ENSOLUM

June 26, 2023

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
EVGSAU 2418-001
Incident Number NAPP2231954757
Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Maverick Permian, LLC (Maverick), has prepared this *Closure Request* to document assessment, excavation, and soil sampling activities performed at the EVGSAU 2418-001 (Site). The purpose of the Site assessment, excavation, and soil sampling activities was to address impacts to soil resulting from a flow line release of crude oil and produced water into the pasture adjacent to the Site. Based on excavation activities and laboratory analytical results from the soil sampling events, Maverick is submitting this *Closure Request*, describing remediation that has occurred and requesting closure for Incident Number NAPP2231954757.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit M, Section 19, Township 17 South, Range 35 East, in Lea County, New Mexico (32.81660°, -103.50212°) and is associated with oil and gas exploration and production operations on state land managed by the New Mexico State Land Office (SLO).

On November 9, 2022, a flow line failure resulted in the release of approximately 0.1 barrels (bbls) of crude oil and 7.3 bbls of produced water into the adjacent pasture. A vacuum truck was immediately dispatched to the Site and recovered approximately 0.1 bbls of produced water. Maverick reported the release to the New Mexico Oil Conservation Division (NMOCD) and the New Mexico State Land Office (NMSLO) on a Release Notification Form C-141 (Form C-141) on November 15, 2022. The release was assigned Incident Number NAPP2231954757.

The NMSLO was notified of excavation and remediation activities required in the pasture on a Right of Entry Request for Remediation form, submitted to the NMSLO on December 13, 2022. The request included a copy of the Form C-141, a topographic location map, and a satellite image of the location. The Right of Entry (ROE) Permit was fully executed by the NMSLO and received by Maverick on January 3, 2023. No additional cultural resource surveys were completed in connection with this release. A copy of the ROE Request for Remediation form and fully executed ROE Permit, are included in Appendix A.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential Site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be between 51 feet and 100 feet below ground surface (bgs) based on regional groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well L-05439, located approximately 206 feet south of the Site. The groundwater well has a reported depth to groundwater of 85 feet bgs and a total depth of 135 feet bgs. Two other wells within 0.08 miles of the Site have a reported depth to groundwater between 71 feet and 76.6 feet bgs. The groundwater well with the most recent depth to groundwater data is United States Geological Survey (USGS) well 324855103300701, located approximately 0.08 miles southwest of the Site. The groundwater well has a reported depth to groundwater of 71.65 feet bgs from October 1980. Ground surface elevation at the groundwater well location is 3,988 feet above mean sea level (amsl), which is approximately 2 feet lower in elevation than the Site. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well records are included in Appendix B.

The closest continuously flowing or significant watercourse to the Site is a dry playa lake, located adjacent to the Site. The Site is less than 200 feet from a playa lake, less than 300 feet from a wetland, and less than 1,000 feet from a water well. The Site is greater than 300 feet from an occupied residence, school, hospital, institution, or church. The Site is not located within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low 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

EXCAVATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

Between January 20, 2023, and May 31, 2023, Ensolum personnel were at the Site to oversee excavation activities based on information provided on the Form C-141 and visual observations. Excavation activities were performed using a backhoe and transport vehicles. To direct excavation activities, soil was field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips.

Following the removal of impacted soil, 5-point composite soil samples were collected every 200 square feet from the floor and sidewalls of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS04 were collected from the floor of the excavation at depths ranging from 0.5 feet to 3 feet bgs. Composite soil samples SW01 and SW02 were collected from the sidewalls of the excavation at depths ranging from ground surface to 3 feet bgs. The excavation extent and soil sample locations were mapped utilizing a handheld Global Positioning

System (GPS) unit and are depicted on Figure 2. Photographic documentation of the excavation activities is included in a photographic log in Appendix C.

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 Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analyses of the following constituents of concern (COC): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for excavation soil samples FS04 and SW02 indicated all COC concentrations were compliant with the Site Closure Criteria. Laboratory analytical results for excavation floor samples FS01 through FS03 and excavation sidewall sample SW01 indicated chloride concentrations exceeded the Site Closure Criteria. Additional soil was excavated from these areas and subsequent floor samples FS01A through FS03A, collected at 4 feet bgs, and subsequent sidewall samples SW01A and SW03, collected at depths ranging from ground surface to 4 feet bgs, were compliant with the Site Closure Criteria. Additionally, four assessment soil samples (SS01 through SS04) were collected around the excavation extent at an approximate depth of 0.5 feet bgs to confirm the lateral extent of the surface release.

Laboratory analytical results for excavation soil samples FS01A through FS03A, FS04, SW01A, SW02, and SW03, collected from the final excavation extent, indicated all COC concentrations were compliant with the Site Closure Criteria. Laboratory analytical results for assessment soil samples SS01 through SS04, indicated all COC concentrations were compliant with the Site Closure Criteria and successfully defined the lateral extent of the release. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included in Appendix D.

