), the Department recommends you contact CEHMM (575-885-3700). If your project may lead to take of a LPC and you did not enter the CCA/A with CEHMM, the Department recommends you contact Lauren Rangel, at 505-761-4745 or [lauren\\_rangel@fws.gov](mailto:lauren_rangel@fws.gov), who is the species lead for the LPC in the Ecological Services Office with USFWS. She is also the contact for the rangewide renewable energy Habitat Conservation Plan (HCP) if relevant for your project. The Department recommends a qualified, permitted biologist conduct surveys for the LPC according to these [Lesser Prairie-chicken Survey Protocols](#) (or others recommended by USFWS) and following any training as required by USFWS.

Burrowing owl (*Athene cunicularia*) may occur within your project area. Burrowing owls are protected from take by the Migratory Bird Treaty Act and under New Mexico state statute. Before any ground disturbing activities occur, the Department recommends that a preliminary burrowing owl survey be conducted by a qualified biologist using the Department's [Burrowing Owl Survey Protocol](#). Should burrowing owls be documented in the project area, please contact the Department or USFWS for further recommendations regarding relocation or avoidance of impacts.

Prairie dog colonies may occur within the vicinity of your project area. Both black-tailed prairie dogs (*Cynomys ludovicianus*) and Gunnison's prairie dogs (*Cynomys gunnisoni*) are designated as New Mexico SGCN, and their colonies provide important habitat for other grassland wildlife. Wherever possible, occupied prairie dog colonies should be left undisturbed, and all project activities should be directed off the colony. Any burrows that are located on the project site should be surveyed by a qualified biologist to determine whether burrows are active or inactive and whether burrowing owls may be utilizing the site. Colonies within the range of the black-tailed prairie dog can be surveyed by a qualified biologist diurnally, year-round using binoculars. Colonies within the range of the Gunnison's prairie dog can be surveyed by a qualified biologist diurnally, using binoculars during the warmer months from April through October and by searching for fairly fresh scat and lack of cobwebs or debris at the mouths of burrows during the cold months (November through March). If ground-disturbing activities cannot be relocated off the prairie dog colony, or if project activities involve control of prairie dogs, the Department recommends live-trapping and relocation of prairie dogs. The Department can provide recommendations regarding suitability of potential translocation areas and procedures.

#### Disclaimers regarding recommendations:

- The Department provides technical guidance to support the persistence of all protected species of native fish and wildlife, including game and nongame wildlife species. Species listed within this report include those that have been documented to occur within the project area, and others that may not have been documented but are projected to occur within the project vicinity.
- Recommendations are provided by the Department under the authority of § 17-1-5.1 New Mexico Statutes Annotated 1978, to provide "communication and consultation with federal and other state agencies, local governments and communities, private organizations and affected interests responsible for habitat, wilderness, recreation, water quality and environmental protection to ensure comprehensive conservation services for hunters, anglers and nonconsumptive wildlife users".
- The Department has no authority for management of plants or Important Plant Areas. The [New Mexico Endangered Plant Program](#), under the Energy, Minerals, and Natural Resources Department's Forestry Division, identifies and develops conservation measures necessary to ensure the survival of plant species within New Mexico. Plant status information is provided within this report as a courtesy to users. Recommendations provided within the ERT may not be sufficient to preclude impacts to rare or sensitive plants, unless conservation measures are identified in coordination with the Endangered Plant Program.
- Additional coordination and/or consultation may also be necessary under the federal ESA or National Environmental Policy Act (NEPA). Further site-specific mitigation recommendations may be proposed during ESA consultation and/or NEPA analyses or through coordination with affected federal agencies.



U.S. Fish and Wildlife Service  
National Wetlands Inventory

# Shell State 1C CTB



January 7, 2025

### Wetlands

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

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



**United States Department of the Interior**

**BUREAU OF LAND MANAGEMENT**

Carlsbad Field Office  
620 E. Greene St.  
Carlsbad, NM 88220-6292

In Reply Refer To:  
3162.4 (NM-080)  
NMNM002379

September 18, 2024

NM Office of the State Engineer  
1900 W. Second St.  
Roswell, NM 88201

Re: COVINGTON A FEDERAL 9  
Sec 25, TS 22S, RE 32E  
Lea County, New Mexico

To Whom It May Concern:

The above well location and the immediate area mentioned above requires advanced soil boring to take place at approximately 110 feet below ground surface. The boring will be secured and left open for 72 hours at which time Oxy USA, Inc will assess for the presence or absence of groundwater. Temporary PVC well material will be placed to total depth of the boring and secured at the surface. If water is encountered at any point during the boring, installation of the soil boring will be plugged using Portland Type 1/11 neat cement less than 6.0 gallons of water per 94lb sack. If no water is encountered, then the soil boring will be plugged. The Bureau of Land Management (landowner) authorizes the access of the area to accomplish depth to groundwater determination of this site.

If you have any questions contact Crisha Morgan, at 575-234-5987.

Sincerely,

**CRISHA MORGAN** Digitally signed by CRISHA MORGAN  
Date: 2024.09.18 09:15:27 -06'00'

Crisha A. Morgan  
Certified Environmental Protection Specialist

U.S. Department of the Interior  
BUREAU OF LAND MANAGEMENT

<b>Well Name:</b> COVINGTON A FEDERAL	<b>Well Location:</b> T22S / R32E / SEC 25 / SESW / 32.356796 / -103.630494	<b>County or Parish/State:</b> LEA / NM
<b>Well Number:</b> 09	<b>Type of Well:</b> OIL WELL	<b>Allottee or Tribe Name:</b>
<b>Lease Number:</b> NMNM2379	<b>Unit or CA Name:</b>	<b>Unit or CA Number:</b>
<b>US Well Number:</b> 3002532036	<b>Operator:</b> OXY USA INCORPORATED	

**Notice of Intent**

**Sundry ID:** 2810983

**Type of Submission:** Notice of Intent

**Type of Action:** Other

**Date Sundry Submitted:** 09/09/2024

**Time Sundry Submitted:** 12:52

**Date proposed operation will begin:** 10/09/2024

**Procedure Description:** Oxy USA, Inc. (Oxy) requests to advance a soil boring to a depth of approximately 110 feet below ground surface for determination of regional groundwater depth. The soil boring (proposed location 32.356725, -103.630893) will be located on the Oxy Covington A Federal #009 well pad (32.3568, -103.6305) north of the Shell State 1C CTB (Incident ID:nAPP2402456040) Site (GPS Coordinates 32.354063, -103.631131) on BLM surface. The soil boring will be left open for approximately 72 hours to allow for the slow infill of groundwater, if any. Following the 72 hour waiting period, Oxy will assess the boring utilizing a water level meter to confirm the presence or absence and depth to groundwater in the soil boring. Following the 72 hour waiting period, the soil boring will be backfilled following the approved New Mexico Office of the State Engineer plugging procedures. A site map and kmz depicting the location of the Site and the proposed soil boring location are included with this Form 3160-5.

**Surface Disturbance**

**Is any additional surface disturbance proposed?:** No

**NOI Attachments**

**Procedure Description**

DTW\_Proposed\_Boring\_Map\_20240909124343.pdf

Form\_3160\_5\_\_Shell\_State\_1C\_CTB\_20240909124343.pdf

Shell\_State\_1C\_CTB\_DTW\_Proposed\_Boring\_20240909124343.kmz

Well Name: COVINGTON A FEDERAL

Well Location: T22S / R32E / SEC 25 / SESW / 32.356796 / -103.630494

County or Parish/State: LEA / NM

Well Number: 09

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM2379

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002532036

Operator: OXY USA INCORPORATED

Conditions of Approval

Specialist Review

20240918\_COVINGTON\_A\_FEDERAL\_9\_St\_Engineer\_Office\_drilling\_approval\_20240918091613.pdf

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: WADE DITTRICH

Signed on: SEP 09, 2024 12:45 PM

Name: OXY USA INCORPORATED

Title: Environmental Advisor

Street Address: 5 GREENWAY PLAZA SUITE 110

City: HOUSTON

State: TX

Phone: (575) 390-2828

Email address: WADE\_DITTRICH@OXY.COM

Field

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CRISHA A MORGAN

BLM POC Title: Environmental Protection Specialist

BLM POC Phone: 5752345987

BLM POC Email Address: camorgan@blm.gov

Disposition: Approved

Disposition Date: 09/18/2024

Signature: CRISHA A. MORGAN

Elizabeth K. Anderson, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 770626  
File Nbr: C 04908

Nov. 08, 2024

WADE DITTRICH  
OXY USA INC.  
P.O. BOX 4294  
HOUSTON, TX 77210

Greetings:

Your approved copy of the above numbered permit to drill a well for non-consumptive purposes is enclosed. You must obtain an additional permit if you intend to use the water. It is your responsibility to provide the contracted well driller with a copy of the permit that must be made available during well drilling activities.

Carefully review the attached conditions of approval for all specific permit requirements.

- \* If use of this well is temporary in nature and the well will be plugged at the end of the well usage, the OSE must initially approve of the plugging. If plugging approval is not conditioned in this permit, the applicant must submit a Plugging Plan of Operations for approval prior to the well being plugged. The Plugging Record must be properly completed and submitted to the OSE within 30 days of the well plugging.
- \* If the final intended purpose and condition requires a well ID tag and meter installation, the applicant must immediately send a completed meter report form to this office.
- \* The well record and log must be submitted within 30 days of the completion of the well or if the attempt was a dry hole.
- \* This permit expires and will be cancelled if no well is drilled and/or a well log is not received by the date set forth in the conditions of approval.

Appropriate forms can be downloaded from the OSE website [www.ose.state.nm.us](http://www.ose.state.nm.us).

Sincerely,

A handwritten signature in cursive script that reads "Vanessa Clements".

Vanessa Clements  
(575) 622-6521

Enclosure

explore

Elizabeth K. Anderson, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 770626  
File Nbr: C 04908

Nov. 08, 2024

KELLY LOWERY  
ENSOLUM, LLC  
601 N. MARIENFIELD ST. STE 400  
MIDLAND, TX 79701

Greetings:

Your approved copy of the above numbered permit to drill a well for non-consumptive purposes is enclosed. You must obtain an additional permit if you intend to use the water. It is your responsibility to provide the contracted well driller with a copy of the permit that must be made available during well drilling activities.

Carefully review the attached conditions of approval for all specific permit requirements.

- \* If use of this well is temporary in nature and the well will be plugged at the end of the well usage, the OSE must initially approve of the plugging. If plugging approval is not conditioned in this permit, the applicant must submit a Plugging Plan of Operations for approval prior to the well being plugged. The Plugging Record must be properly completed and submitted to the OSE within 30 days of the well plugging.
- \* If the final intended purpose and condition requires a well ID tag and meter installation, the applicant must immediately send a completed meter report form to this office.
- \* The well record and log must be submitted within 30 days of the completion of the well or if the attempt was a dry hole.
- \* This permit expires and will be cancelled if no well is drilled and/or a well log is not received by the date set forth in the conditions of approval.

