



April 3, 2025

New Mexico Oil Conservation Division

New Mexico Energy, Minerals, and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

**Re: Closure Request
North Indian Basin Unit #15
Incident Number NAPP2500653070
Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Oxy USA Inc. (Oxy), has prepared this *Closure Request* to document assessment, delineation, and soil sampling activities performed at the North Indian Basin Unit #15 (Site). The purpose of the Site assessment, delineation, and soil sampling activities was to assess for the presence or absence of impacts to soil resulting from a natural gas release at the Site. Based on field observations, field screening activities, and soil sample laboratory analytical results, Oxy is submitting this *Closure Request*, describing Site assessment and delineation activities that have occurred and requesting closure for Incident Number NAPP2500653070.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit B, Section 02, Township 21 South, Range 23 East, in Eddy County, New Mexico (32.514799°, -104.570034°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On December 10, 2024, a flowline leak resulted in an unknown amount of natural gas being released. Oxy reported the release to the New Mexico Oil Conservation Division (NMOCD) via email on January 6, 2025, and subsequently submitted an Initial C-141 Report (C-141) on February 28, 2025. The release was assigned Incident Number NAPP2500653070.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization are summarized below and detailed in the NMOCD permitting portal C-141 Site Characterization section. Potential Site receptors are identified on Figure 4.

Depth to groundwater at the Site is reasonably estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geological Survey Well 323004104344001, located approximately 1.06 miles southwest of the Site. The groundwater well was drilled during October 6, 1987, depth to water was measured to be 146 feet bgs. All wells used for depth to groundwater determination are presented on Figure 4. The associated well records are included in Appendix A.

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The closest continuously flowing or significant watercourse to the Site is Stinking Draw, located approximately 660 feet south 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 unstable geology (high potential karst designation area). Site receptors are identified on Figure 1.

Based on the results of the Site Characterization, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total Petroleum Hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

SITE ASSESSMENT ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

On January 27, 2025 Ensolum personnel conducted Site assessment activities to evaluate the release extent based on information provided on the Form C-141 and visual observations. Three potholes (DS01, DS02, and DS03) were advanced via hand auger to depths ranging from surface to 7 feet bgs, and discrete soil samples were collected from each pothole location at varying depths ranging from 0.25 feet bgs to 7 feet bgs, in order to assess for the presence or absence of impacted soil resulting from the natural gas release. Eight delineation samples (East, North, Northeast, Northwest, South, Southeast, Southwest, and West) were collected around the perimeter of the release extent, at 0.5 feet bgs, to laterally delineate the presence of impacted soil. The soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 3. Photographic documentation was completed during the Site visit and a photographic log is included as Appendix B.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico, for analysis of the following chemicals of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH- GRO, TPH- DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method SM4500Cl-B.

Laboratory analytical results for the pothole samples (DS01, DS02, and DS03) as well as the delineation samples (East, North, Northeast, Northwest, South, Southeast, Southwest, and West) were compliant with the most stringent Table I Closure Criteria and thus successfully defined the extent of the release. Confirmation soil sampling and lateral delineation activities were warranted to further confirm the absence of impacted soil within the release area.

DELINEATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

Between January 31 and February 6, 2025, Ensolum personnel returned to the Site to complete lateral delineation and excavation activities to confirm the absence of impacted soil within the release area. A total of 16 soil samples from the floor of the excavation (FS01 to FS16), and 5 soil samples from the excavation sidewalls (SW01 to SW05) were collected at depths ranging from the surface to 7 feet bgs. Soil samples were field screened for VOCs and chloride, and samples were collected based on the field screening results. The floor and sidewall soil samples were collected, handled, and analyzed following the same procedures previously described. The confirmation soil sample locations were mapped utilizing

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a handheld GPS unit and are depicted on Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included in Appendix B.

Laboratory analytical results for floor soil samples (FS01 through FS16) and sidewall soil samples (SW01 through SW05) indicated all COC concentrations were compliant with the reclamation requirements and provided lateral delineation to below the most stringent Table I Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete analytical reports are included as Appendix C.

Subsequent to the results of the final confirmation soil sampling, the excavated areas were backfilled with clean fill material and contoured to the original surrounding grade. Two representative 5-point composite soil samples (Bryksaw Caliche Pit Caliche Sample and Bryksaw Caliche Pit Topsoil Sample) were collected from the backfill material prior to use at the Site. Laboratory analytical results for the backfill soil sample confirmed compliance with the NMOCD requirements for the reclaimed area to be non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg and TPH concentrations less than 100 mg/kg. The laboratory analytical results are summarized in the attached Table 2 and the complete laboratory analytical report is included in Appendix C.

CLOSURE REQUEST

Soil sampling activities were conducted at the Site to assess for the presence or absence of impacted soil resulting from the December 10, 2024, natural gas release. Laboratory analytical results for all pothole, confirmation, and delineation soil samples collected from the release area indicated that all COC concentrations were compliant with the Site Closure Criteria and provided lateral and vertical delineation to the most stringent Table I Closure Criteria. Based on the laboratory analytical results, no impacted soil was identified, and no further remediation is required.

Depth to groundwater was reasonably determined to be greater than 100 feet bgs within 1.06 miles of the Site, the Site is underlain by unstable geology (high potential karst designation area). Oxy believes the remedial actions completed are protective of human health, the environment, and groundwater. As such, Oxy respectfully requests closure for Incident Number NAPP2500653070.

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

Sincerely,
Ensolum, LLC

A handwritten signature in cursive script that reads 'Samantha MacKenzie'.

Samantha MacKenzie
Staff Geologist

A handwritten signature in cursive script that reads 'Beaux Jennings'.

Beaux Jennings
Associate Principal

cc: Wade Dittrich, Oxy USA Inc.
Bureau of Land Management Office

Appendices:

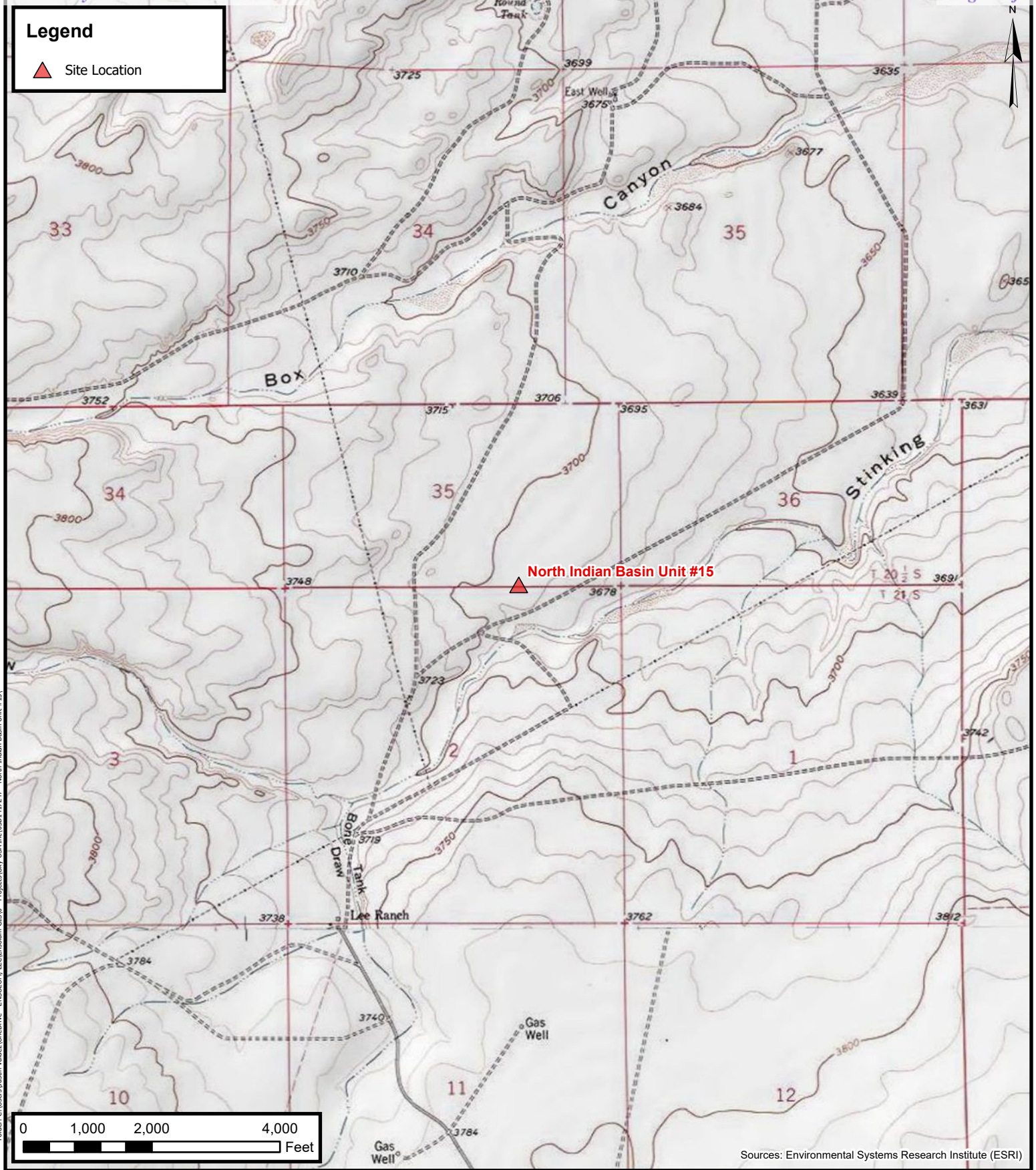
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Figure 1	Topographic Map
Figure 2	Site Vicinity Map
Figure 3	Site Map
Figure 4	Closure Criteria Map
Figure 5	Backfill Site Map
Table 1	Soil Sample Analytical Results
Table 2	Backfill Soil Sample Analytical Results
Appendix A	Referenced Well Records
Appendix B	Photographic Log
Appendix C	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix D	NMOCD Correspondence



FIGURES



ENSOLUM
Environmental, Engineering and
Hydrogeologic Consultants

Topographic Map

Oxy USA Inc.
North Indian Basin Unit #15
Project Number: 03B1417247
32.514799, -104.570034
Eddy County, New Mexico