The excavation area measured approximately 800 square feet and a total of approximately 89 cubic yards of impacted soil was removed during excavation activities. The impacted soil was transported and properly disposed of at R360 Environmental Solutions in Hobbs, New Mexico.

CLOSURE REQUEST

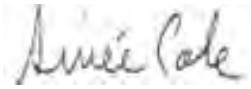
Site assessment and excavation activities were conducted at the Site to address the November 9, 2022, release of crude oil and produced water. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated all COC concentrations were compliant with the Site Closure Criteria. Based on the laboratory analytical results, no further remediation was required.

Maverick believes the remedial actions completed are protective of human health, the environment, and groundwater. As such, Maverick respectfully requests closure for Incident Number NAPP2231954757. NMOCD notification records are provided in Appendix E and the Final C-141 is included in Appendix F. A Reclamation Plan for the disturbed pasture area is included in Appendix G for NMSLO review.

If you have any questions or comments, please contact please contact Ms. Kalei Jennings at (817) 683-2503 or kjennings@ensolum.com.

Sincerely,
Ensolum, LLC

Kalei Jennings
Senior Scientist



Aimee Cole
Senior Managing Scientist

cc: Bryce Wagoner, Maverick Permian, LLC
New Mexico State Land Office

Appendices:

Figure 1	Site Receptor Map
Figure 2	Excavation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	ROE Request for Remediation Form and ROE Permit
Appendix B	Referenced Well Records
Appendix C	Photographic Log
Appendix D	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix E	NMOCD Sampling Notifications
Appendix F	Final C-141
Appendix G	NMSLO Reclamation Plan

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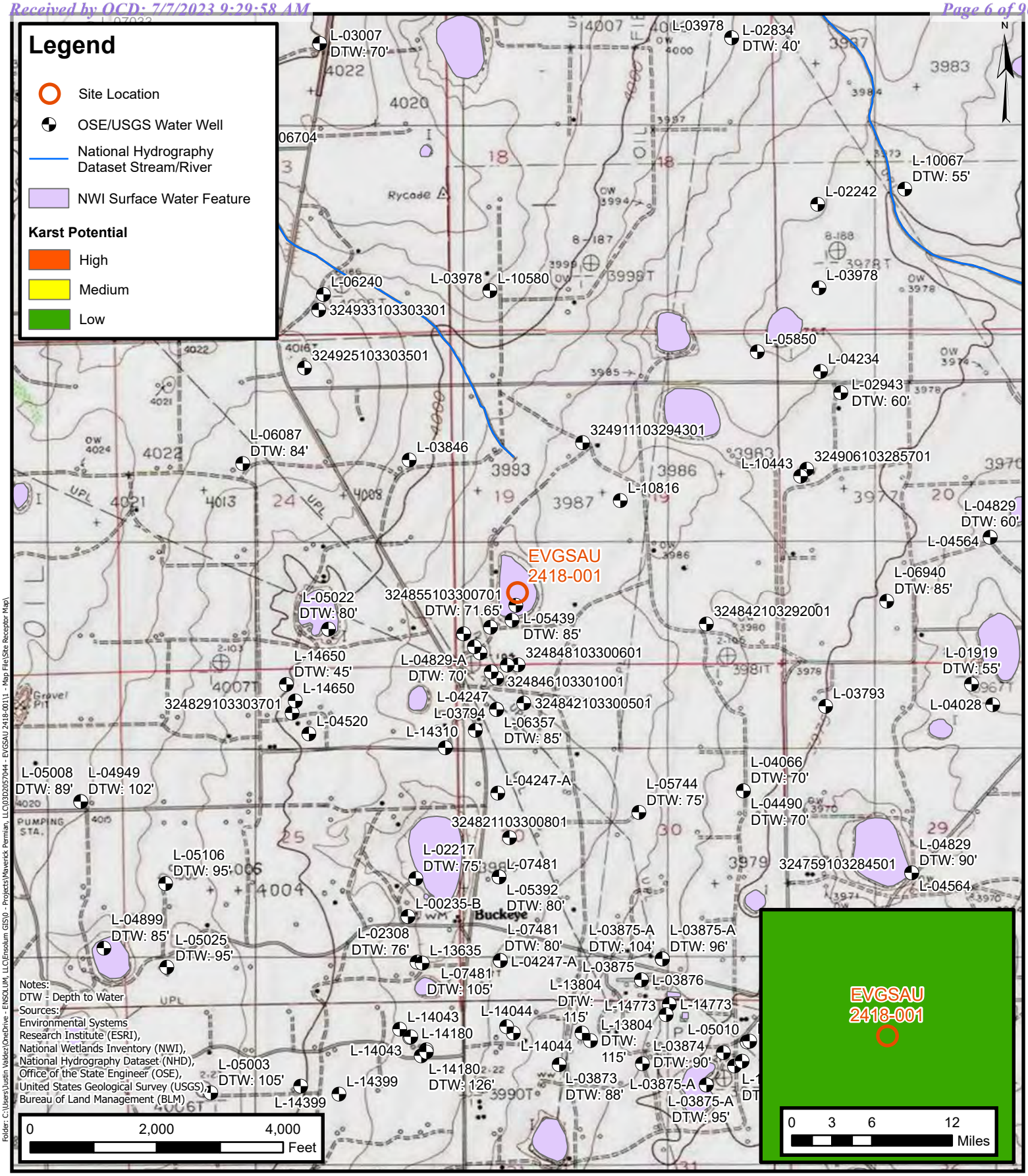
FIGURES