Appropriate forms can be downloaded from the OSE website [www.ose.state.nm.us](http://www.ose.state.nm.us).

Sincerely,

A handwritten signature in cursive script that reads "Vanessa Clements".

Vanessa Clements  
(575) 622-6521

Enclosure

explore

**4. SPECIFIC REQUIREMENTS:** The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

<p><b>Exploratory*:</b> Is proposed well a future public water supply well? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> NO If Yes, an application must be filed with NMED-DWB, concurrently. <input type="checkbox"/> Include a description of any proposed pump test, if applicable.</p>	<p><b>Pollution Control and/or Recovery:</b> <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for the pollution control or recovery operation. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The annual diversion amount. <input type="checkbox"/> The annual consumptive use amount. <input type="checkbox"/> The maximum amount of water to be diverted and injected for the duration of the operation. <input type="checkbox"/> The method and place of discharge. <input type="checkbox"/> The method of measurement of water produced and discharged. <input type="checkbox"/> The source of water to be injected. <input type="checkbox"/> The method of measurement of water injected. <input type="checkbox"/> The characteristics of the aquifer. <input type="checkbox"/> The method of determining the resulting annual consumptive use of water and depletion from any related stream system. <input type="checkbox"/> Proof of any permit required from the New Mexico Environment Department. <input type="checkbox"/> An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.</p>	<p><b>Construction De-Watering:</b> <input type="checkbox"/> Include a description of the proposed dewatering operation, <input type="checkbox"/> The estimated duration of the operation, <input type="checkbox"/> The maximum amount of water to be diverted, <input type="checkbox"/> A description of the need for the dewatering operation, and, <input type="checkbox"/> A description of how the diverted water will be disposed of. <b>Ground Source Heat Pump:</b> <input type="checkbox"/> Include a description of the geothermal heat exchange project, <input type="checkbox"/> The number of boreholes for the completed project and required depths. <input type="checkbox"/> The time frame for constructing the geothermal heat exchange project, and, <input type="checkbox"/> The duration of the project. <input type="checkbox"/> Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.</p>	<p><b>Mine De-Watering:</b> <input type="checkbox"/> Include a plan for Mine De-Watering, that includes the following: <input type="checkbox"/> A description of the need for mine dewatering. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The source(s) of the water to be diverted. <input type="checkbox"/> The geohydrologic characteristics of the aquifer(s). <input type="checkbox"/> The maximum amount of water to be diverted per annum. <input type="checkbox"/> The maximum amount of water to be diverted for the duration of the operation. <input type="checkbox"/> The quality of the water. <input type="checkbox"/> The method of measurement of water diverted. <input type="checkbox"/> The recharge of water to the aquifer. <input type="checkbox"/> Description of the estimated area of hydrologic effect of the project. <input type="checkbox"/> The method and place of discharge. <input type="checkbox"/> An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. <input type="checkbox"/> A description of the methods employed to estimate effects on surface water rights and underground water rights. <input type="checkbox"/> Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.</p>
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(\* if exploration or monitoring drilling activity is required by NMED, then you must also submit the NMED Work Plan)

**ACKNOWLEDGEMENT**

I, We (name of applicant(s)), Kelly Lowery, Wade Dittrich

Print Name(s)

affirm that the foregoing statements are true to the best of (my,our) knowledge and belief.

Kelly Lowery  
Applicant Signature

Wade Dittrich  
Applicant Signature

**ACTION OF THE STATE ENGINEER**

This application is:

- approved     partially approved     denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 8th day of November 2024, for the State Engineer,

Elizabeth K. Anderson, P.E State Engineer



By: K. Parekh  
Signature  
**Water Resources Manager I**  
Title:  
Print

**Kashyap Parekh**  
Print

FOR OSE INTERNAL USE

Application for Permit, Form WR-07 Version 10/02/2024

File No.: <u>C-4908</u>	Trn No.: <u>770626</u>
-------------------------	------------------------

NEW MEXICO STATE ENGINEER OFFICE  
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL

- 17-16 Construction of a water well by anyone without a valid New Mexico Well Driller License is illegal, and the landowner shall bear the cost of plugging the well by a licensed New Mexico well driller. This does not apply to driven wells, the casing of which does not exceed two and three-eighths inches outside diameter.
- 17-1A Depth of the well shall not exceed the thickness of the valley fill.
- 17-4 No water shall be appropriated and beneficially used under this permit.
- 17-6 The well authorized by this permit shall be plugged completely using the following method per Rules and Regulations Governing Well Driller Licensing, Construction, Repair and Plugging of Wells; Subsection C of 19.27.4.30 NMAC unless an alternative plugging method is proposed by the well owner and approved by the State Engineer upon completion of the permitted use. All pumping appurtenance shall be removed from the well prior to plugging. To plug a well, the entire well shall be filled from the bottom upwards to ground surface using a tremie pipe. The bottom of the tremie shall remain submerged in the sealant throughout the entire sealing process; other placement methods may be acceptable and approved by the state engineer. The well shall be plugged with an office of the state engineer approved sealant for use in the plugging of non-artesian wells. The well driller shall cut the casing off at least four (4) feet below ground surface and fill the open hole with at least two vertical feet of approved sealant. The driller must fill or cover any open annulus with sealant. Once the sealant has cured, the well driller or well owner may cover the seal with soil. A Plugging Report for said well shall be filed with the Office of the State Engineer in a District Office within 30 days of completion of the plugging.

Trn Desc: C 04908 POD1

File Number: C 04908

Trn Number: 770626

NEW MEXICO STATE ENGINEER OFFICE  
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL (Continued)

- 17-R Pursuant to section 72-8-1 NMSA 1978, the permittee shall allow the State Engineer and OSE representatives entry upon private property for the performance of their respective duties, including access to the ditch or acequia to measure flow and also to the well for meter reading and water level measurement.
- LOG The Point of Diversion C 04908 POD1 must be completed and the Well Log filed on or before 11/08/2025.

IT IS THE PERMITTEE'S RESPONSIBILITY TO OBTAIN ALL AUTHROIZATIONS AND PERMISSIONS TO DRILL ON PROPERTY OF OTHER OWNERSHIP BEFORE COMMENCING ACTIVITIES UNDER THIS PERMIT.

ACTION OF STATE ENGINEER

Notice of Intention Rcvd:	Date Rcvd. Corrected:
Formal Application Rcvd: 10/31/2024	Pub. of Notice Ordered:
Date Returned - Correction:	Affidavit of Pub. Filed:

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific conditions listed previously.

Witness my hand and seal this 08 day of Nov A.D., 2024

Elizabeth K. Anderson, P.E., State Engineer

By: K. Parekh  
KASHYAP PAREKH



Trn Desc: C 04908 POD1

File Number: C 04908  
Trn Number: 770626



**MICHELLE LUJAN GRISHAM**  
GOVERNOR

**ELIZABETH K. ANDERSON, P.E.**  
STATE ENGINEER

**State of New Mexico**  
**Office of the State Engineer**

**DISTRICT 2 OFFICE**

October 31, 2024

Oxy USA Inc.  
P.O. Box 4294  
Denver, CO 80206

RE: Well Plugging Plan of Operations for well No. C-4908-POD1

Greetings:

Enclosed is your copy of the Well Plugging Plan of Operations for the above referenced well subject to the attached Conditions of Approval. The proposed method of operation is found to be acceptable and in accordance with the Rules and Regulations Governing Well Driller Licensing; Construction, Repair and Plugging of Wells 19.27.4 NMAC adopted June 30, 2017 by the State Engineer. subject to the attached Conditions of Approval.

Within 30 days after the well is plugged, the well driller is required to file a complete plugging record with the OSE and the permit holder.

Sincerely,

Handwritten signature of Kashyap Parekh in black ink.

Kashyap Parekh  
Water Resources Manager I

1900 WEST SECOND STREET, ROSWELL, NM 88201  
(575) 622/6521 FAX (575) 623-8559

[WWW.OSE.STATE.NM.GOV](http://WWW.OSE.STATE.NM.GOV)



Office of the State Engineer  
State of New Mexico

DISTRICT 2 OFFICE

1900 West Second St.  
Roswell, New Mexico 88201  
Phone: (575) 622-6521  
Fax: (575) 623- 8559

Applicant has identified a well, listed below, to be plugged. West Texas Water Well Service (WD-1184) will perform the plugging.

Permittee: Oxy USA Inc.  
NMOSE Permit Number: C-4908-POD1

NMOSE File	Casing diameter (inches)	Well depth (feet bgl)	Approximate static water level (feet bgl)	Latitude	Longitude
C-4908-POD1	6.0 (Borehole)	110.0	Unknown	32° 21' 24.2094"	103° 37' 51.2034"

**Specific Plugging Conditions of Approval for Well located in Lea County.**

1. Water well drilling and well drilling activities, including well plugging, are regulated under 19.27.4 NMAC, which requires any person engaged in the business of well drilling within New Mexico to obtain a Well Driller License issued by the New Mexico Office of the State Engineer (NMOSE). Therefore, the firm of a New Mexico licensed Well Driller shall perform the well plugging.
2. Theoretical volume of sealant required for abandonment is approximately 161.5 gallons. Total minimum volume of necessary sealant shall be calculated upon sounding the actual pluggable depth of well, which is estimated at 110.0 feet below ground surface (b.g.s.).
3. A Type I/II Portland cement mixed with 5.2 to 6.0 gallons of fresh water per 94-lb sack of cement is approved for the plugging the well.
4. Sealant shall be placed by pumping through a tremie pipe extended to near well bottom and kept below top of the slurry column as the well is plugged from bottom-upwards in a manner





# WELL PLUGGING PLAN OF OPERATIONS



**NOTE:** A Well Plugging Plan of Operations shall be filed with and accepted by the Office of the State Engineer prior to plugging. This form may be used to plug a single well, or if you are plugging multiple monitoring wells on the same site using the same plugging methodology.

**Alert!** Your well may be eligible to participate in the Aquifer Mapping Program (AMP)-NM Bureau of Geology [geoinfo.nmt.edu/resources/water/cgmn/](http://geoinfo.nmt.edu/resources/water/cgmn/) if within an area of interest and meets the minimum construction requirements, such as there is still water in your well, and the well construction reflected in a well record and log is not compromised, contact AMP at 575-835-5038 or -6951, or by email [nmbg-waterlevels@nmt.edu](mailto:nmbg-waterlevels@nmt.edu), prior to completing this prior form. Showing proof to the OSE that your well was accepted in this program, may delay the plugging of your well until a later date.