FIGURE

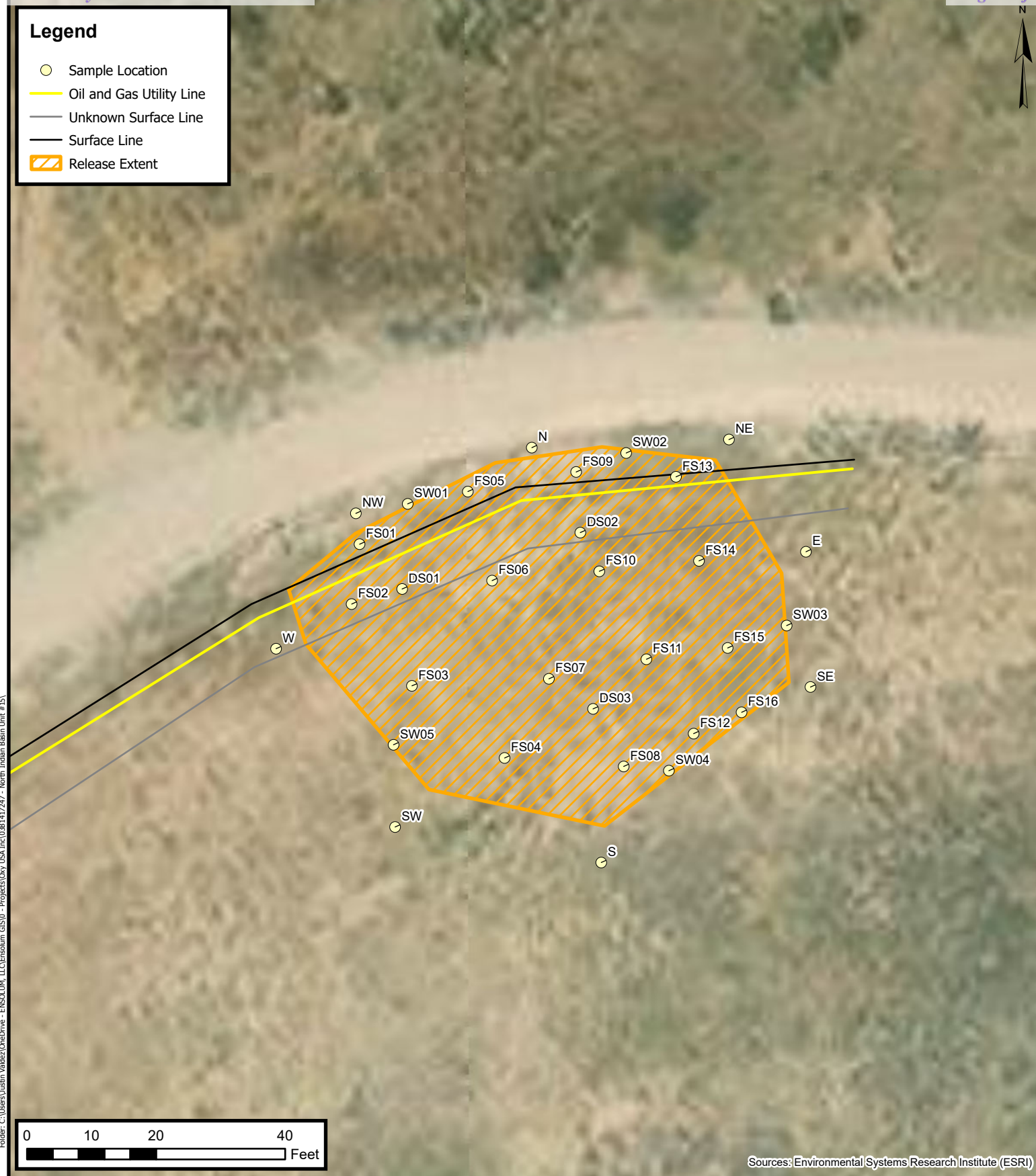
1



Site Vicinity Map

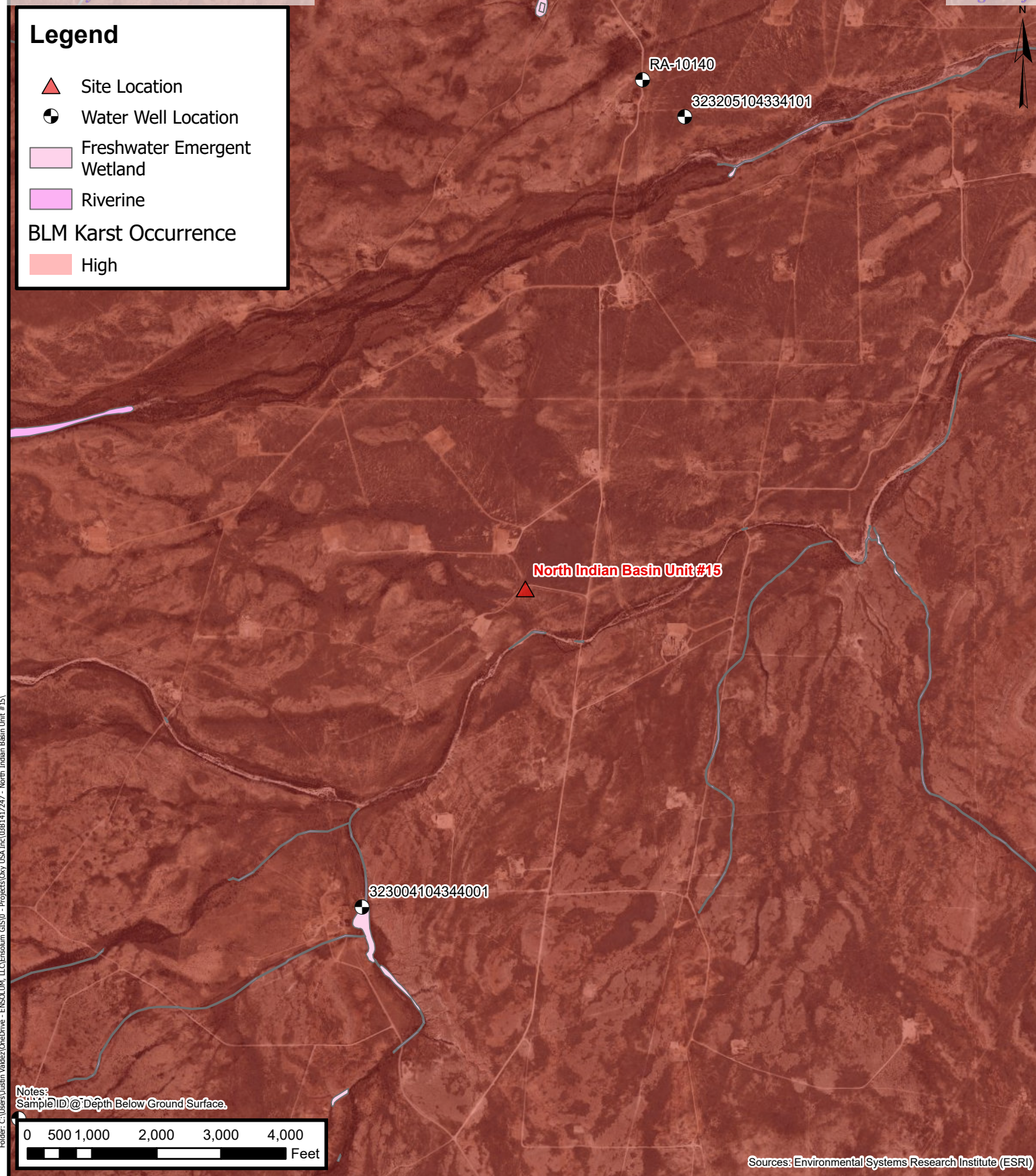
Oxy USA Inc.
North Indian Basin Unit #15
Project Number: 03B1417247
32.514799, -104.570034
Eddy County, New Mexico

FIGURE
2



Site Map
Oxy USA Inc.
North Indian Basin Unit #15
Project Number: 03B1417247
32.514799, -104.570034
Eddy County, New Mexico

FIGURE
3



Closure Criteria Map

Oxy USA Inc.
North Indian Basin Unit #15
Project Number: 03B1417247
32.514799, -104.570034
Eddy County, New Mexico

FIGURE
4



Backfill Site Map

Bryksaw Caliche Pit
32.474238, -104.319420
Eddy County, New Mexico

FIGURE
5



TABLES

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 North Indian Basin Unit #15
 Oxy, USA INC.
 Eddy County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	100	600
Pothole Soil Samples									
DS01	1/27/2025	0.25	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	32.0
		3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	48.0
		7	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	32.0
DS02	1/27/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	32.0
		1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	16.0
DS03	1/27/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	16.0
		3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	64.0
		6	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	48.0
Confirmation Floor Soil Samples									
FS01	2/5/2025	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
FS02	2/5/2025	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
FS03	2/5/2025	7	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
FS04	2/5/2025	7	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
FS05	2/5/2025	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
FS06	2/5/2025	6	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
FS07	2/5/2025	7	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
FS08	2/5/2025	7	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
FS09	2/5/2025	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
FS10	2/5/2025	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
FS11	2/5/2025	6	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
FS12	2/5/2025	6	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
FS13	2/5/2025	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
FS14	2/5/2025	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
FS15	2/5/2025	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
FS16	2/5/2025	6	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
Confirmation Side Wall Soil Samples									
SW01	2/5/2025	0-1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
SW02	2/5/2025	0-1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
SW03	2/5/2025	0-6	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
SW04	2/5/2025	0-7	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
SW05	2/5/2025	0-7	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
Lateral Delineation Soil Samples									
East	1/27/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
North	1/27/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
North East	1/27/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
North West	1/27/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
South	1/27/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
South East	1/27/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
South West	1/27/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
West	1/27/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCOD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

Concentrations in **bold** exceed the NMOCOD Table I Closure Criteria or reclamation standard where applicable.

Grey text represents samples that have been excavated

* indicates sample was collected in area to be reclaimed after remediation is complete; reclamation standard in the top 4 feet is 600 mg/kg for chloride and 100 mg/kg for TPH.