Folder: C:\Users\Justin Valdez\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\Maverick Permian, LLC\03D2057044 - EVGSAU 2418-001\1 - Map File\Site Receptor Map\

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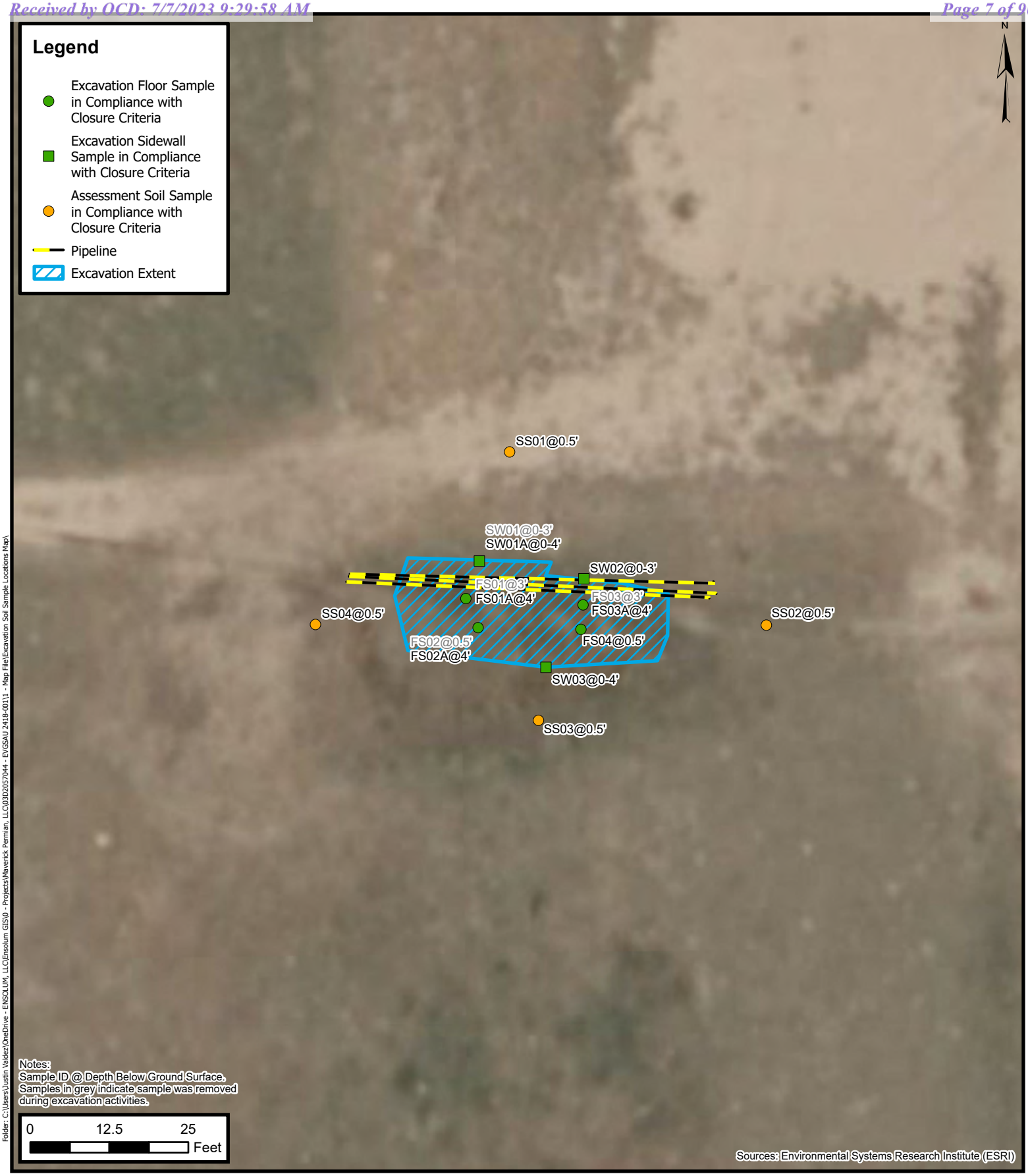
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

Maverick Permian, LLC
EVGSAU 2418-001
Incident Number: NAPP2231954757
Unit M, Sec 19, T17S, 35E
Lea County, New Mexico