**I. FILING FEE:** There is no filing fee for this form.

**II. GENERAL / WELL OWNERSHIP:**  Check here if proposing one plan for multiple monitoring wells on the same site and attaching WD-08m

Existing Office of the State Engineer POD Number (Well Number) for well to be plugged: C-4908-POD1  
Name of well owner: Oxy USA Inc.  
Mailing address: PO BOX 4294 County: Harris  
City: Houston State: Texas Zip code: 77210  
Phone number: 575-390-2828 E-mail: wade\_dittrich@oxy.com

**III. WELL DRILLER INFORMATION:**

Well Driller contracted to provide plugging services: West Texas Water Well Service  
New Mexico Well Driller License No.: WD-1184 Expiration Date: 10/31/2025

**IV. WELL INFORMATION:**  Check here if this plan describes method for plugging multiple monitoring wells on the same site and attach supplemental form WD-08m and skip to #2 in this section.

Note: A copy of the existing Well Record for the well(s) to be plugged should be attached to this plan.

1) GPS Well Location: Latitude: 32 deg, 21 min, 24.2094 sec  
Longitude: -103 deg, 37 min, 51.2034 sec, NAD 83

2) Reason(s) for plugging well(s):

Investigation soil boring to determine groundwater level.

3) Was well used for any type of monitoring program? N/A If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging.

4) Does the well tap brackish, saline, or otherwise poor quality water? N/A If yes, provide additional detail, including analytical results and/or laboratory report(s):

5) Static water level: Unknown feet below land surface / feet above land surface (circle one)

6) Depth of the well: 110 feet

- 7) Inside diameter of innermost casing: N/A inches.
- 8) Casing material: N/A
- 9) The well was constructed with:
  - an open-hole production interval, state the open interval: \_\_\_\_\_
  - a well screen or perforated pipe, state the screened interval(s): \_\_\_\_\_
- 10) What annular interval surrounding the artesian casing of this well is cement-grouted? N/A
- 11) Was the well built with surface casing? No If yes, is the annulus surrounding the surface casing grouted or otherwise sealed? No If yes, please describe:
- 12) Has all pumping equipment and associated piping been removed from the well? N/A If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.

**V. DESCRIPTION OF PLANNED WELL PLUGGING:**  If plugging method differs between multiple wells on same site, a separate form must be completed for each method.

Note: If this plan proposes to plug an artesian well in a way other than with cement grout, placed bottom to top with a tremie pipe, a detailed diagram of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such as geophysical logs, that are necessary to adequately describe the proposal. Attach a copy of any signed OSE variance to this plugging plan.

Also, if this planned plugging plan requires a variance to 19.27.4 NMAC, attach a detailed variance request signed by the applicant.

- 1) Describe the method by which cement grout shall be placed in the well, or describe requested plugging methodology proposed for the well:

The soil boring will be plugged tremie from bottom to a slurry of Portland TYPE I/II Neat cement in lifts.

- 2) Will well head be cut-off below land surface after plugging? N/A

**VI. PLUGGING AND SEALING MATERIALS:**

Note: The plugging of a well that taps poor quality water may require the use of a specialty cement or specialty sealant. Attach a copy of the batch mix recipe from the cement company and/or product description for specialty cement mixes or any sealant that deviates from the list of OSE approved sealants.

- 1) For plugging intervals that employ cement grout, complete and attach Table A.
- 2) For plugging intervals that will employ approved non-cement based sealant(s), complete and attach Table B.
- 3) Theoretical volume of grout required to plug the well to land surface: 100
- 4) Type of Cement proposed: Type I/II Neat Cement
- 5) Proposed cement grout mix: <6.0 gallons of water per 94 pound sack of Portland cement.
- 6) Will the grout be: \_\_\_\_\_ batch-mixed and delivered to the site  
 mixed on site

OSE DISTRICT 11  
8100T 24-8-11

7) Grout additives requested, and percent by dry weight relative to cement:

N/A

8) Additional notes and calculations:

N/A

**VII. ADDITIONAL INFORMATION:** List additional information below, or on separate sheet(s):

Volumes calculated on an up to an approximate 6" boring.

**VIII. SIGNATURE:**

I, Kelly Lowery, say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

*Kelly Lowery*

Signature of Applicant

10/21/2024

Date

**IX. ACTION OF THE STATE ENGINEER:**

This Well Plugging Plan of Operations is:

- Approved subject to the attached conditions.
- Not approved for the reasons provided on the attached letter.

OSE DII ROSWELL NM  
31 OCT '24 PM 8:12

Witness my hand and official seal this 31<sup>st</sup> day of October, 2024  
Elizabeth K. Anderson P.E.

\_\_\_\_\_, New Mexico State Engineer

By: *K. Parekh*  
Kashyap Parekh

Water Resources Manager I

WD-08 Well Plugging Plan  
Version: March 07, 2022  
Page 3 of 5



**TABLE A - For plugging intervals that employ cement grout. Start with deepest interval.**

	<b>Interval 1 – deepest</b>	<b>Interval 2</b>	<b>Interval 3 – most shallow</b>
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of grout placement (ft bgl)	N/A	N/A	0
Bottom of proposed interval of grout placement (ft bgl)	N/A	N/A	100
Theoretical volume of grout required per interval (gallons)	N/A	N/A	50
Proposed cement grout mix gallons of water per 94-lb. sack of Portland cement	N/A	N/A	<6.0
Mixed on-site or batch-mixed and delivered?	N/A		
Grout additive 1 requested	N/A	N/A	N/A
Additive 1 percent by dry weight relative to cement	N/A	N/A	N/A
Grout additive 2 requested	N/A	N/A	N/A
Additive 2 percent by dry weight relative to cement	N/A	N/A	N/A

JSE DII RCS WELL NW  
31 OCT 2024 4:48:11

**TABLE B - For plugging intervals that will employ approved non-cement based sealant(s). Start with deepest interval.**

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of sealant placement (ft bgl)	N/A	N/A	0
Bottom of proposed sealant or grout placement (ft bgl)	N/A	N/A	10
Theoretical volume of sealant required per interval (gallons)	N/A	N/A	52
Proposed abandonment sealant (manufacturer and trade name)	N/A	N/A	Bariod Hole Plug

USE DII RISWELL W.  
31 OCT '24 8:11



C-4908-POD1 (SB-1)

**ENSOLUM**

<b>PROJECT NUMBER</b> 03B1417144	<b>DRILLING DATE</b> 12/09/2024 - 12/09/2024	<b>COORDINATES</b> 32.354063, -103.631131
<b>PROJECT NAME</b> Shell State 1C CTB	<b>TOTAL DEPTH</b> 110' BGS	<b>COORD SYS</b> N/A
<b>CLIENT</b> Oxy USA, Inc	<b>DIAMETER</b> 6.25"	<b>COMPLETION</b> Plugged after 72 hrs
<b>ADDRESS</b> PO Box 4294 Houston, Texas 77210	<b>CASING</b> Temporary 2" PVC.	<b>SURFACE ELEVATION</b> N/A
<b>LICENCE NO.</b> WD-1184	<b>SCREEN</b> 10'	<b>WELL TOC</b> N/A

**COMMENTS** Temporary casing removed after 72 hours. The borehole was backfilled with cuttings (3' - 110') and plugged with Quikrete (0 - 3') 72 hours after drilling. No water was struck.

**LOGGED BY** Nicolas Christakos  
**CHECKED BY** Kelly Lowery

Depth (ft)	Water	Well Diagram	Graphic Log	Material Description
0 - 10				Gravelly sand, light brown, some gravel, coarse to large gravel, non-cohesive, non-plastic, non-uniform, dry, no odor
10 - 20				Gravelly sand, reddish - grey, few gravel, fine to large gravel, non-cohesive, non-plastic, non-uniform, dry, no odor
20 - 30				Gravelly sand, reddish - grey, few gravel, fine to large gravel, non-cohesive, non-plastic, non-uniform, dry, no odor
30 - 40				Gravelly sand, reddish-grey, trace gravel, fine to little gravel, non-cohesive, non-plastic, non-uniform, dry, no odor
40 - 50				Sand, reddish-brown, fine to very fine, uniform, non-cohesive, non-plastic, dry, no odor
50 - 60				Gravelly sand, reddish-brown, trace gravel, fine to very fine, non-uniform, non-cohesive, non-plastic, dry, no odor
60 - 70				Sand, reddish-brown, very fine to fine, uniform, non-cohesive, non-plastic, no odor, dry
70 - 80				Clayey sand, reddish-brown, very fine to fine, some clay aggregates, oxidized, non-uniform, non-cohesive, non plastic, no odor, dry
80 - 90				Clayey sand, reddish-brown, very fine - fine, few clay aggregates, oxidized, non-uniform, non-cohesive, non-plastic, dry, no odor
90 - 100				Sandy clay, reddish-brown, trace gravel, coarse - small gravel, loose clay aggregates, non-uniform, non-cohesive, non-plastic, dry, no odor
100 - 110				Gravelly clay, reddish-brown, coarse to large gravel, non-uniform, non-cohesive, non-plastic, dry, no odor

**Disclaimer** This bore log is intended for environmental not geotechnical purposes.



## APPENDIX C

### Photographic Log

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Project: Shell State 1C CTB  
Entity: Oxy USA, Inc.  
Incident ID: nAPP2402456040



View of release extent prior to site assessment activities, facing southeast (January 25, 2024).



View of release point prior to site assessment activities, facing west (January 25, 2024).

Project: Shell State 1C CTB  
Entity: Oxy USA, Inc.  
Incident ID: nAPP2402456040



View of excavation extent during remediation activities, facing northeast (October 10, 2024).



View of excavation extent during remediation activities, facing northeast (October 10, 2024).

Project: Shell State 1C CTB  
Entity: Oxy USA, Inc.  
Incident ID: nAPP2402456040



View of soil boring (C-4908-POD1) with temporary 2-inch pvc casing post drilling activities, facing south (December 9, 2024).



View of soil boring (C-4908-POD1) after 72-hours, post backfill activities, facing northwest (December 12, 2024).