TABLE 2
BACKFILL SOIL SAMPLE ANALYTICAL RESULTS
 Bryksaw Caliche Pit
 Oxy USA, Inc.
 Eddy County, New Mexico
 Ensolum Project No. NA

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (GRO+DRO+MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (≤ 50 feet)			10	NE	NE	NE	50	NE	NE	NE	100	600
Composite Background Soil Sample Analytical Result												
BRYKSAW CALICHE PIT CALICHE SAMPLE	3/21/2025	NA	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	68.0	<10.0	68.0	<16.0
BRYKSAW CALICHE PIT TOPSOIL SAMPLE	03/21/2025	NA	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	16.0

bgs: below ground surface

mg/kg: milligrams per kilogram

NA: Not Applicable

NE: Not Established

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

MRO: Motor Oil/Lube Oil Range Organics

TPH: Total Petroleum Hydrocarbon



APPENDIX A

Referenced Well Records



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:
Groundwater

Geographic Area:
United States

GO

Click to hideNews Bulletins

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

Groundwater levels for the Nation

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

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 323004104344001

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 323004104344001 21S.23E.02.33434

Eddy County, New Mexico
Latitude 32°30'04", Longitude 104°34'40" NAD27
Land-surface elevation 3,710.0 feet above NGVD29
This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement
1987-10-06			D	62610	3563.52	NGVD29	1	S		
1987-10-06			D	62611	3565.17	NAVD88	1	S		
1987-10-06			D	72019	146.48		1	S		

Explanation

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



APPENDIX B

Photographic Log

**Photographic Log**

Oxy USA, Inc
North Indian Basin Unit #15
NAPP2500653070



Photograph: 1 Date: 1/10/2025
Description: Release area during one call marking
View: Northwest



Photograph: 2 Date: 1/27/2025
Description: Pothole during delineation efforts
View: Southeast



Photograph: 3 Date: 1/31/2025
Description: Excavation during excavation activities
View: East



Photograph: 4 Date: 1/31/2025
Description: Excavation during excavation activities
View: North



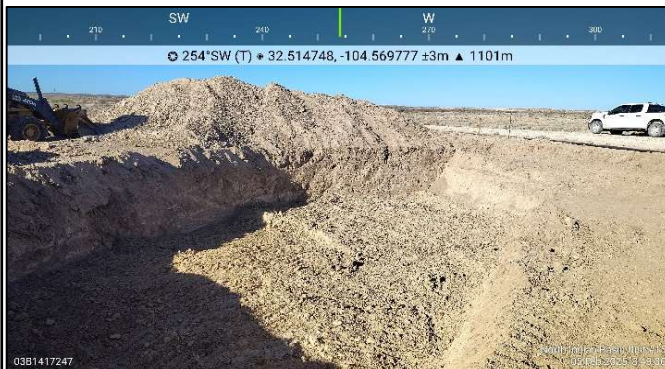
Photographic Log
 Oxy USA, Inc
 North Indian Basin Unit #15
 NAPP2500653070



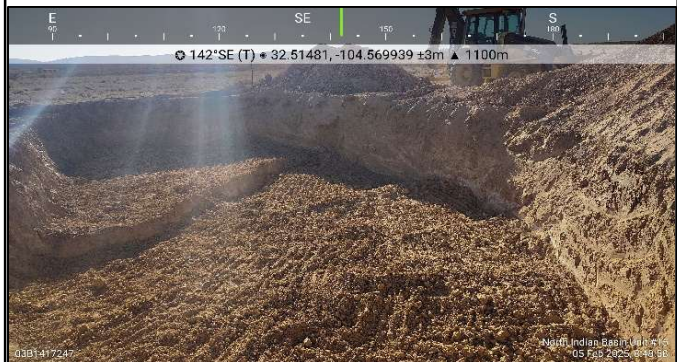
Photograph: 5 Date: 1/31/2025
 Description: Excavation during excavation activities
 View: North



Photograph: 6 Date: 2/5/2025
 Description: Excavation during confirmation sampling
 View: Southwest



Photograph: 7 Date: 2/5/2025
 Description: Excavation during confirmation sampling
 View: West



Photograph: 8 Date: 2/5/2025
 Description: Excavation during confirmation sampling
 View: Southeast



Photographic Log
 Oxy USA, Inc
 North Indian Basin Unit #15
 NAPP2500653070



Photograph: 9
 Description: Backfill
 View: North



Photograph: 10
 Description: Backfill
 View: West



Photograph: 11
 Description: Backfill
 View: East



Photograph: 12
 Description: Backfill
 View: East



APPENDIX C

Laboratory Analytical Reports & Chain of Custody Documentation



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

February 03, 2025

SAMANTHA MACKENZIE

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: NORTH INDIAN BASIN UNIT #15

Enclosed are the results of analyses for samples received by the laboratory on 01/28/25 13:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	01/28/2025	Sampling Date:	01/27/2025
Reported:	02/03/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Alyssa Parras
Project Location:	OXY		

Sample ID: NORTH 0.5' (H250493-01)

BTX 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	01/30/2025	ND	2.05	103	2.00	3.56	
Toluene*	<0.050	0.050	01/30/2025	ND	2.15	107	2.00	2.75	
Ethylbenzene*	<0.050	0.050	01/30/2025	ND	2.12	106	2.00	3.51	
Total Xylenes*	<0.150	0.150	01/30/2025	ND	6.37	106	6.00	3.33	
Total BTX	<0.300	0.300	01/30/2025	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	01/29/2025	ND	464	116	400	3.51	

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	01/29/2025	ND	207	103	200	1.63	
DRO >C10-C28*	<10.0	10.0	01/29/2025	ND	216	108	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	01/29/2025	ND					

Surrogate: 1-Chlorooctane 85.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.2 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	01/28/2025	Sampling Date:	01/27/2025
Reported:	02/03/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Alyssa Parras
Project Location:	OXY		

Sample ID: WEST 0.5' (H250493-02)

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	01/30/2025	ND	2.05	103	2.00	3.56		
Toluene*	<0.050	0.050	01/30/2025	ND	2.15	107	2.00	2.75		
Ethylbenzene*	<0.050	0.050	01/30/2025	ND	2.12	106	2.00	3.51		
Total Xylenes*	<0.150	0.150	01/30/2025	ND	6.37	106	6.00	3.33		
Total BTEx	<0.300	0.300	01/30/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 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	<16.0	16.0	01/29/2025	ND	464	116	400	3.51		

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	01/29/2025	ND	207	103	200	1.63	
DRO >C10-C28*	<10.0	10.0	01/29/2025	ND	216	108	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	01/29/2025	ND					

Surrogate: 1-Chlorooctane 85.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.1 % 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
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	01/28/2025	Sampling Date:	01/27/2025
Reported:	02/03/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Alyssa Parras
Project Location:	OXY		

Sample ID: SOUTH 0.5' (H250493-03)

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	01/30/2025	ND	2.05	103	2.00	3.56		
Toluene*	<0.050	0.050	01/30/2025	ND	2.15	107	2.00	2.75		
Ethylbenzene*	<0.050	0.050	01/30/2025	ND	2.12	106	2.00	3.51		
Total Xylenes*	<0.150	0.150	01/30/2025	ND	6.37	106	6.00	3.33		
Total BTEx	<0.300	0.300	01/30/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	01/29/2025	ND	464	116	400	3.51		

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	01/29/2025	ND	207	103	200	1.63	
DRO >C10-C28*	<10.0	10.0	01/29/2025	ND	216	108	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	01/29/2025	ND					

Surrogate: 1-Chlorooctane 86.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	01/28/2025	Sampling Date:	01/27/2025
Reported:	02/03/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Alyssa Parras
Project Location:	OXY		

Sample ID: EAST 0.5' (H250493-04)

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	01/30/2025	ND	2.05	103	2.00	3.56		
Toluene*	<0.050	0.050	01/30/2025	ND	2.15	107	2.00	2.75		
Ethylbenzene*	<0.050	0.050	01/30/2025	ND	2.12	106	2.00	3.51		
Total Xylenes*	<0.150	0.150	01/30/2025	ND	6.37	106	6.00	3.33		
Total BTEx	<0.300	0.300	01/30/2025	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	<16.0	16.0	01/29/2025	ND	464	116	400	3.51		

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	01/29/2025	ND	207	103	200	1.63	
DRO >C10-C28*	<10.0	10.0	01/29/2025	ND	216	108	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	01/29/2025	ND					

Surrogate: 1-Chlorooctane 86.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 82.3 % 49.1-148

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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	01/28/2025	Sampling Date:	01/27/2025
Reported:	02/03/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Alyssa Parras
Project Location:	OXY		

Sample ID: SOUTH EAST 0.5' (H250493-05)

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	01/30/2025	ND	2.05	103	2.00	3.56		
Toluene*	<0.050	0.050	01/30/2025	ND	2.15	107	2.00	2.75		
Ethylbenzene*	<0.050	0.050	01/30/2025	ND	2.12	106	2.00	3.51		
Total Xylenes*	<0.150	0.150	01/30/2025	ND	6.37	106	6.00	3.33		
Total BTEx	<0.300	0.300	01/30/2025	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	<16.0	16.0	01/29/2025	ND	464	116	400	3.51		

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	01/29/2025	ND	207	103	200	1.63	
DRO >C10-C28*	<10.0	10.0	01/29/2025	ND	216	108	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	01/29/2025	ND					

Surrogate: 1-Chlorooctane 79.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 75.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	01/28/2025	Sampling Date:	01/27/2025
Reported:	02/03/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Alyssa Parras
Project Location:	OXY		

Sample ID: SOUTH WEST 0.5' (H250493-06)

BTX 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	01/30/2025	ND	2.05	103	2.00	3.56		
Toluene*	<0.050	0.050	01/30/2025	ND	2.15	107	2.00	2.75		
Ethylbenzene*	<0.050	0.050	01/30/2025	ND	2.12	106	2.00	3.51		
Total Xylenes*	<0.150	0.150	01/30/2025	ND	6.37	106	6.00	3.33		
Total BTX	<0.300	0.300	01/30/2025	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	<16.0	16.0	01/29/2025	ND	464	116	400	3.51		

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	01/29/2025	ND	207	103	200	1.63	
DRO >C10-C28*	<10.0	10.0	01/29/2025	ND	216	108	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	01/29/2025	ND					

Surrogate: 1-Chlorooctane 89.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	01/28/2025	Sampling Date:	01/27/2025
Reported:	02/03/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Alyssa Parras
Project Location:	OXY		

Sample ID: NORTH WEST 0.5' (H250493-07)