FIGURE 1



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Excavation Soil Sample Locations

Maverick Permian, LLC
EVGSAU 2418-001
Incident Number: NAPP2231954757
Unit M, Sec 19, T17S, 35E
Lea County, New Mexico

FIGURE 2

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TABLE

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
EVGSAU 2418-001
Maverick Permian, LLC
Lea County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**NE**	**100**	**600**
Excavation Floor Samples										
FS01	01/20/2023	3	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	**10,600**
FS01A	05/25/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
FS02	01/20/2023	0.5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	**3,670**
FS02A	05/25/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
FS03	01/20/2023	3	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	**3,310**
FS03A	05/25/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
FS04	01/20/2023	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	78.8
Excavation Sidewall Samples										
SW01	01/20/2023	0 - 3	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	**8,430**
SW01A	05/25/2023	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
SW02	01/20/2023	0 - 3	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	152
SW03	05/25/2023	0 - 4	<0.050	<0.300	<10.0	22.8	<10.0	22.8	22.8	288
Assessment Soil Samples										
SS01	05/31/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
SS02	05/31/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SS03	05/31/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SS04	05/31/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0

Notes:

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

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APPENDIX A

ROE Request for Remediation Form and ROE Permit

Stephanie Garcia Richard
Commissioner of Public Lands

RIGHT OF ENTRY REQUEST FOR REMEDIATION

Company Name _____
Address _____
City, State, Zip _____
Contact Person: _____
Telephone #: _____
Email: _____

Purpose of request: _____
_____
_____

Section _____ Township _____ Range _____ Unit Letter _____

Qtr/Qtr _____ County_____

GPS Location (decimal degrees): Latitude _____ W Longitude _____ N

If this is a remediation for a spill please attach a copy of the OCD C-141 form.

Is the completed C-141 attached? Yes ☐ No ☐

Square footage of spill impacted surface: _____

Estimated square footage of total disturbance: _____

Reclamation Plan (*attach addl. sheet if necessary*) _____
_____
_____

Driving directions from nearest state highway or road (*attach a map of the location*):
_____
_____