## APPENDIX D

### Soil Sample Results Table

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**TABLE 1**  
**FLOOR & SIDEWALL SOIL SAMPLE ANALYTICAL RESULTS (NON-VEGETATIVE ZONE)**

Shell State 1C CTB  
 Oxy USA, Inc.  
 Lea County, New Mexico  
 Ensolium Project No. 03B1417144

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH (GRO+DRO) (mg/kg)	TPH MRO (mg/kg)	Total TPH (GRO+DRO+MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (> 100 feet)			10	NE	NE	NE	50	1,000	NE	2,500	20,000
<b>Composite Floor Soil Sample Analytical Results</b>											
FS01	10/10/2024	13	<0.050	<0.050	<0.050	<0.150	<0.300	33.5	<10.0	33.5	39,200
FS02	10/10/2024	13	<0.050	<0.050	<0.050	<0.150	<0.300	78.4	18.2	96.6	45,600
FS03	10/10/2024	13	<0.050	<0.050	<0.050	<0.150	<0.300	17.5	<10.0	17.5	44,000
FS04	10/10/2024	13	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	48,800
FS05	10/10/2024	13	<0.050	<0.050	<0.050	<0.150	<0.300	47.4	<10.0	47.4	48,000
FS06	10/10/2024	13	<0.050	<0.050	<0.050	<0.150	<0.300	11.1	<10.0	11.1	43,200
FS07	10/10/2024	13	<0.050	<0.050	<0.050	<0.150	<0.300	14.4	<10.0	14.4	46,400
FS08	10/10/2024	13	<0.050	<0.050	<0.050	<0.150	<0.300	175	42.7	218	44,000
FS09	10/10/2024	13	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	6,530
FS10	10/10/2024	13	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	65,600
FS11	10/10/2024	13	<0.050	<0.050	<0.050	<0.150	<0.300	125	40.9	166	64,800
FS12	10/10/2024	13	<0.050	<0.050	<0.050	<0.150	<0.300	20.6	<10.0	20.6	52,000
FS13	10/10/2024	9	<0.050	<0.050	<0.050	<0.150	<0.300	110	24.0	134	38,400
FS14	10/10/2024	9	<0.050	<0.050	<0.050	<0.150	<0.300	97.7	18.6	116	54,400
FS15	10/10/2024	9	<0.050	<0.050	<0.050	<0.150	<0.300	142	40.4	182	42,400
FS16	10/10/2024	9	<0.050	<0.050	<0.050	<0.150	<0.300	526	144	670	24,000
FS17	10/10/2024	9	<0.050	<0.050	<0.050	<0.150	<0.300	50.1	19.0	69.1	44,800
FS18	10/10/2024	9	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	21,200
FS19	10/10/2024	9	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	60,800
FS20	10/10/2024	9	<0.050	<0.050	<0.050	<0.150	<0.300	14.1	<10.0	14.1	65,600
FS21	10/10/2024	9	<0.050	<0.050	<0.050	<0.150	<0.300	85.9	33.1	119	51,200
FS22	10/10/2024	9	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	35,200
FS23	10/10/2024	9	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	8,130
FS24	10/10/2024	9	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	864
FS25	10/10/2024	9	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	160
FS26	10/10/2024	9	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	19,200
FS27	10/10/2024	9	<0.050	<0.050	<0.050	<0.150	<0.300	216	65.9	282	32,400
FS28	10/10/2024	9	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	13,600
FS29	10/10/2024	9	<0.050	<0.050	<0.050	<0.150	<0.300	269	84.9	354	37,200
FS30	10/10/2024	9	<0.050	<0.050	<0.050	<0.150	<0.300	73.9	29.2	103	29,200
FS31	10/10/2024	9	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	56,000
FS32	10/10/2024	9	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	14,000

**TABLE 1**  
**FLOOR & SIDEWALL SOIL SAMPLE ANALYTICAL RESULTS (NON-VEGETATIVE ZONE)**  
 Shell State 1C CTB  
 Oxy USA, Inc.  
 Lea County, New Mexico  
 Ensolium Project No. 03B1417144

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH (GRO+DRO) (mg/kg)	TPH MRO (mg/kg)	Total TPH (GRO+DRO+MRO) (mg/kg)	Chloride (mg/kg)	
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (> 100 feet)			10	NE	NE	NE	50	1,000	NE	2,500	20,000	
<b>Composite Sidewall Soil Sample Analytical Results</b>												
SW01	10/10/2024	4 - 9	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<b>50.0</b>	<10.0	<b>50.0</b>	<b>76,800</b>
SW02	10/10/2024	4 - 9	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>9,600</b>
SW03	10/10/2024	4 - 9	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>6,660</b>
SW04	10/10/2024	4 - 9	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>864</b>
SW05	10/10/2024	4 - 9	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>272</b>
SW06	10/10/2024	4 - 9	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>2,800</b>
SW07	10/10/2024	4 - 13	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<b>328</b>	<b>104</b>	<b>432</b>	<b>8,000</b>
SW08	10/10/2024	4 - 13	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<b>65.7</b>	<b>11.4</b>	<b>77.1</b>	<b>17,800</b>
SW09	10/10/2024	4 - 13	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>40,000</b>
SW10	10/10/2024	4 - 13	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>90,600</b>
SW11	10/10/2024	4 - 13	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>26,400</b>
SW12	10/10/2024	4 - 13	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>32,000</b>
SW13	10/10/2024	9 - 13	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>64,000</b>
SW14	10/10/2024	9 - 13	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>29,200</b>

Concentrations in **bold** and yellow exceed the New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (> 100 feet)

bgs: below ground surface

mg/kg: milligrams per kilogram

NE: Not Established

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

MRO: Motor Oil/Lube Oil Range Organics

TPH: Total Petroleum Hydrocarbon

**TABLE 2**  
**SIDEWALL SOIL SAMPLE ANALYTICAL RESULTS (VEGETATIVE ZONE)**  
 Shell State 1C CTB  
 Oxy USA, Inc.  
 Lea County, New Mexico  
 Ensolium Project No. 03B1417144

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (GRO+DRO+MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (≤ 50 feet)			10	NE	NE	NE	50	NE	NE	NE	100	600
<b>Composite Sidewall Soil Sample Analytical Results</b>												
SW01	10/10/2024	0 - 4	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	176
SW02	10/10/2024	0 - 4	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	1,520
SW03	10/10/2024	0 - 4	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	26,400
SW04	10/10/2024	0 - 4	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	7,600
SW05	10/10/2024	0 - 4	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	2,200
SW06	10/10/2024	0 - 4	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	832
SW07	10/10/2024	0 - 4	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<b>10.4</b>	<10.0	<b>10.4</b>	<b>48,800</b>
SW08	10/10/2024	0 - 4	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<b>30.8</b>	<10.0	<b>30.8</b>	<b>8,660</b>
SW09	10/10/2024	0 - 4	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>68,000</b>
SW10	10/10/2024	0 - 4	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>22,400</b>
SW11	10/10/2024	0 - 4	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>8,800</b>
SW12	10/10/2024	0 - 4	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>40,000</b>

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

bgs: below ground surface  
 mg/kg: milligrams per kilogram  
 NE: Not Established  
 NS: Not Sampled  
 BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes  
 GRO: Gasoline Range Organics  
 DRO: Diesel Range Organics  
 MRO: Motor Oil/Lube Oil Range Organics  
 TPH: Total Petroleum Hydrocarbon



**TABLE A**  
**FIELD SCREENING SOIL SAMPLE RESULTS**  
 Shell State 1C CTB  
 Oxy USA, Inc.  
 Lea County, New Mexico  
 Ensolum Project No. 03B1417144

Sample Designation	Date	Depth (feet bgs)	PID Field Screening Results (ppm)	Chloride Strips Field Screening Results (mg/kg)
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (≤ 50 feet)			NA	Chloride 600 mg/kg
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (> 100 feet)			NA	Chloride 20,000 mg/kg
<b>Composite Floor Soil Sample Analytical Results</b>				
FS01	10/10/2024	13	1.7	>36,075
FS02	10/10/2024	13	2.6	36,075
FS03	10/10/2024	13	0.5	>36,075
FS04	10/10/2024	13	0.3	>36,075
FS05	10/10/2024	13	0.6	>36,075
FS06	10/10/2024	13	0.2	36,075
FS07	10/10/2024	13	1.7	36,075
FS08	10/10/2024	13	0.5	>36,075
FS09	10/10/2024	13	0.3	>36,075
FS10	10/10/2024	13	0.3	>36,075
FS11	10/10/2024	13	0.5	36,075
FS12	10/10/2024	13	0.5	>36,075
FS13	10/10/2024	9	1.0	>36,075
FS14	10/10/2024	9	0.7	>36,075
FS15	10/10/2024	9	6.9	>36,075
FS16	10/10/2024	9	3.8	>36,075
FS17	10/10/2024	9	1.3	>36,075
FS18	10/10/2024	9	0.5	>36,075
FS19	10/10/2024	9	0.5	>36,075
FS20	10/10/2024	9	0.2	>36,075
FS21	10/10/2024	9	0.1	>37,452
FS22	10/10/2024	9	0.1	>37,452
FS23	10/10/2024	9	0.2	>37,452
FS24	10/10/2024	9	0.5	<1,702.4
FS25	10/10/2024	9	0.0	<1,702.4
FS26	10/10/2024	9	0.1	32,911
FS27	10/10/2024	9	3.9	>37,452
FS28	10/10/2024	9	0.3	23,076
FS29	10/10/2024	9	1.8	>37,452
FS30	10/10/2024	9	0.4	>37,452
FS31	10/10/2024	9	0.7	>36,075
FS32	10/10/2024	9	0.3	23,016



**TABLE A**  
**FIELD SCREENING SOIL SAMPLE RESULTS**  
 Shell State 1C CTB  
 Oxy USA, Inc.  
 Lea County, New Mexico  
 Ensolum Project No. 03B1417144

Sample Designation	Date	Depth (feet bgs)	PID Field Screening Results (ppm)	Chloride Strips Field Screening Results (mg/kg)
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (≤ 50 feet)			NA	Chloride 600 mg/kg
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (> 100 feet)			NA	Chloride 20,000 mg/kg
<b>Composite Sidewall Soil Sample Analytical Results</b>				
SW01	10/10/2024	0 - 4	<b>0.0</b>	<b>1,237</b>
	10/10/2024	4 - 9	<b>1.0</b>	<b>&gt;37,744</b>
SW02	10/10/2024	0 - 4	<b>0.0</b>	<b>&gt;3,617</b>
	10/10/2024	4 - 9	<b>0.0</b>	<b>20,642</b>
SW03	10/10/2024	0 - 4	<b>0.0</b>	<b>&gt;3,617</b>
	10/10/2024	4 - 9	<b>0.0</b>	<b>23,016</b>
SW04	10/10/2024	0 - 4	<b>0.0</b>	<b>&gt;3,617</b>
	10/10/2024	4 - 9	<b>0.0</b>	<b>&gt;37,744</b>
SW05	10/10/2024	0 - 4	<b>0.0</b>	<b>1,332</b>
	10/10/2024	4 - 9	<b>0.0</b>	<b>&lt;1,528.8</b>
SW06	10/10/2024	0 - 4	<b>0.0</b>	<b>269</b>
	10/10/2024	4 - 9	<b>0.1</b>	<b>&lt;1,702</b>
SW07	10/10/2024	0 - 4	<b>1.0</b>	<b>&gt;3,427</b>
	10/10/2024	4 - 13	<b>7.8</b>	<b>17,152</b>
SW08	10/10/2024	0 - 4	<b>0.3</b>	<b>&gt;3,427</b>
	10/10/2024	4 - 13	<b>0.5</b>	<b>28,890</b>
SW09	10/10/2024	0 - 4	<b>0.2</b>	<b>&gt;3,427</b>
	10/10/2024	4 - 13	<b>0.2</b>	<b>&gt;37,452</b>
SW10	10/10/2024	0 - 4	<b>0.4</b>	<b>&gt;3,427</b>
	10/10/2024	4 - 13	<b>0.2</b>	<b>&gt;37,452</b>
SW11	10/10/2024	0 - 4	<b>0.1</b>	<b>&gt;3,427</b>
	10/10/2024	4 - 13	<b>0.1</b>	<b>20,804</b>
SW12	10/10/2024	0 - 4	<b>0.1</b>	<b>&gt;3,617</b>
	10/10/2024	4 - 13	<b>0.2</b>	<b>&gt;45,478</b>
SW13	10/10/2024	9 - 13	<b>0.1</b>	<b>&gt;45,478</b>
SW14	10/10/2024	9 - 13	<b>0.2</b>	<b>&gt;45,478</b>

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

Concentrations in **bold** and yellow exceed the New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (> 100 feet)

bgs: below ground surface  
 mg/kg: milligrams per kilogram  
 ppm: parts per million  
 NA: Not Applicable



## APPENDIX E

### Laboratory Analytical Reports

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

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October 17, 2024

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

RE: SHELL STATE 1C CTB

Enclosed are the results of analyses for samples received by the laboratory on 10/11/24 13:55.