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	01/30/2025	ND	2.05	103	2.00	3.56		
Toluene*	<0.050	0.050	01/30/2025	ND	2.15	107	2.00	2.75		
Ethylbenzene*	<0.050	0.050	01/30/2025	ND	2.12	106	2.00	3.51		
Total Xylenes*	<0.150	0.150	01/30/2025	ND	6.37	106	6.00	3.33		
Total BTEX	<0.300	0.300	01/30/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	01/29/2025	ND	464	116	400	3.51		

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	01/29/2025	ND	207	103	200	1.63	
DRO >C10-C28*	<10.0	10.0	01/29/2025	ND	216	108	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	01/29/2025	ND					

Surrogate: 1-Chlorooctane 92.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	01/28/2025	Sampling Date:	01/27/2025
Reported:	02/03/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Alyssa Parras
Project Location:	OXY		

Sample ID: NORTH EAST 0.5' (H250493-08)

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	01/30/2025	ND	2.05	103	2.00	3.56		
Toluene*	<0.050	0.050	01/30/2025	ND	2.15	107	2.00	2.75		
Ethylbenzene*	<0.050	0.050	01/30/2025	ND	2.12	106	2.00	3.51		
Total Xylenes*	<0.150	0.150	01/30/2025	ND	6.37	106	6.00	3.33		
Total BTEX	<0.300	0.300	01/30/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	01/29/2025	ND	464	116	400	3.51		

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	01/29/2025	ND	207	103	200	1.63	
DRO >C10-C28*	<10.0	10.0	01/29/2025	ND	216	108	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	01/29/2025	ND					

Surrogate: 1-Chlorooctane 98.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	01/28/2025	Sampling Date:	01/27/2025
Reported:	02/03/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Alyssa Parras
Project Location:	OXY		

Sample ID: DS 01 0.25' (H250493-09)

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	01/30/2025	ND	2.05	103	2.00	3.56		
Toluene*	<0.050	0.050	01/30/2025	ND	2.15	107	2.00	2.75		
Ethylbenzene*	<0.050	0.050	01/30/2025	ND	2.12	106	2.00	3.51		
Total Xylenes*	0.254	0.150	01/30/2025	ND	6.37	106	6.00	3.33	GC-NC1	
Total BTEX	<0.300	0.300	01/30/2025	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	32.0	16.0	01/29/2025	ND	400	100	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	01/29/2025	ND	207	103	200	1.63	
DRO >C10-C28*	<10.0	10.0	01/29/2025	ND	216	108	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	01/29/2025	ND					

Surrogate: 1-Chlorooctane 86.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 82.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	01/28/2025	Sampling Date:	01/27/2025
Reported:	02/03/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Alyssa Parras
Project Location:	OXY		

Sample ID: DS 01 3' (H250493-10)

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	01/30/2025	ND	2.05	103	2.00	3.56		
Toluene*	<0.050	0.050	01/30/2025	ND	2.15	107	2.00	2.75		
Ethylbenzene*	<0.050	0.050	01/30/2025	ND	2.12	106	2.00	3.51		
Total Xylenes*	<0.150	0.150	01/30/2025	ND	6.37	106	6.00	3.33		
Total BTEx	<0.300	0.300	01/30/2025	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	48.0	16.0	01/29/2025	ND	400	100	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	01/29/2025	ND	194	96.9	200	0.384	
DRO >C10-C28*	<10.0	10.0	01/29/2025	ND	209	105	200	0.550	
EXT DRO >C28-C36	<10.0	10.0	01/29/2025	ND					

Surrogate: 1-Chlorooctane 87.5 % 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
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	01/28/2025	Sampling Date:	01/27/2025
Reported:	02/03/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Alyssa Parras
Project Location:	OXY		

Sample ID: DS 01 7' (H250493-11)

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	01/30/2025	ND	2.05	103	2.00	3.56	
Toluene*	<0.050	0.050	01/30/2025	ND	2.15	107	2.00	2.75	
Ethylbenzene*	<0.050	0.050	01/30/2025	ND	2.12	106	2.00	3.51	
Total Xylenes*	<0.150	0.150	01/30/2025	ND	6.37	106	6.00	3.33	
Total BTEX	<0.300	0.300	01/30/2025	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	01/29/2025	ND	400	100	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	01/29/2025	ND	194	96.9	200	0.384	
DRO >C10-C28*	<10.0	10.0	01/29/2025	ND	209	105	200	0.550	
EXT DRO >C28-C36	<10.0	10.0	01/29/2025	ND					

Surrogate: 1-Chlorooctane 71.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 70.1 % 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
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	01/28/2025	Sampling Date:	01/27/2025
Reported:	02/03/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Alyssa Parras
Project Location:	OXY		

Sample ID: DS 02 0.5' (H250493-12)

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	01/30/2025	ND	2.05	103	2.00	3.56		
Toluene*	<0.050	0.050	01/30/2025	ND	2.15	107	2.00	2.75		
Ethylbenzene*	<0.050	0.050	01/30/2025	ND	2.12	106	2.00	3.51		
Total Xylenes*	<0.150	0.150	01/30/2025	ND	6.37	106	6.00	3.33		
Total BTEX	<0.300	0.300	01/30/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	01/29/2025	ND	400	100	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	01/29/2025	ND	194	96.9	200	0.384	
DRO >C10-C28*	<10.0	10.0	01/29/2025	ND	209	105	200	0.550	
EXT DRO >C28-C36	<10.0	10.0	01/29/2025	ND					

Surrogate: 1-Chlorooctane 73.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 77.4 % 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
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	01/28/2025	Sampling Date:	01/27/2025
Reported:	02/03/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Alyssa Parras
Project Location:	OXY		

Sample ID: DS 02 1' (H250493-13)

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	01/30/2025	ND	2.05	103	2.00	3.56		
Toluene*	<0.050	0.050	01/30/2025	ND	2.15	107	2.00	2.75		
Ethylbenzene*	<0.050	0.050	01/30/2025	ND	2.12	106	2.00	3.51		
Total Xylenes*	<0.150	0.150	01/30/2025	ND	6.37	106	6.00	3.33		
Total BTEX	<0.300	0.300	01/30/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	01/29/2025	ND	400	100	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	01/29/2025	ND	194	96.9	200	0.384	
DRO >C10-C28*	<10.0	10.0	01/29/2025	ND	209	105	200	0.550	
EXT DRO >C28-C36	<10.0	10.0	01/29/2025	ND					

Surrogate: 1-Chlorooctane 79.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.8 % 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
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	01/28/2025	Sampling Date:	01/27/2025
Reported:	02/03/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Alyssa Parras
Project Location:	OXY		

Sample ID: DS 03 0.5' (H250493-14)

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	01/30/2025	ND	2.05	103	2.00	3.56		
Toluene*	<0.050	0.050	01/30/2025	ND	2.15	107	2.00	2.75		
Ethylbenzene*	<0.050	0.050	01/30/2025	ND	2.12	106	2.00	3.51		
Total Xylenes*	<0.150	0.150	01/30/2025	ND	6.37	106	6.00	3.33		
Total BTEX	<0.300	0.300	01/30/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	01/29/2025	ND	400	100	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	01/29/2025	ND	194	96.9	200	0.384	
DRO >C10-C28*	<10.0	10.0	01/29/2025	ND	209	105	200	0.550	
EXT DRO >C28-C36	<10.0	10.0	01/29/2025	ND					

Surrogate: 1-Chlorooctane 77.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	01/28/2025	Sampling Date:	01/27/2025
Reported:	02/03/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Alyssa Parras
Project Location:	OXY		

Sample ID: DS 03 3' (H250493-15)

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	01/30/2025	ND	2.05	103	2.00	3.56	
Toluene*	<0.050	0.050	01/30/2025	ND	2.15	107	2.00	2.75	
Ethylbenzene*	<0.050	0.050	01/30/2025	ND	2.12	106	2.00	3.51	
Total Xylenes*	<0.150	0.150	01/30/2025	ND	6.37	106	6.00	3.33	
Total BTEX	<0.300	0.300	01/30/2025	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	01/29/2025	ND	400	100	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	01/29/2025	ND	194	96.9	200	0.384	
DRO >C10-C28*	<10.0	10.0	01/29/2025	ND	209	105	200	0.550	
EXT DRO >C28-C36	<10.0	10.0	01/29/2025	ND					

Surrogate: 1-Chlorooctane 83.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.2 % 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
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	01/28/2025	Sampling Date:	01/27/2025
Reported:	02/03/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Alyssa Parras
Project Location:	OXY		

Sample ID: DS 03 6' (H250493-16)

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	01/30/2025	ND	2.05	103	2.00	3.56		
Toluene*	<0.050	0.050	01/30/2025	ND	2.15	107	2.00	2.75		
Ethylbenzene*	<0.050	0.050	01/30/2025	ND	2.12	106	2.00	3.51		
Total Xylenes*	<0.150	0.150	01/30/2025	ND	6.37	106	6.00	3.33		
Total BTEX	<0.300	0.300	01/30/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	01/29/2025	ND	400	100	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	01/29/2025	ND	194	96.9	200	0.384	
DRO >C10-C28*	<10.0	10.0	01/29/2025	ND	209	105	200	0.550	
EXT DRO >C28-C36	<10.0	10.0	01/29/2025	ND					

Surrogate: 1-Chlorooctane 79.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
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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A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager



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

February 11, 2025

SAMANTHA MACKENZIE

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: NORTH INDIAN BASIN UNIT #15

Enclosed are the results of analyses for samples received by the laboratory on 02/05/25 12:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	02/05/2025	Sampling Date:	02/05/2025
Reported:	02/11/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - EDDY CO., NM		

Sample ID: FS 01 1' (H250693-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/06/2025	ND	2.27	113	2.00	1.70	
Toluene*	<0.050	0.050	02/06/2025	ND	2.26	113	2.00	5.77	
Ethylbenzene*	<0.050	0.050	02/06/2025	ND	2.38	119	2.00	7.40	
Total Xylenes*	<0.150	0.150	02/06/2025	ND	7.25	121	6.00	6.00	
Total BTEX	<0.300	0.300	02/06/2025	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	02/06/2025	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	02/06/2025	ND	207	103	200	1.37	
DRO >C10-C28*	<10.0	10.0	02/06/2025	ND	196	97.8	200	1.32	
EXT DRO >C28-C36	<10.0	10.0	02/06/2025	ND					

Surrogate: 1-Chlorooctane 93.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 02/05/2025
 Reported: 02/11/2025
 Project Name: NORTH INDIAN BASIN UNIT #15
 Project Number: 03B1417247
 Project Location: OXY - EDDY CO., NM