Lease number associated with the ROE request: _____

Well Name and/or Operator (if applicable):_____

Time expected to complete remediation:_____

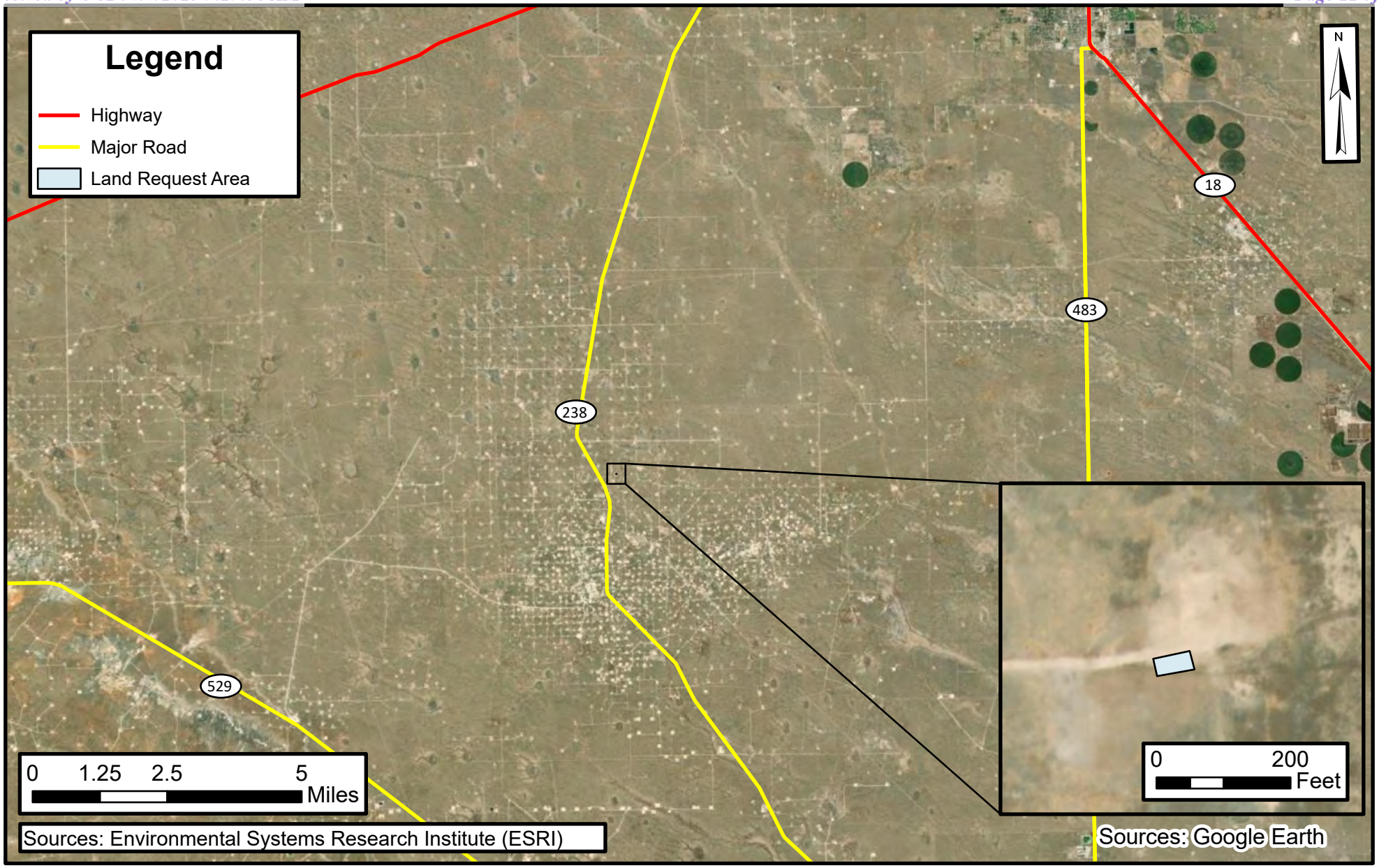
Personnel present on State Land_____

Equipment & materials present on State Land_____

$50.00 application fee and $500.00 permit amount (based on 180 days) renewable for up to 3 yrs.

Payable to: The Commissioner of Public Lands
P. O. Box 1148
Santa Fe, NM 87504-1148

* ***When you provide a check as payment, you authorize the State of New Mexico to either use information from your check to make a one-time electronic fund transfer from your account or to process the payment as a check transaction.***



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Environmental, Engineering and Hydrogeologic Consultants

Right of Entry Site Map

Maverick Natural Resources, LLC
EVG SAU 2418-001
Incident Number: NAPP2231954757
Unit M, Sec 19, T17S, R35E
Lea County, New Mexico

FIGURE
2

Stephanie Garcia Richard
COMMISSIONER

State of New Mexico
Commissioner of Public Lands
310 OLD SANTA FE TRAIL
P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

COMMISSIONER'S OFFICE
Phone (505) 827-5760
Fax (505) 827-5766
www.nmstatelands.org

January 3, 2023

Maverick Natural Resources, LLC
1410 NW County Rd
Hobbs, NM 88240

Attn: Bryce Wagoner

Re: Right-of-Entry Permit No.: **RE-6381/EVGSAU 2418-001 Reclamation and Remediation Permit**

Dear Applicant:

Enclosed is the completed captioned Right-of-Entry permit. If any corrections are necessary, please let us know and we will retype or amend this permit as necessary.

The New Mexico State Land Office requires you to notify any surface lessees that will be impacted by your project prior to construction.

If you have any questions, or if we may be of further assistance, please do not hesitate to contact Amy Velazquez of my staff at (505) 827-5789.

Sincerely,

James S. Bordegaray
Director, Commercial Resources Division

JSB/alv

NEW MEXICO STATE LAND OFFICE
Commissioner of Public Lands
Stephanie Garcia Richard
New Mexico State Land Office Building
P.O. Box 1148, Santa Fe, NM 87504-1148

RIGHT OF ENTRY PERMIT
CONTRACT NO. RE – 6381

This Agreement is made and entered into between the COMMISSIONER OF PUBLIC LANDS (the "Commissioner") and

Maverick Natural Resources, LLC
1410 NW County Rd
Hobbs, NM 88240

("Permittee"). The parties agree as follows:

1. RIGHT OF ENTRY ("ROE")

The Commissioner grants to Permittee, and its authorized representatives, employees, and contractors, permission to use the state trust lands identified below (the "Premises"), and ingress and egress to the Premises, for the sole purposes of (1) surveying/conducting an environmental investigation due to a crude oil and produced water release on or adjacent to the site of the **EVGSAU 2418-001 (Incident # nAPP2231954757)** and (2) conducting surface reclamation activities, including removal of equipment and debris, and any required remediation per 19.15.29.12 NMAC.

The Premises are situated in the following location in **Lea County**, New Mexico::

Section	Township	Range	Subdivision	County	Longitude/Latitude
19	17S	35E	Lot 4	Lea	32.81660,-103.50212

2. TERM AND TERMINATION

Right of entry is granted for a term of **180 days,** commencing on the execution date of this document by the Commissioner of Public Lands.

3. FEES

$ 50.00 Application Fee
$ 500.00 Permit Fee
$ 550.00 Total Fee

4. CONDITIONS OF USE

A. The issuance of this ROE does not guarantee that any subsequent lease, permit, or any other instrument will be issued to Permittee for the Premises.

B. No blading or widening of any roads that provide access to the Premises is permitted under this ROE.

C. No sale of any material extracted from the Premises is allowed under this ROE.

D. Permittee shall observe all applicable federal, state, and local laws and regulations.

E. Permittee shall take all reasonable precautions to prevent and suppress forest, brush, and grass fires and prevent pollution of waters on or in the vicinity of the Premises.