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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, flowing "C" at the beginning.

Celey D. Keene  
Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 01 13' (H246214-01)**

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	10/16/2024	ND	2.03	102	2.00	3.40		
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	2.33		
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.14	107	2.00	1.90		
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.41	107	6.00	2.13		
Total BTEX	<0.300	0.300	10/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 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	<b>39200</b>	16.0	10/16/2024	ND	416	104	400	0.00	QM-07	

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	10/15/2024	ND	211	105	200	7.34		
<b>DRO &gt;C10-C28*</b>	<b>33.5</b>	10.0	10/15/2024	ND	191	95.6	200	4.86		
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND						

Surrogate: 1-Chlorooctane 93.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.4 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 02 13' (H246214-02)**

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	10/16/2024	ND	2.03	102	2.00	3.40	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	2.33	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.14	107	2.00	1.90	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.41	107	6.00	2.13	
Total BTEX	<0.300	0.300	10/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 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
<b>Chloride</b>	<b>45600</b>	16.0	10/16/2024	ND	416	104	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	10/15/2024	ND	211	105	200	7.34	
<b>DRO &gt;C10-C28*</b>	<b>78.4</b>	10.0	10/15/2024	ND	191	95.6	200	4.86	
<b>EXT DRO &gt;C28-C36</b>	<b>18.2</b>	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 03 13' (H246214-03)**

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	10/16/2024	ND	2.03	102	2.00	3.40	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	2.33	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.14	107	2.00	1.90	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.41	107	6.00	2.13	
Total BTEX	<0.300	0.300	10/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 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
<b>Chloride</b>	<b>44000</b>	16.0	10/16/2024	ND	416	104	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	10/15/2024	ND	211	105	200	7.34	
<b>DRO &gt;C10-C28*</b>	<b>17.5</b>	10.0	10/15/2024	ND	191	95.6	200	4.86	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 98.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 04 13' (H246214-04)**

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	10/16/2024	ND	2.03	102	2.00	3.40	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	2.33	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.14	107	2.00	1.90	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.41	107	6.00	2.13	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48800	16.0	10/16/2024	ND	416	104	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	10/15/2024	ND	211	105	200	7.34	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	191	95.6	200	4.86	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 96.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.2 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 05 13' (H246214-05)**

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	10/16/2024	ND	2.03	102	2.00	3.40	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	2.33	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.14	107	2.00	1.90	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.41	107	6.00	2.13	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>48000</b>	16.0	10/16/2024	ND	416	104	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	10/15/2024	ND	211	105	200	7.34	
<b>DRO &gt;C10-C28*</b>	<b>47.4</b>	10.0	10/15/2024	ND	191	95.6	200	4.86	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 95.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 06 13' (H246214-06)**

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	10/16/2024	ND	2.03	102	2.00	3.40	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	2.33	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.14	107	2.00	1.90	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.41	107	6.00	2.13	
Total BTEX	<0.300	0.300	10/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 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
<b>Chloride</b>	<b>43200</b>	16.0	10/16/2024	ND	416	104	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	10/15/2024	ND	211	105	200	7.34	
<b>DRO &gt;C10-C28*</b>	<b>11.1</b>	10.0	10/15/2024	ND	191	95.6	200	4.86	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 07 13' (H246214-07)**

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	10/16/2024	ND	2.03	102	2.00	3.40	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	2.33	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.14	107	2.00	1.90	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.41	107	6.00	2.13	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>46400</b>	16.0	10/16/2024	ND	416	104	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	10/15/2024	ND	211	105	200	7.34	
<b>DRO &gt;C10-C28*</b>	<b>14.4</b>	10.0	10/15/2024	ND	191	95.6	200	4.86	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 08 13' (H246214-08)**

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	10/16/2024	ND	2.03	102	2.00	3.40	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	2.33	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.14	107	2.00	1.90	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.41	107	6.00	2.13	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>44000</b>	16.0	10/16/2024	ND	416	104	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	10/15/2024	ND	211	105	200	7.34	
<b>DRO &gt;C10-C28*</b>	<b>175</b>	10.0	10/15/2024	ND	191	95.6	200	4.86	
<b>EXT DRO &gt;C28-C36</b>	<b>42.7</b>	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 119 % 48.2-134

Surrogate: 1-Chlorooctadecane 122 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 09 13' (H246214-09)**

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	10/16/2024	ND	2.03	102	2.00	3.40	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	2.33	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.14	107	2.00	1.90	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.41	107	6.00	2.13	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6530	16.0	10/16/2024	ND	416	104	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	10/15/2024	ND	211	105	200	7.34	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	191	95.6	200	4.86	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 98.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 10 13' (H246214-10)**

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	10/16/2024	ND	2.03	102	2.00	3.40	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	2.33	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.14	107	2.00	1.90	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.41	107	6.00	2.13	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	65600	16.0	10/16/2024	ND	416	104	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	10/15/2024	ND	211	105	200	7.34	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	191	95.6	200	4.86	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 11 13' (H246214-11)**

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	10/16/2024	ND	2.03	102	2.00	3.40	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	2.33	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.14	107	2.00	1.90	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.41	107	6.00	2.13	
Total BTEX	<0.300	0.300	10/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 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
<b>Chloride</b>	<b>64800</b>	16.0	10/16/2024	ND	416	104	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	10/15/2024	ND	211	105	200	7.34	
<b>DRO &gt;C10-C28*</b>	<b>125</b>	10.0	10/15/2024	ND	191	95.6	200	4.86	
<b>EXT DRO &gt;C28-C36</b>	<b>40.9</b>	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 115 % 48.2-134

Surrogate: 1-Chlorooctadecane 118 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 12 13' (H246214-12)**

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	10/16/2024	ND	2.03	102	2.00	3.40	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	2.33	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.14	107	2.00	1.90	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.41	107	6.00	2.13	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>52000</b>	16.0	10/16/2024	ND	416	104	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	10/15/2024	ND	211	105	200	7.34	
<b>DRO &gt;C10-C28*</b>	<b>20.6</b>	10.0	10/15/2024	ND	191	95.6	200	4.86	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 13 9' (H246214-13)**

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	10/16/2024	ND	2.03	102	2.00	3.40		
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	2.33		
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.14	107	2.00	1.90		
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.41	107	6.00	2.13		
Total BTEX	<0.300	0.300	10/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 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	<b>38400</b>	16.0	10/16/2024	ND	416	104	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	10/15/2024	ND	211	105	200	7.34		
<b>DRO &gt;C10-C28*</b>	<b>110</b>	10.0	10/15/2024	ND	191	95.6	200	4.86		
<b>EXT DRO &gt;C28-C36</b>	<b>24.0</b>	10.0	10/15/2024	ND						

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 14 9' (H246214-14)**

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	10/16/2024	ND	2.07	104	2.00	0.356	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	3.52	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.18	109	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.50	108	6.00	4.46	
Total BTEX	<0.300	0.300	10/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 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
<b>Chloride</b>	<b>54400</b>	16.0	10/16/2024	ND	416	104	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	10/15/2024	ND	211	105	200	7.34	
<b>DRO &gt;C10-C28*</b>	<b>97.7</b>	10.0	10/15/2024	ND	191	95.6	200	4.86	
<b>EXT DRO &gt;C28-C36</b>	<b>18.6</b>	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 111 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 15 9' (H246214-15)**

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	10/16/2024	ND	2.07	104	2.00	0.356	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	3.52	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.18	109	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.50	108	6.00	4.46	
Total BTEX	<0.300	0.300	10/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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
<b>Chloride</b>	<b>42400</b>	16.0	10/16/2024	ND	416	104	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	10/15/2024	ND	211	105	200	7.34	
<b>DRO &gt;C10-C28*</b>	<b>142</b>	10.0	10/15/2024	ND	191	95.6	200	4.86	
<b>EXT DRO &gt;C28-C36</b>	<b>40.4</b>	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 16 9' (H246214-16)**

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	10/16/2024	ND	2.07	104	2.00	0.356	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	3.52	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.18	109	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.50	108	6.00	4.46	
Total BTEX	<0.300	0.300	10/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>24000</b>	16.0	10/16/2024	ND	416	104	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	10/15/2024	ND	211	105	200	7.34	
<b>DRO &gt;C10-C28*</b>	<b>526</b>	10.0	10/15/2024	ND	191	95.6	200	4.86	
<b>EXT DRO &gt;C28-C36</b>	<b>144</b>	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 17 9' (H246214-17)**

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	10/16/2024	ND	2.07	104	2.00	0.356	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	3.52	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.18	109	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.50	108	6.00	4.46	
Total BTEX	<0.300	0.300	10/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 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
<b>Chloride</b>	<b>44800</b>	16.0	10/16/2024	ND	416	104	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	10/15/2024	ND	211	105	200	7.34	
<b>DRO &gt;C10-C28*</b>	<b>50.1</b>	10.0	10/15/2024	ND	191	95.6	200	4.86	
<b>EXT DRO &gt;C28-C36</b>	<b>19.0</b>	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 111 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 18 9' (H246214-18)**

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	10/16/2024	ND	2.07	104	2.00	0.356	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	3.52	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.18	109	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.50	108	6.00	4.46	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	21200	16.0	10/16/2024	ND	416	104	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	10/15/2024	ND	211	105	200	7.34	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	191	95.6	200	4.86	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 118 % 48.2-134

Surrogate: 1-Chlorooctadecane 122 % 49.1-148

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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 19 9' (H246214-19)**

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	10/16/2024	ND	2.07	104	2.00	0.356	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	3.52	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.18	109	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.50	108	6.00	4.46	
Total BTEX	<0.300	0.300	10/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	60800	16.0	10/16/2024	ND	416	104	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	10/15/2024	ND	208	104	200	0.708	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	187	93.3	200	1.06	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 98.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 20 9' (H246214-20)**