Sampling Date: 02/05/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS 02 1' (H250693-02)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/06/2025	ND	2.27	113	2.00	1.70		
Toluene*	<0.050	0.050	02/06/2025	ND	2.26	113	2.00	5.77		
Ethylbenzene*	<0.050	0.050	02/06/2025	ND	2.38	119	2.00	7.40		
Total Xylenes*	<0.150	0.150	02/06/2025	ND	7.25	121	6.00	6.00		
Total BTEX	<0.300	0.300	02/06/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	02/06/2025	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	02/06/2025	ND	207	103	200	1.37	
DRO >C10-C28*	<10.0	10.0	02/06/2025	ND	196	97.8	200	1.32	
EXT DRO >C28-C36	<10.0	10.0	02/06/2025	ND					

Surrogate: 1-Chlorooctane 96.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.5 % 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
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 02/05/2025
 Reported: 02/11/2025
 Project Name: NORTH INDIAN BASIN UNIT #15
 Project Number: 03B1417247
 Project Location: OXY - EDDY CO., NM

Sampling Date: 02/05/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS 03 7' (H250693-03)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/06/2025	ND	2.27	113	2.00	1.70		
Toluene*	<0.050	0.050	02/06/2025	ND	2.26	113	2.00	5.77		
Ethylbenzene*	<0.050	0.050	02/06/2025	ND	2.38	119	2.00	7.40		
Total Xylenes*	<0.150	0.150	02/06/2025	ND	7.25	121	6.00	6.00		
Total BTX	<0.300	0.300	02/06/2025	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	<16.0	16.0	02/06/2025	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	02/06/2025	ND	207	103	200	1.37	
DRO >C10-C28*	<10.0	10.0	02/06/2025	ND	196	97.8	200	1.32	
EXT DRO >C28-C36	<10.0	10.0	02/06/2025	ND					

Surrogate: 1-Chlorooctane 87.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	02/05/2025	Sampling Date:	02/05/2025
Reported:	02/11/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - EDDY CO., NM		

Sample ID: FS 04 7' (H250693-04)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/06/2025	ND	2.27	113	2.00	1.70		
Toluene*	<0.050	0.050	02/06/2025	ND	2.26	113	2.00	5.77		
Ethylbenzene*	<0.050	0.050	02/06/2025	ND	2.38	119	2.00	7.40		
Total Xylenes*	<0.150	0.150	02/06/2025	ND	7.25	121	6.00	6.00		
Total BTEX	<0.300	0.300	02/06/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	02/06/2025	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	02/06/2025	ND	207	103	200	1.37	
DRO >C10-C28*	<10.0	10.0	02/06/2025	ND	196	97.8	200	1.32	
EXT DRO >C28-C36	<10.0	10.0	02/06/2025	ND					

Surrogate: 1-Chlorooctane 96.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	02/05/2025	Sampling Date:	02/05/2025
Reported:	02/11/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - EDDY CO., NM		

Sample ID: FS 05 1' (H250693-05)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/06/2025	ND	2.27	113	2.00	1.70		
Toluene*	<0.050	0.050	02/06/2025	ND	2.26	113	2.00	5.77		
Ethylbenzene*	<0.050	0.050	02/06/2025	ND	2.38	119	2.00	7.40		
Total Xylenes*	<0.150	0.150	02/06/2025	ND	7.25	121	6.00	6.00		
Total BTEX	<0.300	0.300	02/06/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	02/06/2025	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	02/06/2025	ND	207	103	200	1.37	
DRO >C10-C28*	<10.0	10.0	02/06/2025	ND	196	97.8	200	1.32	
EXT DRO >C28-C36	<10.0	10.0	02/06/2025	ND					

Surrogate: 1-Chlorooctane 98.9 % 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
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	02/05/2025	Sampling Date:	02/05/2025
Reported:	02/11/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - EDDY CO., NM		

Sample ID: FS 06 6' (H250693-06)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/06/2025	ND	2.27	113	2.00	1.70		
Toluene*	<0.050	0.050	02/06/2025	ND	2.26	113	2.00	5.77		
Ethylbenzene*	<0.050	0.050	02/06/2025	ND	2.38	119	2.00	7.40		
Total Xylenes*	<0.150	0.150	02/06/2025	ND	7.25	121	6.00	6.00		
Total BTEX	<0.300	0.300	02/06/2025	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	<16.0	16.0	02/06/2025	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	02/06/2025	ND	207	103	200	1.37	
DRO >C10-C28*	<10.0	10.0	02/06/2025	ND	196	97.8	200	1.32	
EXT DRO >C28-C36	<10.0	10.0	02/06/2025	ND					

Surrogate: 1-Chlorooctane 96.9 % 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
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	02/05/2025	Sampling Date:	02/05/2025
Reported:	02/11/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - EDDY CO., NM		

Sample ID: FS 07 7' (H250693-07)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/06/2025	ND	2.27	113	2.00	1.70		
Toluene*	<0.050	0.050	02/06/2025	ND	2.26	113	2.00	5.77		
Ethylbenzene*	<0.050	0.050	02/06/2025	ND	2.38	119	2.00	7.40		
Total Xylenes*	<0.150	0.150	02/06/2025	ND	7.25	121	6.00	6.00		
Total BTX	<0.300	0.300	02/06/2025	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	<16.0	16.0	02/06/2025	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	02/06/2025	ND	207	103	200	1.37	
DRO >C10-C28*	<10.0	10.0	02/06/2025	ND	196	97.8	200	1.32	
EXT DRO >C28-C36	<10.0	10.0	02/06/2025	ND					

Surrogate: 1-Chlorooctane 89.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	02/05/2025	Sampling Date:	02/05/2025
Reported:	02/11/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - EDDY CO., NM		

Sample ID: FS 08 7' (H250693-08)

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	02/06/2025	ND	2.27	113	2.00	1.70		
Toluene*	<0.050	0.050	02/06/2025	ND	2.26	113	2.00	5.77		
Ethylbenzene*	<0.050	0.050	02/06/2025	ND	2.38	119	2.00	7.40		
Total Xylenes*	<0.150	0.150	02/06/2025	ND	7.25	121	6.00	6.00		
Total BTEX	<0.300	0.300	02/06/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	02/06/2025	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	02/06/2025	ND	207	103	200	1.37	
DRO >C10-C28*	<10.0	10.0	02/06/2025	ND	196	97.8	200	1.32	
EXT DRO >C28-C36	<10.0	10.0	02/06/2025	ND					

Surrogate: 1-Chlorooctane 92.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 02/05/2025
 Reported: 02/11/2025
 Project Name: NORTH INDIAN BASIN UNIT #15
 Project Number: 03B1417247
 Project Location: OXY - EDDY CO., NM

Sampling Date: 02/05/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS 09 1' (H250693-09)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/06/2025	ND	2.27	113	2.00	1.70		
Toluene*	<0.050	0.050	02/06/2025	ND	2.26	113	2.00	5.77		
Ethylbenzene*	<0.050	0.050	02/06/2025	ND	2.38	119	2.00	7.40		
Total Xylenes*	<0.150	0.150	02/06/2025	ND	7.25	121	6.00	6.00		
Total BTX	<0.300	0.300	02/06/2025	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	<16.0	16.0	02/06/2025	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/06/2025	ND	207	103	200	1.37	
DRO >C10-C28*	<10.0	10.0	02/06/2025	ND	196	97.8	200	1.32	
EXT DRO >C28-C36	<10.0	10.0	02/06/2025	ND					

Surrogate: 1-Chlorooctane 85.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	02/05/2025	Sampling Date:	02/05/2025
Reported:	02/11/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - EDDY CO., NM		

Sample ID: FS 10 1' (H250693-10)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/06/2025	ND	2.27	113	2.00	1.70	
Toluene*	<0.050	0.050	02/06/2025	ND	2.26	113	2.00	5.77	
Ethylbenzene*	<0.050	0.050	02/06/2025	ND	2.38	119	2.00	7.40	
Total Xylenes*	<0.150	0.150	02/06/2025	ND	7.25	121	6.00	6.00	
Total BTX	<0.300	0.300	02/06/2025	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
Chloride	<16.0	16.0	02/06/2025	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/06/2025	ND	207	103	200	1.37	
DRO >C10-C28*	<10.0	10.0	02/06/2025	ND	196	97.8	200	1.32	
EXT DRO >C28-C36	<10.0	10.0	02/06/2025	ND					

Surrogate: 1-Chlorooctane 89.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.9 % 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
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	02/05/2025	Sampling Date:	02/05/2025
Reported:	02/11/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - EDDY CO., NM		

Sample ID: FS 11 6' (H250693-11)

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	02/06/2025	ND	2.27	113	2.00	1.70		
Toluene*	<0.050	0.050	02/06/2025	ND	2.26	113	2.00	5.77		
Ethylbenzene*	<0.050	0.050	02/06/2025	ND	2.38	119	2.00	7.40		
Total Xylenes*	<0.150	0.150	02/06/2025	ND	7.25	121	6.00	6.00		
Total BTEX	<0.300	0.300	02/06/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	02/06/2025	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/06/2025	ND	207	103	200	1.37	
DRO >C10-C28*	<10.0	10.0	02/06/2025	ND	196	97.8	200	1.32	
EXT DRO >C28-C36	<10.0	10.0	02/06/2025	ND					

Surrogate: 1-Chlorooctane 89.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.4 % 49.1-148

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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	02/05/2025	Sampling Date:	02/05/2025
Reported:	02/11/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - EDDY CO., NM		

Sample ID: FS 12 6' (H250693-12)

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	02/06/2025	ND	2.27	113	2.00	1.70		
Toluene*	<0.050	0.050	02/06/2025	ND	2.26	113	2.00	5.77		
Ethylbenzene*	<0.050	0.050	02/06/2025	ND	2.38	119	2.00	7.40		
Total Xylenes*	<0.150	0.150	02/06/2025	ND	7.25	121	6.00	6.00		
Total BTEX	<0.300	0.300	02/06/2025	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	<16.0	16.0	02/06/2025	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/06/2025	ND	207	103	200	1.37	
DRO >C10-C28*	<10.0	10.0	02/06/2025	ND	196	97.8	200	1.32	
EXT DRO >C28-C36	<10.0	10.0	02/06/2025	ND					