F. Permittee shall not block or disrupt roads or trails commonly in use.

G. This ROE is subject to any and all easements and rights-of-way previously granted and now in force and effect.

H. Permittee shall be responsible for repair and restitution for damage to any Premises or improvements as a result of activities related to the ROE.

I. Prior to entering the Premises, Permittee must identify and contact any existing surface lessees. The grant of this ROE does not allow access across private lands.

J. Permittee may utilize this ROE upon its execution for inspection of the Premises and to conduct any necessary tests or inspections. Permittee may not conduct remediation or reclamation work until it has submitted a written plan for such work, and received State Land Office approval.

K. Personnel present on Premises: **Maverick personnel and contractors.**

L. Equipment and materials present on Premises: **Vehicles, heavy equipment, and associated equipment.**

5. SITE CONDITIONS

A. No surface disturbance, other than soil tests, except as described in a reclamation plan submitted to and approved by the State Land Office.

B. Access to the Premises shall be over existing roads.

C. The natural environmental conditions that exist contemporaneously with this grant of ROE shall be preserved and protected. Permittee must follow all applicable environmental and cultural resource protection laws and regulations.

6. INDEMNITY

Permittee shall save, hold harmless, indemnify, and defend the State of New Mexico, the Commissioner and Commissioner's employees, agents and contractors, in both their official and individual capacities, from any and all liability, claims, losses, damages, or expenses of any character or nature whatsoever, including but not limited to attorney's fees, court costs, loss of land value or use, third party claims, penalties, or removal, remedial or restoration costs arising out of, or alleged to arise out of Permittee's operations or presence on the Premises (or operations or presence of his representatives, employees, or contractors).

7. SURVIVAL OF TERMS

Permittee's obligations regarding indemnity, site conditions, and compliance with applicable standards and laws, shall survive the termination, cancellation or relinquishment of this Agreement, and any cause of action of the Commissioner to enforce any right, liability, claim, loss, damage or expense under those paragraphs shall not be deemed to accrue until the Commissioner's actual discovery of said right, liability, claim, loss, damage or expense.

8. NOTIFICATION

Permittee must notify the State Land Office immediately in the event Permittee or his representatives, employees, or contractors observe any spill, fire, or other emergency on the Premises, or if Permittee or his representatives, employees, or contractors experience any serious injury while on the Premises.

WITNESS the hands of PERMITTEE and COMMISSIONER on the day(s) and year entered below.

_____ DATE: _____

PERMITTEE SIGNATURE

_____

_____

PERMITTEE NAME AND TITLE (PRINT)

BY: _____

SEAL:

Stephanie Garcia Richard
Commissioner of Public Lands

DATE: 01/03/2023

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APPENDIX B

Referenced Well Records

New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	L 05439	2	3	3	19	17S	35E	640212	3631888*

Driller License: 46 **Driller Company:** ABBOTT BROTHERS COMPANY

Driller Name: ABBOTT, MURRELL

Drill Start Date:	07/25/1964	**Drill Finish Date:**	07/25/1964	**Plug Date:**	01/15/1965
Log File Date:	08/06/1964	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:	7.00	**Depth Well:**	135 feet	**Depth Water:**	85 feet

Water Bearing Stratifications:	Top	Bottom	Description
	85	135	Other/Unknown

Casing Perforations:	Top	Bottom
	85	135

***UTM location was derived from PLSS - see Help**

USGS 324855103300701 17S.35E.19.3323411

Lea County, New Mexico
Latitude 32°48'55", Longitude 103°30'07" NAD27
Land-surface elevation 3,987.80 feet above NGVD29
The depth of the well is 220 feet below land surface.
The depth of the hole is 220 feet below land surface.
This well is completed in the High Plains aquifer (N100HGHPLN) national aquifer.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

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

Date	Time	Water-level date-time accuracy	Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Status	Method of measurement	Measuring agency	Source of measurement	Water-level approval status
1980-10-02		D	62610		3916.15	NGVD29	1	T			A
1980-10-02		D	62611		3917.66	NAVD88	1	T			A
1980-10-02		D	72019	71.65			1	T			A

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APPENDIX C

Photographic Log

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Photographic Log
Maverick Permian, LLC
EVGSAU 2418-001
NAPP2231954757

Photograph 1 Date: 11/11/22
Description: Soil staining in release footprint
View: East

Photograph 2 Date: 11/11/22
Description: Soil staining in release footprint
View: West

Photograph 3 Date: 01/20/23
Description: Excavation activities
View: East

Photograph 4 Date: 01/20/23
Description: Excavation activities
View: West

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Photographic Log
Maverick Permian, LLC
EVGSAU 2418-001
NAPP2231954757