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	10/16/2024	ND	2.07	104	2.00	0.356	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	3.52	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.18	109	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.50	108	6.00	4.46	
Total BTEX	<0.300	0.300	10/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>65600</b>	16.0	10/16/2024	ND	416	104	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	10/15/2024	ND	208	104	200	0.708	
<b>DRO &gt;C10-C28*</b>	<b>14.1</b>	10.0	10/15/2024	ND	187	93.3	200	1.06	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 109 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 21 9' (H246214-21)**

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	10/16/2024	ND	2.07	104	2.00	0.356	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	3.52	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.18	109	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.50	108	6.00	4.46	
Total BTEX	<0.300	0.300	10/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 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
<b>Chloride</b>	<b>51200</b>	16.0	10/16/2024	ND	416	104	400	3.77	QM-07

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	10/15/2024	ND	208	104	200	0.708	
<b>DRO &gt;C10-C28*</b>	<b>85.9</b>	10.0	10/15/2024	ND	187	93.3	200	1.06	
<b>EXT DRO &gt;C28-C36</b>	<b>33.1</b>	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 90.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 22 9' (H246214-22)**

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	10/16/2024	ND	2.07	104	2.00	0.356	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	3.52	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.18	109	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.50	108	6.00	4.46	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	35200	16.0	10/16/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/15/2024	ND	208	104	200	0.708	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	187	93.3	200	1.06	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 23 9' (H246214-23)**

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	10/16/2024	ND	2.07	104	2.00	0.356	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	3.52	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.18	109	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.50	108	6.00	4.46	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8130	16.0	10/16/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/15/2024	ND	208	104	200	0.708	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	187	93.3	200	1.06	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 124 % 48.2-134

Surrogate: 1-Chlorooctadecane 124 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 24 9' (H246214-24)**

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	10/16/2024	ND	2.07	104	2.00	0.356	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	3.52	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.18	109	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.50	108	6.00	4.46	
Total BTEX	<0.300	0.300	10/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	864	16.0	10/16/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/15/2024	ND	208	104	200	0.708	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	187	93.3	200	1.06	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 117 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 25 9' (H246214-25)**

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	10/16/2024	ND	2.07	104	2.00	0.356	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	3.52	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.18	109	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.50	108	6.00	4.46	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	10/16/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/15/2024	ND	208	104	200	0.708	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	187	93.3	200	1.06	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 117 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 26 9' (H246214-26)**

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	10/16/2024	ND	2.07	104	2.00	0.356	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	3.52	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.18	109	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.50	108	6.00	4.46	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	19200	16.0	10/16/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/15/2024	ND	208	104	200	0.708	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	187	93.3	200	1.06	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 116 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 27 9' (H246214-27)**

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	10/16/2024	ND	2.07	104	2.00	0.356	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	3.52	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.18	109	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.50	108	6.00	4.46	
Total BTEX	<0.300	0.300	10/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32400</b>	16.0	10/16/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/15/2024	ND	208	104	200	0.708	
<b>DRO &gt;C10-C28*</b>	<b>216</b>	10.0	10/15/2024	ND	187	93.3	200	1.06	
<b>EXT DRO &gt;C28-C36</b>	<b>65.9</b>	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 116 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 28 9' (H246214-28)**

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	10/16/2024	ND	2.07	104	2.00	0.356	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	3.52	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.18	109	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.50	108	6.00	4.46	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	13600	16.0	10/16/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/15/2024	ND	208	104	200	0.708	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	187	93.3	200	1.06	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 121 % 48.2-134

Surrogate: 1-Chlorooctadecane 121 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 29 9' (H246214-29)**

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	10/16/2024	ND	2.07	104	2.00	0.356	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	3.52	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.18	109	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.50	108	6.00	4.46	
Total BTEX	<0.300	0.300	10/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>37200</b>	16.0	10/16/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/15/2024	ND	208	104	200	0.708	
<b>DRO &gt;C10-C28*</b>	<b>269</b>	10.0	10/15/2024	ND	187	93.3	200	1.06	
<b>EXT DRO &gt;C28-C36</b>	<b>84.9</b>	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 30 9' (H246214-30)**

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	10/16/2024	ND	2.07	104	2.00	0.356	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	3.52	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.18	109	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.50	108	6.00	4.46	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>29200</b>	16.0	10/16/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/15/2024	ND	208	104	200	0.708	
<b>DRO &gt;C10-C28*</b>	<b>73.9</b>	10.0	10/15/2024	ND	187	93.3	200	1.06	
<b>EXT DRO &gt;C28-C36</b>	<b>29.2</b>	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 31 9' (H246214-31)**

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	10/16/2024	ND	2.07	104	2.00	0.356	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	3.52	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.18	109	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.50	108	6.00	4.46	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	56000	16.0	10/16/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/15/2024	ND	208	104	200	0.708	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	187	93.3	200	1.06	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: FS 32 9' (H246214-32)**

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	10/16/2024	ND	2.07	104	2.00	0.356	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	3.52	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.18	109	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.50	108	6.00	4.46	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14000	16.0	10/16/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/15/2024	ND	208	104	200	0.708	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	187	93.3	200	1.06	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 100 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 01 0-4' (H246214-33)**

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	10/16/2024	ND	2.07	104	2.00	0.356	
Toluene*	<0.050	0.050	10/16/2024	ND	2.10	105	2.00	3.52	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.18	109	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.50	108	6.00	4.46	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	10/16/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/15/2024	ND	208	104	200	0.708	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	187	93.3	200	1.06	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 117 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 01 4-9' (H246214-34)**

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	10/16/2024	ND	2.07	104	2.00	2.34	
Toluene*	<0.050	0.050	10/16/2024	ND	2.01	100	2.00	2.34	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.04	102	2.00	1.49	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.10	102	6.00	1.36	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>76800</b>	16.0	10/16/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/15/2024	ND	208	104	200	0.708	
<b>DRO &gt;C10-C28*</b>	<b>50.0</b>	10.0	10/15/2024	ND	187	93.3	200	1.06	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 117 % 48.2-134

Surrogate: 1-Chlorooctadecane 119 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 02 0-4' (H246214-35)**

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	10/16/2024	ND	2.07	104	2.00	2.34	
Toluene*	<0.050	0.050	10/16/2024	ND	2.01	100	2.00	2.34	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.04	102	2.00	1.49	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.10	102	6.00	1.36	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1520	16.0	10/16/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/15/2024	ND	208	104	200	0.708	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	187	93.3	200	1.06	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 116 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 02 4-9' (H246214-36)**

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	10/16/2024	ND	2.07	104	2.00	2.34		
Toluene*	<0.050	0.050	10/16/2024	ND	2.01	100	2.00	2.34		
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.04	102	2.00	1.49		
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.10	102	6.00	1.36		
Total BTEX	<0.300	0.300	10/16/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	9600	16.0	10/16/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/15/2024	ND	208	104	200	0.708		
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	187	93.3	200	1.06		
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND						

Surrogate: 1-Chlorooctane 109 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 03 0-4' (H246214-37)**

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	10/16/2024	ND	2.07	104	2.00	2.34	
Toluene*	<0.050	0.050	10/16/2024	ND	2.01	100	2.00	2.34	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.04	102	2.00	1.49	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.10	102	6.00	1.36	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	26400	16.0	10/16/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/15/2024	ND	208	104	200	0.708	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	187	93.3	200	1.06	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 03 4-9' (H246214-38)**

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	10/16/2024	ND	2.07	104	2.00	2.34		
Toluene*	<0.050	0.050	10/16/2024	ND	2.01	100	2.00	2.34		
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.04	102	2.00	1.49		
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.10	102	6.00	1.36		
Total BTEX	<0.300	0.300	10/16/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	6660	16.0	10/16/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/15/2024	ND	208	104	200	0.708		
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	187	93.3	200	1.06		
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND						

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 04 0-4' (H246214-39)**

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	10/16/2024	ND	2.07	104	2.00	2.34	
Toluene*	<0.050	0.050	10/16/2024	ND	2.01	100	2.00	2.34	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.04	102	2.00	1.49	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.10	102	6.00	1.36	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7600	16.0	10/16/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/15/2024	ND	207	103	200	2.57	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	208	104	200	0.872	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 04 4-9' (H246214-40)**

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	10/16/2024	ND	2.07	104	2.00	2.34	
Toluene*	<0.050	0.050	10/16/2024	ND	2.01	100	2.00	2.34	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.04	102	2.00	1.49	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.10	102	6.00	1.36	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	864	16.0	10/16/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/15/2024	ND	207	103	200	2.57	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	208	104	200	0.872	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 124 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 05 0-4' (H246214-41)**

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	10/16/2024	ND	2.07	104	2.00	2.34	
Toluene*	<0.050	0.050	10/16/2024	ND	2.01	100	2.00	2.34	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.04	102	2.00	1.49	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.10	102	6.00	1.36	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2200	16.0	10/15/2024	ND	432	108	400	0.00	QM-07

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	10/15/2024	ND	207	103	200	2.57	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	208	104	200	0.872	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 98.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 05 4-9' (H246214-42)**

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	10/16/2024	ND	2.07	104	2.00	2.34		
Toluene*	<0.050	0.050	10/16/2024	ND	2.01	100	2.00	2.34		
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.04	102	2.00	1.49		
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.10	102	6.00	1.36		
Total BTEX	<0.300	0.300	10/16/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	272	16.0	10/15/2024	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	10/15/2024	ND	207	103	200	2.57		
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	208	104	200	0.872		
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND						

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 06 0-4' (H246214-43)**

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	10/16/2024	ND	2.07	104	2.00	2.34	
Toluene*	<0.050	0.050	10/16/2024	ND	2.01	100	2.00	2.34	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.04	102	2.00	1.49	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.10	102	6.00	1.36	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	832	16.0	10/15/2024	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	10/15/2024	ND	207	103	200	2.57	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	208	104	200	0.872	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 95.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 06 4-9' (H246214-44)**

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	10/16/2024	ND	2.07	104	2.00	2.34	
Toluene*	<0.050	0.050	10/16/2024	ND	2.01	100	2.00	2.34	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.04	102	2.00	1.49	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.10	102	6.00	1.36	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2800	16.0	10/15/2024	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	10/15/2024	ND	207	103	200	2.57	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	208	104	200	0.872	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 07 0-4' (H246214-45)**

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	10/16/2024	ND	2.07	104	2.00	2.34	
Toluene*	<0.050	0.050	10/16/2024	ND	2.01	100	2.00	2.34	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.04	102	2.00	1.49	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.10	102	6.00	1.36	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>48800</b>	16.0	10/15/2024	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	10/15/2024	ND	207	103	200	2.57	
<b>DRO &gt;C10-C28*</b>	<b>10.4</b>	10.0	10/15/2024	ND	208	104	200	0.872	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 118 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 07 4-13' (H246214-46)**