Surrogate: 1-Chlorooctane 97.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.9 % 49.1-148

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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	02/05/2025	Sampling Date:	02/05/2025
Reported:	02/11/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - EDDY CO., NM		

Sample ID: FS 13 1' (H250693-13)

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	02/06/2025	ND	2.42	121	2.00	0.159	
Toluene*	<0.050	0.050	02/06/2025	ND	2.52	126	2.00	0.623	
Ethylbenzene*	<0.050	0.050	02/06/2025	ND	2.49	125	2.00	1.20	
Total Xylenes*	<0.150	0.150	02/06/2025	ND	7.66	128	6.00	0.766	
Total BTEx	<0.300	0.300	02/06/2025	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	
Chloride	<16.0	16.0	02/06/2025	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/06/2025	ND	207	103	200	1.37	
DRO >C10-C28*	<10.0	10.0	02/06/2025	ND	196	97.8	200	1.32	
EXT DRO >C28-C36	<10.0	10.0	02/06/2025	ND					

Surrogate: 1-Chlorooctane 95.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	02/05/2025	Sampling Date:	02/05/2025
Reported:	02/11/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - EDDY CO., NM		

Sample ID: FS 14 1' (H250693-14)

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	02/06/2025	ND	2.42	121	2.00	0.159		
Toluene*	<0.050	0.050	02/06/2025	ND	2.52	126	2.00	0.623		
Ethylbenzene*	<0.050	0.050	02/06/2025	ND	2.49	125	2.00	1.20		
Total Xylenes*	<0.150	0.150	02/06/2025	ND	7.66	128	6.00	0.766		
Total BTEx	<0.300	0.300	02/06/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 121 % 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	<16.0	16.0	02/06/2025	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/06/2025	ND	207	103	200	1.37	
DRO >C10-C28*	<10.0	10.0	02/06/2025	ND	196	97.8	200	1.32	
EXT DRO >C28-C36	<10.0	10.0	02/06/2025	ND					

Surrogate: 1-Chlorooctane 98.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	02/05/2025	Sampling Date:	02/05/2025
Reported:	02/11/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - EDDY CO., NM		

Sample ID: FS 15 1' (H250693-15)

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	02/06/2025	ND	2.42	121	2.00	0.159		
Toluene*	<0.050	0.050	02/06/2025	ND	2.52	126	2.00	0.623		
Ethylbenzene*	<0.050	0.050	02/06/2025	ND	2.49	125	2.00	1.20		
Total Xylenes*	<0.150	0.150	02/06/2025	ND	7.66	128	6.00	0.766		
Total BTEx	<0.300	0.300	02/06/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 116 % 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	<16.0	16.0	02/06/2025	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/06/2025	ND	207	103	200	1.37	
DRO >C10-C28*	<10.0	10.0	02/06/2025	ND	196	97.8	200	1.32	
EXT DRO >C28-C36	<10.0	10.0	02/06/2025	ND					

Surrogate: 1-Chlorooctane 88.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	02/05/2025	Sampling Date:	02/05/2025
Reported:	02/11/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - EDDY CO., NM		

Sample ID: FS 16 6' (H250693-16)

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	02/06/2025	ND	2.42	121	2.00	0.159		
Toluene*	<0.050	0.050	02/06/2025	ND	2.52	126	2.00	0.623		
Ethylbenzene*	<0.050	0.050	02/06/2025	ND	2.49	125	2.00	1.20		
Total Xylenes*	<0.150	0.150	02/06/2025	ND	7.66	128	6.00	0.766		
Total BTEx	<0.300	0.300	02/06/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 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	<16.0	16.0	02/06/2025	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/06/2025	ND	207	103	200	1.37	
DRO >C10-C28*	<10.0	10.0	02/06/2025	ND	196	97.8	200	1.32	
EXT DRO >C28-C36	<10.0	10.0	02/06/2025	ND					

Surrogate: 1-Chlorooctane 92.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	02/05/2025	Sampling Date:	02/05/2025
Reported:	02/11/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - EDDY CO., NM		

Sample ID: SW 01 0-1' (H250693-17)

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	02/06/2025	ND	2.42	121	2.00	0.159	
Toluene*	<0.050	0.050	02/06/2025	ND	2.52	126	2.00	0.623	
Ethylbenzene*	<0.050	0.050	02/06/2025	ND	2.49	125	2.00	1.20	
Total Xylenes*	<0.150	0.150	02/06/2025	ND	7.66	128	6.00	0.766	
Total BTEx	<0.300	0.300	02/06/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 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	<16.0	16.0	02/06/2025	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/06/2025	ND	225	113	200	3.80	
DRO >C10-C28*	<10.0	10.0	02/06/2025	ND	207	104	200	1.87	
EXT DRO >C28-C36	<10.0	10.0	02/06/2025	ND					

Surrogate: 1-Chlorooctane 90.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	02/05/2025	Sampling Date:	02/05/2025
Reported:	02/11/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - EDDY CO., NM		

Sample ID: SW 02 0-1' (H250693-18)

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	02/06/2025	ND	2.42	121	2.00	0.159		
Toluene*	<0.050	0.050	02/06/2025	ND	2.52	126	2.00	0.623		
Ethylbenzene*	<0.050	0.050	02/06/2025	ND	2.49	125	2.00	1.20		
Total Xylenes*	<0.150	0.150	02/06/2025	ND	7.66	128	6.00	0.766		
Total BTEx	<0.300	0.300	02/06/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 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	<16.0	16.0	02/06/2025	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/06/2025	ND	225	113	200	3.80	
DRO >C10-C28*	<10.0	10.0	02/06/2025	ND	207	104	200	1.87	
EXT DRO >C28-C36	<10.0	10.0	02/06/2025	ND					

Surrogate: 1-Chlorooctane 91.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.0 % 49.1-148

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Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	02/05/2025	Sampling Date:	02/05/2025
Reported:	02/11/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - EDDY CO., NM		

Sample ID: SW 03 0-6' (H250693-19)

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	02/06/2025	ND	2.42	121	2.00	0.159		
Toluene*	<0.050	0.050	02/06/2025	ND	2.52	126	2.00	0.623		
Ethylbenzene*	<0.050	0.050	02/06/2025	ND	2.49	125	2.00	1.20		
Total Xylenes*	<0.150	0.150	02/06/2025	ND	7.66	128	6.00	0.766		
Total BTEx	<0.300	0.300	02/06/2025	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	<16.0	16.0	02/06/2025	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/06/2025	ND	225	113	200	3.80	
DRO >C10-C28*	<10.0	10.0	02/06/2025	ND	207	104	200	1.87	
EXT DRO >C28-C36	<10.0	10.0	02/06/2025	ND					

Surrogate: 1-Chlorooctane 89.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.1 % 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
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	02/05/2025	Sampling Date:	02/05/2025
Reported:	02/11/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - EDDY CO., NM		

Sample ID: SW 04 0-7' (H250693-20)

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	02/06/2025	ND	2.42	121	2.00	0.159	
Toluene*	<0.050	0.050	02/06/2025	ND	2.52	126	2.00	0.623	
Ethylbenzene*	<0.050	0.050	02/06/2025	ND	2.49	125	2.00	1.20	
Total Xylenes*	<0.150	0.150	02/06/2025	ND	7.66	128	6.00	0.766	
Total BTEx	<0.300	0.300	02/06/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 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	<16.0	16.0	02/06/2025	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/06/2025	ND	225	113	200	3.80	
DRO >C10-C28*	<10.0	10.0	02/06/2025	ND	207	104	200	1.87	
EXT DRO >C28-C36	<10.0	10.0	02/06/2025	ND					

Surrogate: 1-Chlorooctane 93.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.1 % 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
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	02/05/2025	Sampling Date:	02/05/2025
Reported:	02/11/2025	Sampling Type:	Soil
Project Name:	NORTH INDIAN BASIN UNIT #15	Sampling Condition:	Cool & Intact
Project Number:	03B1417247	Sample Received By:	Shalyn Rodriguez
Project Location:	OXY - EDDY CO., NM		

Sample ID: SW 05 0-7' (H250693-21)

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	02/06/2025	ND	2.42	121	2.00	0.159	
Toluene*	<0.050	0.050	02/06/2025	ND	2.52	126	2.00	0.623	
Ethylbenzene*	<0.050	0.050	02/06/2025	ND	2.49	125	2.00	1.20	
Total Xylenes*	<0.150	0.150	02/06/2025	ND	7.66	128	6.00	0.766	
Total BTEx	<0.300	0.300	02/06/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 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	<16.0	16.0	02/06/2025	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/06/2025	ND	225	113	200	3.80	
DRO >C10-C28*	<10.0	10.0	02/06/2025	ND	207	104	200	1.87	
EXT DRO >C28-C36	<10.0	10.0	02/06/2025	ND					

Surrogate: 1-Chlorooctane 87.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager

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

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A handwritten signature in black ink, appearing to read "C. D. Keene", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO						ANALYSIS REQUEST						
Company Name: Ensolum, LLC						P.O. #:						
Project Manager: Samantha Mackenzie						Oxy, USA, Inc.						
Address: 601 N Marientfield Street, Suite 400						Attn: Wade Dittich						
City: Midland						State: TX Zip: 79701						
Phone #: 703-357-3545						Fax #:						
Project #: 03B1417247						Project Owner:						
Project Name: North Indian Basin Unit #15						City:						
Project Location: Eddy County, NM						State: Zip:						
Sample Name: Noah Duker						Phone #						
						Fax #:						
FOR LAB USE ONLY												
Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV.	SAMPLING	DATE	TIME	BTEX 8021	TPH 8015	Chlorides 4500
H350693	E501	1'	C	1	GROUNDWATER	X		2/5/25	0738	X	X	X
	E502	1'	C	1	WASTEWATER	X		2/5/25	0740	X	X	X
	E503	1'	C	1	SOIL	X		2/4/25	0742	X	X	X
	E504	1'	C	1	OIL	X		2/4/25	0744	X	X	X
	E505	1'	C	1	SLUDGE	X		2/4/25	0746	X	X	X
	E506	1'	C	1	OTHER :	X		2/4/25	0748	X	X	X
	E507	1'	C	1	ACID/BASE:	X		2/4/25	0750	X	X	X
	E508	1'	C	1	ICE / COOL	X		2/4/25	0752	X	X	X
	E509	1'	C	1	OTHER :	X		2/4/25	0754	X	X	X
	E510	1'	C	1		X		2/4/25	0756	X	X	X