Photograph 1 Date: 05/25/23
Description: Completed Excavation
View: South

Photograph 2 Date: 05/25/23
Description: Completed Excavation
View: North

Photograph 3 Date: 05/25/23
Description: Completed Excavation
View: North East

Photograph 4 Date: 05/25/23
Description: Completed Excavation
View: East

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APPENDIX D

Laboratory Analytical Reports & Chain-of-Custody Documentation

CARDINAL Laboratories

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

May 30, 2023

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: EVGSAU 2418

Enclosed are the results of analyses for samples received by the laboratory on 05/26/23 12:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	05/26/2023	Sampling Date:	05/25/2023
Reported:	05/30/2023	Sampling Type:	Soil
Project Name:	EVGSAU 2418	Sampling Condition:	Cool & Intact
Project Number:	03D2057044	Sample Received By:	Tamara Oldaker
Project Location:	32.81660, -103.50212		

Sample ID: FS 01 @ 4' (H232697-01)

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	05/26/2023	ND	1.98	98.8	2.00	1.43	
Toluene*	<0.050	0.050	05/26/2023	ND	2.06	103	2.00	1.84	
Ethylbenzene*	<0.050	0.050	05/26/2023	ND	1.96	98.0	2.00	2.49	
Total Xylenes*	<0.150	0.150	05/26/2023	ND	6.07	101	6.00	3.43	
Total BTEX	<0.300	0.300	05/26/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**128**	16.0	05/26/2023	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	05/26/2023	ND	221	110	200	0.152	
DRO >C10-C28*	<10.0	10.0	05/26/2023	ND	200	99.8	200	1.05	
EXT DRO >C28-C36	<10.0	10.0	05/26/2023	ND					

Surrogate: 1-Chlorooctane *93.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *93.4 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	05/26/2023	Sampling Date:	05/25/2023
Reported:	05/30/2023	Sampling Type:	Soil
Project Name:	EVGSAU 2418	Sampling Condition:	Cool & Intact
Project Number:	03D2057044	Sample Received By:	Tamara Oldaker
Project Location:	32.81660, -103.50212		

Sample ID: FS 02 @ 4' (H232697-02)

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	05/26/2023	ND	1.98	98.8	2.00	1.43	
Toluene*	<0.050	0.050	05/26/2023	ND	2.06	103	2.00	1.84	
Ethylbenzene*	<0.050	0.050	05/26/2023	ND	1.96	98.0	2.00	2.49	
Total Xylenes*	<0.150	0.150	05/26/2023	ND	6.07	101	6.00	3.43	
Total BTEX	<0.300	0.300	05/26/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**144**	16.0	05/26/2023	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	05/26/2023	ND	221	110	200	0.152	
DRO >C10-C28*	<10.0	10.0	05/26/2023	ND	200	99.8	200	1.05	
EXT DRO >C28-C36	<10.0	10.0	05/26/2023	ND					

Surrogate: 1-Chlorooctane *89.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *88.9 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	05/26/2023	Sampling Date:	05/25/2023
Reported:	05/30/2023	Sampling Type:	Soil
Project Name:	EVGSAU 2418	Sampling Condition:	Cool & Intact
Project Number:	03D2057044	Sample Received By:	Tamara Oldaker
Project Location:	32.81660, -103.50212		

Sample ID: SW 01 @ 0-4' (H232697-03)

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	05/26/2023	ND	1.98	98.8	2.00	1.43	
Toluene*	<0.050	0.050	05/26/2023	ND	2.06	103	2.00	1.84	
Ethylbenzene*	<0.050	0.050	05/26/2023	ND	1.96	98.0	2.00	2.49	
Total Xylenes*	<0.150	0.150	05/26/2023	ND	6.07	101	6.00	3.43	
Total BTEX	<0.300	0.300	05/26/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	05/26/2023	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/26/2023	ND	221	110	200	0.152	
DRO >C10-C28*	<10.0	10.0	05/26/2023	ND	200	99.8	200	1.05	
EXT DRO >C28-C36	<10.0	10.0	05/26/2023	ND					

Surrogate: 1-Chlorooctane *92.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *91.7 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	05/26/2023	Sampling Date:	05/25/2023
Reported:	05/30/2023	Sampling Type:	Soil
Project Name:	EVGSAU 2418	Sampling Condition:	Cool & Intact
Project Number:	03D2057044	Sample Received By:	Tamara Oldaker
Project Location:	32.81660, -103.50212		

Sample ID: SW 03 @ 0-4' (H232697-04)

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	05/26/2023	ND	1.98	98.8	2.00	1.43	
Toluene*	<0.050	0.050	05/26/2023	ND	2.06	103	2.00	1.84	
Ethylbenzene*	<0.050	0.050	05/26/2023	ND	1.96	98.0	2.00	2.49	
Total Xylenes*	<0.150	0.150	05/26/2023	ND	6.07	101	6.00	3.43	
Total BTEX	<0.300	0.300	05/26/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**288**	16.0	05/26/2023	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/26/2023	ND	221	110	200	0.152	
DRO >C10-C28*	**22.8**	10.0	05/26/2023	ND	200	99.8	200	1.05	
EXT DRO >C28-C36	<10.0	10.0	05/26/2023	ND					