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	10/16/2024	ND	2.07	104	2.00	2.34	
Toluene*	<0.050	0.050	10/16/2024	ND	2.01	100	2.00	2.34	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.04	102	2.00	1.49	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.10	102	6.00	1.36	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>8000</b>	16.0	10/15/2024	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	10/15/2024	ND	207	103	200	2.57	
<b>DRO &gt;C10-C28*</b>	<b>328</b>	10.0	10/15/2024	ND	208	104	200	0.872	
<b>EXT DRO &gt;C28-C36</b>	<b>104</b>	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 111 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 08 0-4' (H246214-47)**

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	10/16/2024	ND	2.07	104	2.00	2.34	
Toluene*	<0.050	0.050	10/16/2024	ND	2.01	100	2.00	2.34	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.04	102	2.00	1.49	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.10	102	6.00	1.36	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>8660</b>	16.0	10/15/2024	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	10/15/2024	ND	207	103	200	2.57	
<b>DRO &gt;C10-C28*</b>	<b>30.8</b>	10.0	10/15/2024	ND	208	104	200	0.872	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 08 4-13' (H246214-48)**

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	10/16/2024	ND	2.07	104	2.00	2.34	
Toluene*	<0.050	0.050	10/16/2024	ND	2.01	100	2.00	2.34	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.04	102	2.00	1.49	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.10	102	6.00	1.36	
Total BTEX	<0.300	0.300	10/16/2024	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
<b>Chloride</b>	<b>17800</b>	16.0	10/15/2024	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	10/15/2024	ND	207	103	200	2.57	
<b>DRO &gt;C10-C28*</b>	<b>65.7</b>	10.0	10/15/2024	ND	208	104	200	0.872	
<b>EXT DRO &gt;C28-C36</b>	<b>11.4</b>	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 86.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 09 0-4' (H246214-49)**

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	10/16/2024	ND	2.07	104	2.00	2.34		
Toluene*	<0.050	0.050	10/16/2024	ND	2.01	100	2.00	2.34		
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.04	102	2.00	1.49		
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.10	102	6.00	1.36		
Total BTEX	<0.300	0.300	10/16/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	68000	16.0	10/15/2024	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	10/15/2024	ND	207	103	200	2.57		
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	208	104	200	0.872		
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND						

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 09 4-13' (H246214-50)**

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	10/16/2024	ND	2.07	104	2.00	2.34	
Toluene*	<0.050	0.050	10/16/2024	ND	2.01	100	2.00	2.34	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.04	102	2.00	1.49	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.10	102	6.00	1.36	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	40000	16.0	10/15/2024	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	10/15/2024	ND	207	103	200	2.57	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	208	104	200	0.872	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 10 0-4' (H246214-51)**

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	10/16/2024	ND	2.07	104	2.00	2.34	
Toluene*	<0.050	0.050	10/16/2024	ND	2.01	100	2.00	2.34	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.04	102	2.00	1.49	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.10	102	6.00	1.36	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	22400	16.0	10/15/2024	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	10/15/2024	ND	207	103	200	2.57	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	208	104	200	0.872	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 10 4-13' (H246214-52)**

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	10/16/2024	ND	2.07	104	2.00	2.34	
Toluene*	<0.050	0.050	10/16/2024	ND	2.01	100	2.00	2.34	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.04	102	2.00	1.49	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.10	102	6.00	1.36	
Total BTEX	<0.300	0.300	10/16/2024	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	90600	16.0	10/15/2024	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	10/15/2024	ND	207	103	200	2.57	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	208	104	200	0.872	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 98.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.8 % 49.1-148

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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 11 0-4' (H246214-53)**

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	10/16/2024	ND	2.07	104	2.00	2.34		
Toluene*	<0.050	0.050	10/16/2024	ND	2.01	100	2.00	2.34		
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.04	102	2.00	1.49		
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.10	102	6.00	1.36		
Total BTEX	<0.300	0.300	10/16/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	8800	16.0	10/15/2024	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	10/15/2024	ND	207	103	200	2.57		
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	208	104	200	0.872		
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND						

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 11 4-13' (H246214-54)**

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	10/16/2024	ND	2.08	104	2.00	1.80	
Toluene*	<0.050	0.050	10/16/2024	ND	2.09	104	2.00	2.21	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.13	106	2.00	1.91	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.33	106	6.00	1.79	
Total BTEX	<0.300	0.300	10/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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	26400	16.0	10/15/2024	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	10/15/2024	ND	207	103	200	2.57	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	208	104	200	0.872	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 12 0-4' (H246214-55)**

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	10/16/2024	ND	2.08	104	2.00	1.80	
Toluene*	<0.050	0.050	10/16/2024	ND	2.09	104	2.00	2.21	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.13	106	2.00	1.91	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.33	106	6.00	1.79	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	40000	16.0	10/15/2024	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	10/15/2024	ND	207	103	200	2.57	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	208	104	200	0.872	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 96.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.6 % 49.1-148

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**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 12 4-13' (H246214-56)**

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	10/16/2024	ND	2.08	104	2.00	1.80	
Toluene*	<0.050	0.050	10/16/2024	ND	2.09	104	2.00	2.21	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.13	106	2.00	1.91	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.33	106	6.00	1.79	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32000	16.0	10/15/2024	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	10/15/2024	ND	207	103	200	2.57	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	208	104	200	0.872	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 13 9-13' (H246214-57)**

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	10/16/2024	ND	2.08	104	2.00	1.80		
Toluene*	<0.050	0.050	10/16/2024	ND	2.09	104	2.00	2.21		
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.13	106	2.00	1.91		
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.33	106	6.00	1.79		
Total BTEX	<0.300	0.300	10/16/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64000	16.0	10/15/2024	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	10/15/2024	ND	207	103	200	2.57		
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	208	104	200	0.872		
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND						

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	SHELL STATE 1C CTB	Sampling Condition:	Cool & Intact
Project Number:	03B1417144	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - LEA CO NM		

**Sample ID: SW 14 9-13' (H246214-58)**

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	10/16/2024	ND	2.08	104	2.00	1.80	
Toluene*	<0.050	0.050	10/16/2024	ND	2.09	104	2.00	2.21	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.13	106	2.00	1.91	
Total Xylenes*	<0.150	0.150	10/16/2024	ND	6.33	106	6.00	1.79	
Total BTEX	<0.300	0.300	10/16/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	29200	16.0	10/15/2024	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	10/15/2024	ND	207	103	200	2.57	
DRO >C10-C28*	<10.0	10.0	10/15/2024	ND	208	104	200	0.872	
EXT DRO >C28-C36	<10.0	10.0	10/15/2024	ND					

Surrogate: 1-Chlorooctane 97.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.4 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

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*Celey D. Keene*

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1066

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

Company Name: Ensolum, LLC		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>									
Project Manager: Kelly Lowery		P.O. #: Oxy, USA, Inc.											
Address: 601 N Marienfeld Street, Suite 400		Attn: Wade Dittrich											
City: Midland	State: TX	Zip: 79701											
Phone #: 214-733-3165	Fax #:												
Project #: 03B1417144	Project Owner:												
Project Name: Shell State 1C CTB													
Project Location: Lea County, NM													
Sampler Name: Tabitha Guadian/Azuka Udeh													
Address:		City:											
State:		Zip:											
Phone #		Fax #:											

Lab I.D.	Sample I.D.	Depth (feet)	(GRAB OR C)OMP. # CONTAINERS	MATRIX						PRESERV.		SAMPLING		BTEX 8021B	TPH 8015M	Chlorides 4500
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE			
H246214 1	FS01	13'	C			X				X				X	X	X
2	FS02	13'	C			X				X				X	X	X
3	FS03	13'	C			X				X				X	X	X
4	FS04	13'	C			X				X				X	X	X
5	FS05	13'	C			X				X				X	X	X
6	FS06	13'	C			X				X				X	X	X
7	FS07	13'	C			X				X				X	X	X
8	FS08	13'	C			X				X				X	X	X
9	FS09	13'	C			X				X				X	X	X
10	FS10	17'	C			X				X				X	X	X

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Relinquished By: <i>[Signature]</i>	Date: 10/11/24	Received By: <i>[Signature]</i>	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:
	Time: 1240		All Results are emailed. Please provide Email address:
Relinquished By: <i>[Signature]</i>	Date: 10/11/24	Received By: <i>[Signature]</i>	REMARKS: <i>[Signature]</i> klowery@ensolum.com
	Time: 1355		
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C: 0.8°C Corrected Temp. °C: 0.2°C	Sample Condition Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	Turnaround Time: Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Thermometer ID #443 Correction Factor -0.5°C
		CHECKED BY: <i>[Signature]</i>	Bacteria (only) Sample Condition Cool Intact <input type="checkbox"/> Observed Temp. °C Yes <input type="checkbox"/> No <input type="checkbox"/>

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



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

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

206

Company Name: Ensolum, LLC		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>					
Project Manager: Kelly Lowery		P.O. #: Oxy, USA, Inc.							
Address: 601 N Marienfeld Street, Suite 400		Attn: Wade Dittrich							
City: Midland	State: TX	Zip: 79701							
Phone #: 214-733-3165	Fax #:	Address:							
Project #: 03B1417144	Project Owner:	City:							
Project Name: Shell State 1C CTB		State:	Zip:						
Project Location: Lea County, NM		Phone #:							
Sampler Name: Tabitha Guadian/Azuka Udeh		Fax #:							

FOR LAB USE ONLY		Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX					PRESERV.			SAMPLING		BTEX 8021B	TPH 8015M	Chlorides 4500
Lab I.D.	Sample I.D.				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE/COOL	OTHER	DATE			
H246214																	
11	FS11	13'	C	1			X				X		10/10/24	1218	X	X	X
12	FS12	13'	C	1			X				X		10/10/24	1220	X	X	X
13	FS13	9'	C	1			X				X		10/10/24	1222	X	X	X
14	FS14	9'	C	1			X				X		10/10/24	1224	X	X	X
15	FS15	9'	C	1			X				X		10/10/24	1226	X	X	X
16	FS16	9'	C	1			X				X		10/10/24	1228	X	X	X
17	FS17	9'	C	1			X				X		10/10/24	1230	X	X	X
18	FS18	9'	C	1			X				X		10/10/24	1232	X	X	X
19	FS19	9'	C	1			X				X		10/10/24	1144	X	X	X
20	FS20	9'	C	1			X				X		10/10/24	1146	X	X	X