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Relinquished By: _____	Date: 2/5/25	Received By: Spectorius
Time: 1200	Date: _____	Time: _____
Relinquished By: _____	Date: _____	Received By: _____
Time: _____	Date: _____	Time: _____

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp.: °C 2.5 Corrected Temp.: °C 2.8	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: (Initials) SR	Turnaround Time: Standard Rush #40 +0.3	Bacteria (only) Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Sample Condition Observed Temp.: °C Corrected Temp.: °C
REMARKS: smackenzie@ensolum.com						
Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:						
All Results are emailed. Please provide Email address:						



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

(5/5) 393-2526 FAX (5/5) 393-2570 Company Name: Ensolum, LLC		BILL TO										ANALYSIS REQUEST									
Project Manager: Samantha Mackenzie		P.O. #:																			
Address: 601 N Marientfeld Street, Suite 400		Oxy, USA, Inc.																			
City: Midland		Attn: Wade Dittrich																			
State: TX Zip: 79701																					
Phone #: 703-357-3545 Fax #:		Address:																			
Project #: 03B1417247 Project Owner:		City:																			
Project Name: North Indian Basin Unit #15		State: Zip:																			
Project Location: Eddy County, NM		Phone #:																			
Sampler Name: Noah Duker		Fax #:																			
		MATRIX		PRESERV		SAMPLING															

FOR LAB USE ONLY

[illegible]

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Relinquished By: <i>WJL</i>		Date: <i>2-5-25</i>	Received By: <i>Steele</i>	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:
Time: <i>1300</i>		All Results are emailed. Please provide Email address:		
Date: _____		smackenzie@ensolum.com		
Time: _____		REMARKS:		
Relinquished By: _____	Received By: _____	Turnaround Time: _____	Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>	Bacteria (only) <input type="checkbox"/>
Delivered By: (Circle One)	Observed Temp. °C <i>25.1</i>	Sample Condition	Cool <input type="checkbox"/> Intact <input type="checkbox"/>	Cool <input type="checkbox"/> Intact <input type="checkbox"/>
Sampler - UPS - Bus - Other:	Corrected Temp. °C <i>28.1</i>	Cool <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	CHECKED BY: <i>SK</i>	Observed Temp. °C
			Thermometer ID # <i>140</i>	Corrected Temp. °C
			Correction Factor <i>+0.3</i>	

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



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

3063

Company Name: Ensolum, LLC

Project Manager: Samantha Mackenzie

Address: 601 N Marientfeld Street, Suite 400

City: Midland State: TX Zip: 79701

Phone #: 703-357-3545 Fax #: Project Owner:

Project #: 0381417247 Project Owner:

Project Name: North Indian Basin Unit #15

Project Location: Eddy County, NM

Sampler Name: Noah Duker

P.O. #:

Oxy, USA, Inc.

Attn: Wade Dittich

Address:

City:

State: Zip:

Phone #

Fax #:

BILL TO

ANALYSIS REQUEST

Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV.	SAMPLING	DATE	TIME	BTX 8021	TPH 8015	Chlorides 4500
4450093	4450093	0-7			GROUNDWATER			2/5/25	0828	X	X	X
21	4450093	0-7			WASTEWATER							
					SOIL							
					OIL							
					SLUDGE							
					OTHER :							
					ACID/BASE:							
					ICE / COOL							
					OTHER :							

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Relinquished By:

Date: 2-5-25

Received By:

Verbal Result: ☐ Yes ☐ No Add'l Phone #:

Remarks: smackenzie@ensolum.com

Relinquished By:

Date: 2-5-25

Received By:

Remarks:

Delivered By: (Circle One)

Observed Temp. °C

Sample Condition

Checked By:

Turnaround Time:

Standard

☒

Bacteria (only)

Sample Condition

Sampler - UPS - Bus - Other:

Corrected Temp. °C

Corrected Temp. °C

Corrected Temp. °C

Thermometer ID #

Correction Factor

☐

Corrected Temp. °C

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



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

March 24, 2025

SAMANTHA MACKENZIE

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: BRYKSAW CALICHE PIT

Enclosed are the results of analyses for samples received by the laboratory on 03/21/25 13:52.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 03/21/2025
 Reported: 03/24/2025
 Project Name: BRYKSAW CALICHE PIT
 Project Number: 03B1417247
 Project Location: OXY - EDDY COUNTY, NM

Sampling Date: 03/21/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: BRYKSAW CALICHE PIT CALICHE SAMPLE (H251679-01)

BTX 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	03/22/2025	ND	2.02	101	2.00	2.61	
Toluene*	<0.050	0.050	03/22/2025	ND	2.12	106	2.00	3.24	
Ethylbenzene*	<0.050	0.050	03/22/2025	ND	2.08	104	2.00	4.14	
Total Xylenes*	<0.150	0.150	03/22/2025	ND	6.12	102	6.00	4.21	
Total BTX	<0.300	0.300	03/22/2025	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	03/24/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/21/2025	ND	203	101	200	4.27	
DRO >C10-C28*	68.0	10.0	03/21/2025	ND	196	98.2	200	7.66	
EXT DRO >C28-C36	<10.0	10.0	03/21/2025	ND					

Surrogate: 1-Chlorooctane 98.6 % 44.4-145

Surrogate: 1-Chlorooctadecane 98.1 % 40.6-153

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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
 SAMANTHA MACKENZIE
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 03/21/2025
 Reported: 03/24/2025
 Project Name: BRYKSAW CALICHE PIT
 Project Number: 03B1417247
 Project Location: OXY - EDDY COUNTY, NM

Sampling Date: 03/21/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: BRYKSAW CALICHE PIT TOPSOIL SAMPLE (H251679-02)

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	03/22/2025	ND	2.02	101	2.00	2.61		
Toluene*	<0.050	0.050	03/22/2025	ND	2.12	106	2.00	3.24		
Ethylbenzene*	<0.050	0.050	03/22/2025	ND	2.08	104	2.00	4.14		
Total Xylenes*	<0.150	0.150	03/22/2025	ND	6.12	102	6.00	4.21		
Total BTEX	<0.300	0.300	03/22/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	03/24/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/21/2025	ND	203	101	200	4.27	
DRO >C10-C28*	<10.0	10.0	03/21/2025	ND	196	98.2	200	7.66	
EXT DRO >C28-C36	<10.0	10.0	03/21/2025	ND					

Surrogate: 1-Chlorooctane 75.2 % 44.4-145

Surrogate: 1-Chlorooctadecane 73.2 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

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

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*=Accredited Analyte

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC

Project Manager: ~~Brian Jennings~~ Samantha Macfie

Address: 601 N Marlenfeld Street, Suite 400

City: Midland

State: TX Zip: 79701

Phone #: ~~915-819-0000~~ (762) 367-3545 Fax #:

Project #: 03B1417247 Project Owner:

Project Name: Bryksaw Caliche Pit

Project Location: Eddy County, NM

Sampler Name: Leah Nunez / Raphael Udeh

P.O. #:

Company: Oxy USA Inc.

Attn: Wade Dittich

Address:

City:

State: Zip:

Phone #: 575-390-2828

FOR LAB USE ONLY

Lab I.D. Sample I.D.

HAS11079

Depth (feet)

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE TIME

BTEX 8021

TPH 8015

chloride 4500

ANALYSIS REQUEST

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Relinquished By:

Date: 3/21/25

Received By:

Verbal Result: ☐ Yes ☐ No Add'l Phone #:

All Results are emailed. Please provide Email address:

REMARKS: Smackville @ Ensolum. com

Relinquished By:

Date: 3/21/25

Received By:

Time: 1552

Time: 1552

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Observed Temp.: 4.0°C

Corrected Temp.: 4.9°C

Sample Condition

Cool Intact

Yes ☐ No ☐

Checked By: (Initials)

Turnaround Time: Standard

Thermometer ID #413

Correction Factor -0.5°C

Bacteria (only)

Cool Intact

Yes ☐ No ☐

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



APPENDIX D

NMOCD Correspondence

From: [Velez, Nelson, EMNRD](#)
To: [Samantha MacKenzie](#)
Cc: [Wade Dittrich](#); [Morgan, Crisha A](#); [Bratcher, Michael, EMNRD](#); [Rodgers, Scott, EMNRD](#)
Subject: Re: [EXTERNAL] Extension Request North Indian Basin Unit #15 (NAPP2500653070)
Date: Friday, February 28, 2025 8:29:06 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[Outlook-ybkez0lh.png](#)

You don't often get email from nelson.velez@emnrd.nm.gov. [Learn why this is important](#)

[EXTERNAL EMAIL**]**

Good morning Samantha,

Thanks for the correspondence. I've been assigned to this incident.

The specific incident has a remediation due date of March 10, 2025. I have flagged your email to response and approve your time extension within a week of due date expiration.

Have a safe and productive day!

Regards,

Nelson Velez • Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov
<http://www.emnrd.nm.gov/oed>



From: Rodgers, Scott, EMNRD <Scott.Rodgers@emnrd.nm.gov>
Sent: Thursday, February 27, 2025 3:01 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: FW: [EXTERNAL] Extension Request North Indian Basin Unit #15 (NAPP2500653070)

Scott Rodgers • Environmental Specialist – Adv.

Environmental Bureau
EMNRD - Oil Conservation Division
5200 Oakland NE, Suite B | Albuquerque, NM 87113
505.469.1830 | scott.rodgers@emnrd.nm.gov
<http://www.emnrd.nm.gov/oed>



From: Samantha MacKenzie <smackenzie@ensolum.com>
Sent: Thursday, February 27, 2025 12:09 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Dittrich, John W <Wade_Dittrich@oxy.com>; camorgan@blm.gov
Subject: [EXTERNAL] Extension Request North Indian Basin Unit #15 (NAPP2500653070)

You don't often get email from smackenzie@ensolum.com. [Learn why this is important](#)

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

Hello,

On behalf of Oxy USA, Inc, Ensolum, LLC would like to request a 30-day extension for the North Indian Basin Unit #15 (NAPP2500653070).

Due to delays in scheduling with contractors and various team members, excavation activities at the Site have just recently been completed to meet the Closure Criteria Limits specific to this location. The site has been fully remediated. We will begin the drafting the Closure for this Site. Therefore, we humbly ask for an extension so that we may complete the report and so it can be thoroughly reviewed before submitting the final copy to the portal. Please let us know if you have any questions.

Thank you so much for your time!



Samantha MacKenzie

Staff Geologist
703-357-3545

Ensolum, LLC

inf X

Samantha MacKenzie

From: Samantha MacKenzie
Sent: Friday, March 14, 2025 10:14 AM
To: 'Velez, Nelson, EMNRD'
Cc: Wade Dittrich; Morgan, Crisha A; Bratcher, Michael, EMNRD; Rodgers, Scott, EMNRD
Subject: RE: [EXTERNAL] Extension Request North Indian Basin Unit #15 (NAPP2500653070)

Good Morning,

The NMOCD portal says that the report due date was 3/10/25 but due to our prior correspondence listed below you had granted Oxy an additional week making the new due date 3/17/25. Thank you for granting the 30 days, the closure report will be submitted before April 9th, 2025.

Thanks,



Samantha MacKenzie

Staff Geologist

703-357-3545

Ensolum, LLC

in f X

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Friday, March 14, 2025 10:07 AM
To: Samantha MacKenzie <smackenzie@ensolum.com>
Cc: Wade Dittrich <wade_dittrich@oxy.com>; Morgan, Crisha A <camorgan@blm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Rodgers, Scott, EMNRD <Scott.Rodgers@emnrd.nm.gov>
Subject: Re: [EXTERNAL] Extension Request North Indian Basin Unit #15 (NAPP2500653070)

[**EXTERNAL EMAIL**]

Good morning Samantha,

Thank you for the correspondence.

The incident remediation closure report due date (RCRDD) had lapsed after March 10, 2025. In the future, please submit your requests prior to its RCRDD expires. Failure to do so may result in any request being denied.

Your 30-day time extension request is approved. Remediation Due date has been updated to April 9, 2025.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not

limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

Regards,

Nelson Velez • Environmental Specialist - Adv

Environmental Bureau | EMNRD - Oil Conservation Division

1000 Rio Brazos Road | Aztec, NM 87410

(505) 469-6146 | nelson.velez@emnrd.nm.gov

<http://www.emnrd.nm.gov/oed>



From: Samantha MacKenzie <smackenzie@ensolum.com>

Sent: Thursday, March 13, 2025 3:05 PM

To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>

Cc: Wade Dittrich <wade_dittrich@oxy.com>; Morgan, Crisha A <camorgan@blm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Rodgers, Scott, EMNRD <Scott.Rodgers@emnrd.nm.gov>

Subject: RE: [EXTERNAL] Extension Request North Indian Basin Unit #15 (NAPP2500653070)

Some people who received this message don't often get email from smackenzie@ensolum.com. [Learn why this is important](#)

Good Afternoon,

On behalf of Oxy USA, Inc, Ensolum, LLC would like to request a 30-day extension for the North Indian Basin Unit #15 (NAPP2500653070).

Oxy is currently working on receiving approval from a local caliche pit owner to utilize their material for backfill, backfilling activities at the site have not yet been completed. The site has been fully remediated. We have drafted a copy of Closure for the site. Therefore, we humbly ask for an extension so that we may complete the report with the backfilling activities so it can be thoroughly reviewed before submitting the final copy to the portal. Please let us know if you have any questions.

Thank you so much for your time!



Samantha MacKenzie

Staff Geologist

703-357-3545

Ensolum, LLC

in f X

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>

Sent: Friday, February 28, 2025 8:29 AM

To: Samantha MacKenzie <smackenzie@ensolum.com>

Cc: Wade Dittrich <wade_dittrich@oxy.com>; Morgan, Crisha A <camorgan@blm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Rodgers, Scott, EMNRD <Scott.Rodgers@emnrd.nm.gov>

Subject: Re: [EXTERNAL] Extension Request North Indian Basin Unit #15 (NAPP2500653070)

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[**EXTERNAL EMAIL**]

Good morning Samantha,

Thanks for the correspondence. I've been assigned to this incident.

The specific incident has a remediation due date of March 10, 2025. I have flagged your email to response and approve your time extension within a week of due date expiration.

Have a safe and productive day!

Regards,

Nelson Velez • Environmental Specialist - Adv

Environmental Bureau | EMNRD - Oil Conservation Division

1000 Rio Brazos Road | Aztec, NM 87410

(505) 469-6146 | nelson.velez@emnrd.nm.gov

<http://www.emnrd.nm.gov/ocd>



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Sent: Thursday, February 27, 2025 3:01 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: FW: [EXTERNAL] Extension Request North Indian Basin Unit #15 (NAPP2500653070)

Scott Rodgers • Environmental Specialist – Adv.

Environmental Bureau

EMNRD - Oil Conservation Division

5200 Oakland NE, Suite B | Albuquerque, NM 87113

505.469.1830 | scott.rodgers@emnrd.nm.gov

<http://www.emnrd.nm.gov/oed>



From: Samantha MacKenzie <smackenzie@ensolum.com>
Sent: Thursday, February 27, 2025 12:09 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Dittrich, John W <Wade_Dittrich@oxy.com>; camorgan@blm.gov
Subject: [EXTERNAL] Extension Request North Indian Basin Unit #15 (NAPP2500653070)

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Hello,

On behalf of Oxy USA, Inc, Ensolum, LLC would like to request a 30-day extension for the North Indian Basin Unit #15 (NAPP2500653070).

Due to delays in scheduling with contractors and various team members, excavation activities at the Site have just recently been completed to meet the Closure Criteria Limits specific to this location. The site has been fully remediated. We will begin the drafting the Closure for this Site. Therefore, we humbly ask for an extension so that we may complete the report and so it can be thoroughly reviewed before submitting the final copy to the portal. Please let us know if you have any questions.

Thank you so much for your time!



Samantha MacKenzie

Staff Geologist

703-357-3545

Ensolum, LLC

in f X

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS

Action 448613

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 448613
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2500653070
Incident Name	NAPP2500653070 NORTH INDIAN BASIN UNIT #15 @ 0
Incident Type	Natural Gas Release
Incident Status	Remediation Closure Report Received

Location of Release Source*Please answer all the questions in this group.*

Site Name	NORTH INDIAN BASIN UNIT #15
Date Release Discovered	12/10/2024
Surface Owner	Federal

Incident Details*Please answer all the questions in this group.*

Incident Type	Natural Gas Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release*Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.*

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	Not answered.
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Cause: Other Flow Line - Production Natural Gas Vented Released: 0 MCF (Unknown Released Amount) Recovered: 0 MCF Lost: 0 MCF.
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)	Historical Release. Not sure how much liquid and gasses were released from flowline

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

QUESTIONS, Page 2

Action 448613

QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 448613
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	Yes, according to supplied volumes this appears to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (3) an unauthorized release of gases exceeding 500 MCF.
<i>With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.</i>	

Initial Response

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	NA

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: 04/03/2025
--	--

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Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

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

QUESTIONS, Page 3

Action 448613

QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 448613
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site Characterization	
<i>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.</i>	
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	U.S. Geological Survey
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 500 and 1000 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 500 and 1000 (ft.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 500 and 1000 (ft.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Zero feet, overlying, or within area
Categorize the risk of this well / site being in a karst geology	High
A 100-year floodplain	Between 500 and 1000 (ft.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
<i>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.</i>	
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)	64
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
On what estimated date will the remediation commence	01/10/2025
On what date will (or did) the final sampling or liner inspection occur	02/05/2025
On what date will (or was) the remediation complete(d)	03/26/2025
What is the estimated surface area (in square feet) that will be reclaimed	3215
What is the estimated volume (in cubic yards) that will be reclaimed	929
What is the estimated surface area (in square feet) that will be remediated	3214
What is the estimated volume (in cubic yards) that will be remediated	929
<i>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.</i>	
<i>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.</i>	

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

QUESTIONS, Page 4

Action 448613

QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID:
	16696
	Action Number:
	448613
Action Type:	
[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Remediation Plan (continued)	
<i>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.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	LEA LAND LANDFILL [fEEM0112342028]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Wade Dittrich Title: Environmental Coordinator Email: wade_dittrich@oxy.com Date: 04/03/2025
<i>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.</i>	

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State of New Mexico
Energy, Minerals and Natural Resources
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1220 S. St Francis Dr.
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QUESTIONS, Page 5

Action 448613

QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 448613
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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

QUESTIONS, Page 6

Action 448613

QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 448613
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	427467
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	02/05/2025
What was the (estimated) number of samples that were to be gathered	20
What was the sampling surface area in square feet	3214

Remediation Closure Request

Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.

Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	3214
What was the total volume (cubic yards) remediated	929
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	3214
What was the total volume (in cubic yards) reclaimed	929
Summarize any additional remediation activities not included by answers (above)	NA

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: Wade Dittrich Title: Environmental Coordinator Email: wade_dittrich@oxy.com Date: 04/03/2025
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Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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QUESTIONS, Page 7

Action 448613

QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 448613
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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CONDITIONS

Action 448613

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 448613
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	The remediation closure is approved.	6/20/2025
michael.buchanan	A reclamation report will not be accepted until reclamation of the release area, including areas reasonably needed for production or drilling activities, is complete and meet the requirements of 19.15.29.13 NMAC. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable.	6/20/2025
michael.buchanan	The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. The OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	6/20/2025
michael.buchanan	A revegetation report will not be accepted until revegetation of the release area, including areas reasonably needed for production or drilling activities, is complete and meet the requirements of 19.15.29.13 NMAC. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable.	6/20/2025
michael.buchanan	All revegetation activities will need to be documented and included in the revegetation report. The revegetation report will need to include: An executive summary of the revegetation activities including: Seed mix, Method of seeding, dates of when the release area was reseeded, information pertinent to inspections, information about any amendments added to the soil, information on how the vegetative cover established meets the life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds per 19.15.29.13 D.(3) NMAC, and any additional information; a scaled Site Map including area that was revegetated in square feet; and pictures of the revegetated areas during reseeding activities, inspections, and final pictures when revegetation is achieved.	6/20/2025
michael.buchanan	Per 19.15.29.13 E. NMAC, if a reclamation and revegetation report has been submitted to the surface owner, it may be used if the requirements of the surface owner provide equal or better protection of freshwater, human health, and the environment. A copy of the approval of the reclamation and revegetation report from the surface owner and a copy of the approved reclamation and revegetation report will need to be submitted to the OCD via the Permitting website.	6/20/2025