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Relinquished By: <i>Jai</i>	Date: 10/11/24 Time: 1240	Received By: <i>[Signature]</i>	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:
Relinquished By: <i>[Signature]</i>	Date: 10/11/24 Time: 1355	Received By: <i>[Signature]</i>	All Results are emailed. Please provide Email address: <i>klower@ensolum.com</i>
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C: 0.8°C Corrected Temp. °C: 0.2°C	Sample Condition Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	REMARKS:
		CHECKED BY: (Initials) <i>SR</i>	Turnaround Time: Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>
			Bacteria (only) Sample Condition Cool Intact Observed Temp. °C <input type="checkbox"/> Yes <input type="checkbox"/> No
			Thermometer ID #443 Correction Factor: 0.5°C -0.4°C
			<input type="checkbox"/> Yes <input type="checkbox"/> No Corrected Temp. °C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

3066

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

Company Name: Ensolum, LLC		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>									
Project Manager: Kelly Lowery		P.O. #: Oxy, USA, Inc.											
Address: 601 N Marienfeld Street, Suite 400		Attn: Wade Dittrich											
City: Midland State: TX Zip: 79701		Address:											
Phone #: 214-733-3165 Fax #:		City:											
Project #: 03B1417144 Project Owner:		State: Zip:											
Project Name: Shell State 1C CTB		Phone #:											
Project Location: Lea County, NM		Fax #:											
Sampler Name: Tabitha Guadian/Azuka Udeh													

Lab I.D.	Sample I.D.	Depth (feet)	GRAB OR (COMP. # CONTAINERS)	MATRIX					PRESERV.			SAMPLING		BTEX 8021B	TPH 8015M	Chlorides 4500	
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE				TIME
H246214																	
21	F521	9'	C			X				X			10/10/24	1140	X	X	X
22	F522	9'	C			X				X			10/10/24	1150	X	X	X
23	F523	9'	C			X				X			10/10/24	1152	X	X	X
24	F524	9'	C			X				X			10/10/24	1154	X	X	X
25	F525	9'	C			X				X			10/10/24	1156	X	X	X
26	F526	9'	C			X				X			10/10/24	1158	X	X	X
27	F527	9'	C			X				X			10/10/24	1200	X	X	X
28	F528	9'	C			X				X			10/10/24	1202	X	X	X
29	F529	9'	C			X				X			10/10/24	1204	X	X	X
30	F530	9'	C			X				X			10/10/24	1206	X	X	X

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Relinquished By:	Date: 10/11/24 Time: 1240	Received By:	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:
Relinquished By:	Date: 10/11/24 Time: 1355	Received By:	All Results are emailed. Please provide Email address: kloway@ensolum.com
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C: 0.8°C Corrected Temp. °C: 0.2°C	Sample Condition Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	REMARKS:
		CHECKED BY: (Initials) 	Turnaround Time: -0.4°C Standard Rush <input checked="" type="checkbox"/> Bacteria (only) Sample Condition Cool Intact Observed Temp. °C <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No Corrected Temp. °C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

5066

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

Company Name: Ensolum, LLC		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>					
Project Manager: Kelly Lowery		P.O. #: Oxy, USA, Inc.							
Address: 601 N Mariefeld Street, Suite 400		Attn: Wade Dittrich							
City: Midland State: TX Zip: 79701		Address:							
Phone #: 214-733-3165 Fax #:		City:							
Project #: 03B1417144 Project Owner:		State: Zip:							
Project Name: Shell State 1C CTB		Phone #:							
Project Location: Lea County, NM		Fax #:							
Sampler Name: Tabitha Guadian/Azuka Udeh									

Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP. # CONTAINERS	MATRIX					PRESERV.		SAMPLING		BTEX 8021B	TPH 8015M	Chlorides 4500	
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:				DATE
H246214																
41	SW05	0-4'	C			X				X		10/10/24	1108	X	X	X
42	SW05	4-9'	C			X				X		10/10/24	1110	X	X	X
43	SW06	0-4'	C			X				X		10/10/24	1112	X	X	X
44	SW06	4-9'	C			X				X		10/10/24	1114	X	X	X
45	SW07	0-4'	C			X				X		10/10/24	1128	X	X	X
46	SW07	4-9'	C			X				X		10/10/24	1130	X	X	X
47	SW08	0-4'	C			X				X		10/10/24	1145	X	X	X
48	SW08	4-9'	C			X				X		10/10/24	1149	X	X	X
49	SW09	0-4'	C			X				X		10/10/24	1150	X	X	X
50	SW09	4-9'	C			X				X		10/10/24	1152	X	X	X

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: <i>[Signature]</i>	Date: 10/11/24 Time: 1200	Received By: <i>[Signature]</i>	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:
Relinquished By: <i>[Signature]</i>	Date: 10/11/24 Time: 1355	Received By: <i>[Signature]</i>	All Results are emailed. Please provide Email address: KLowery@ensolum.com
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C: 0.8 Corrected Temp. °C: 0.2	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	REMARKS:
		CHECKED BY: (Initials) <i>[Signature]</i>	Turnaround Time: #140 Thermometer ID #113 Correction Factor: 0.5°C - 0.1°C
		Standard <input checked="" type="checkbox"/> Rush	Bacteria (only) <input checked="" type="checkbox"/> Sample Condition Cool Intact <input type="checkbox"/> Observed Temp. °C <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No Corrected Temp. °C

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



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

6086

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

Company Name: Ensolum, LLC		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>									
Project Manager: Kelly Lowery		P.O. #: Oxy, USA, Inc.											
Address: 601 N Marienfeld Street, Suite 400		Attn: Wade Dittrich											
City: Midland State: TX Zip: 79701		Address:											
Phone #: 214-733-3165 Fax #:		City:											
Project #: 03B1417144 Project Owner:		State: Zip:											
Project Name: Shell State 1C CTB		Phone #:											
Project Location: Lea County, NM		Fax #:											
Sampler Name: Tabitha Guadian/Azuka Udeh													

Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX					PRESERV.		SAMPLING		BTEX 8021B	TPH 8015M	Chlorides 4500	
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:				DATE
H246214																	
51	Sw10	0-4'	C	1			X			X			10/10/24	1153	X	X	X
52	Sw10	4-13'	C	1			X			X			10/10/24	1154	X	X	X
53	Sw11	0-4'	C	1			X			X			10/10/24	1155	X	X	X
54	Sw11	4-13'	C	1			X			X			10/10/24	1156	X	X	X
55	Sw12	0-4'	C	1			X			X			10/10/24	1157	X	X	X
56	Sw12	4-13'	C	1			X			X			10/10/24	1158	X	X	X
57	Sw13	9-13'	C	1			X			X			10/10/24	1159	X	X	X
58	Sw14	9-13'	C	1			X			X			01/10/24	1200	X	X	X

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: <i>[Signature]</i>	Date: 10/11/24 Time: 12:00	Received By: <i>[Signature]</i>	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:
Relinquished By: <i>[Signature]</i>	Date: 10/11/24 Time: 1:35	Received By: <i>[Signature]</i>	All Results are emailed. Please provide Email address: <i>klowery@ensolum.com</i>
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C: 0.8 Corrected Temp. °C: 0.2	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	REMARKS:
		CHECKED BY: (Initials) <i>[Signature]</i>	Turnaround Time: Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Thermometer ID: #113 Correction Factor: -0.5°C #140
			Bacteria (only) Sample Condition Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No Observed Temp. °C <input type="checkbox"/> Yes <input type="checkbox"/> No Corrected Temp. °C

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

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

QUESTIONS

Action 421823

**QUESTIONS**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 421823
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nAPP2402456040
Incident Name	NAPP2402456040 SHELL STATE 1C CTB @ 30-025-20810
Incident Type	Release Other
Incident Status	Remediation Plan Received
Incident Well	[30-025-20810] SHELL STATE #001

<b>Location of Release Source</b>	
<i>Please answer all the questions in this group.</i>	
Site Name	SHELL STATE 1C CTB
Date Release Discovered	01/23/2024
Surface Owner	State

<b>Incident Details</b>	
<i>Please answer all the questions in this group.</i>	
Incident Type	Release Other
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

<b>Nature and Volume of Release</b>	
<i>Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.</i>	
Crude Oil Released (bbls) Details	Cause: Human Error   Valve   Crude Oil   Released: 10 BBL   Recovered: 3 BBL   Lost: 7 BBL.
Produced Water Released (bbls) Details	Cause: Human Error   Valve   Produced Water   Released: 40 BBL   Recovered: 3 BBL   Lost: 37 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)	Produced oil and produced water release

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QUESTIONS, Page 2

Action 421823

**QUESTIONS (continued)**

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

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	<b>No, according to supplied volumes this does not appear to be a "gas only" report.</b>
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	<b>Yes</b>
Reasons why this would be considered a submission for a notification of a major release	<b>From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.</b>

*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: Wade Dittrich Title: Environmental Coordinator Email: wade_dittrich@oxy.com Date: 01/16/2025
--	---

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QUESTIONS, Page 3

Action 421823

**QUESTIONS (continued)**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 421823
	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 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

**Remediation Plan**

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

Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

**Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	90600
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	670
GRO+DRO (EPA SW-846 Method 8015M)	526
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	03/20/2024
On what date will (or did) the final sampling or liner inspection occur	04/16/2025
On what date will (or was) the remediation complete(d)	04/16/2025
What is the estimated surface area (in square feet) that will be reclaimed	6281
What is the estimated volume (in cubic yards) that will be reclaimed	931
What is the estimated surface area (in square feet) that will be remediated	6281
What is the estimated volume (in cubic yards) that will be remediated	8208

*These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.*

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

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QUESTIONS, Page 4

Action 421823

**QUESTIONS (continued)**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 421823
	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 <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	LEA LAND LANDFILL [fEEM0112342028]
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.

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

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

I hereby agree and sign off to the above statement	Name: Wade Dittrich Title: Environmental Coordinator Email: wade_dittrich@oxy.com Date: 01/16/2025
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The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 5

Action 421823

**QUESTIONS (continued)**

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	Action Number: 421823
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

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

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Action 421823

**QUESTIONS (continued)**

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	Action Number: 421823
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Sampling Event Information</b>	
Last sampling notification (C-141N) recorded	<b>422203</b>
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	<b>01/24/2025</b>
What was the (estimated) number of samples that were to be gathered	<b>50</b>
What was the sampling surface area in square feet	<b>6281</b>

<b>Remediation Closure Request</b>	
<i>Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.</i>	
Requesting a remediation closure approval with this submission	<b>No</b>

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CONDITIONS

Action 421823

**CONDITIONS**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 421823
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**CONDITIONS**

Created By	Condition	Condition Date
nvez	Remediation plan is approved as written except with the following condition; 1. Variance request increasing the sampling frequency to 400 square feet (ft.2) per one (1) five-point composite (5pc) from the excavation floor and 200 ft.2 from the sidewalls is approved. 2. Prior to backfilling the open excavation per 19.15.29.12D (2) NMAC, OXY must collect a minimum of one (1) 5pc from the media being used as backfill to verify that it meets non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. This is especially important for the material being used within the top four (4) feet from the ground surface. 3. OXY has 90-days (April 28, 2025) to submit to OCD its appropriate or final remediation closure report.	1/27/2025