Surrogate: 1-Chlorooctane *92.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *94.4 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	05/26/2023	Sampling Date:	05/25/2023
Reported:	05/30/2023	Sampling Type:	Soil
Project Name:	EVGSAU 2418	Sampling Condition:	Cool & Intact
Project Number:	03D2057044	Sample Received By:	Tamara Oldaker
Project Location:	32.81660, -103.50212		

Sample ID: FS 03 @ 4' (H232697-05)

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	05/26/2023	ND	1.98	98.8	2.00	1.43	
Toluene*	<0.050	0.050	05/26/2023	ND	2.06	103	2.00	1.84	
Ethylbenzene*	<0.050	0.050	05/26/2023	ND	1.96	98.0	2.00	2.49	
Total Xylenes*	<0.150	0.150	05/26/2023	ND	6.07	101	6.00	3.43	
Total BTEX	<0.300	0.300	05/26/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	05/26/2023	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/26/2023	ND	199	99.6	200	1.94	
DRO >C10-C28*	<10.0	10.0	05/26/2023	ND	197	98.6	200	0.855	
EXT DRO >C28-C36	<10.0	10.0	05/26/2023	ND					

Surrogate: 1-Chlorooctane *79.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *79.8 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Ensolum, LLC	BILL TO P.O. #:	A.A.
Project Manager:	Hale Jennings	Company:	
Address:	3122 Nat'l Parks Hwy	Attn:	
City:	Carlsbad State: NM Zip: 88220	Address:	
Phone #:	817-683-2503 Fax #:	City:	
Project #:	03D2057041 Project Owner:	State: Zip:	
Project Name:	EVGSAU 2418	Phone #:	
Project Location:	32.816660, 103.50212	Fax #:	
Sampler Name:	Julianna Falcomata		

ANALYSIS REQUEST: TPH, BTEX, Chlorides

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING DATE	TIME	TPH	BTEX	Chlorides
H232697																	
1	FS01 @4'	C	1			X					X		5/25/23	1230	X	X	X
2	FS02 @4'													1235			
3	SW01 @0-4'													1240			
4	SW03 @0-4'													1245			
5	FS03 @4'													1250			

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

Relinquished By:	Date: 5/26/23	Received By:	
	Time: 0727		
Relinquished By:	Date: 5-26-23	Received By:	
	Time: 1205		
Delivered By: (Circle One)	Observed Temp. °C 6.4	Sample Condition Cool / Intact	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:	Corrected Temp. °C 5.8	Yes / Yes; No / No	

Verbal Result: ☐ Yes ☐ No Add'l Phone #:
All Results are emailed. Please provide Email address:
hjennings@ensolum.com jfalcomata@ensolum.com
REMARKS:
NAPP2319547S7
Turnaround Time: Standard ☐ Rush ☒ 48hr
Thermometer ID #113
Correction Factor -0.6°C
Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No; Intact ☐ Yes ☐ No; Observed Temp. °C; Corrected Temp. °C

FORM-006 R 3.3 07/18/22

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

CARDINAL Laboratories

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

June 02, 2023

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: EVGSAU 2418 - 001

Enclosed are the results of analyses for samples received by the laboratory on 05/31/23 11:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	05/31/2023	Sampling Date:	05/31/2023
Reported:	06/02/2023	Sampling Type:	Soil
Project Name:	EVGSAU 2418 - 001	Sampling Condition:	Cool & Intact
Project Number:	03D2057044	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.81660, -103.50212		

Sample ID: SS 01 @ .5' (H232754-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/01/2023	ND	2.37	119	2.00	4.50	
Toluene*	<0.050	0.050	06/01/2023	ND	2.36	118	2.00	4.88	
Ethylbenzene*	<0.050	0.050	06/01/2023	ND	2.29	115	2.00	3.67	
Total Xylenes*	<0.150	0.150	06/01/2023	ND	6.94	116	6.00	2.84	
Total BTEX	<0.300	0.300	06/01/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	05/31/2023	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	05/31/2023	ND	175	87.6	200	1.30	
DRO >C10-C28*	<10.0	10.0	05/31/2023	ND	168	83.8	200	3.99	
EXT DRO >C28-C36	<10.0	10.0	05/31/2023	ND					

Surrogate: 1-Chlorooctane *100 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *99.8 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	05/31/2023	Sampling Date:	05/31/2023
Reported:	06/02/2023	Sampling Type:	Soil
Project Name:	EVGSAU 2418 - 001	Sampling Condition:	Cool & Intact
Project Number:	03D2057044	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.81660, -103.50212		

Sample ID: SS 02 @ .5' (H232754-02)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/01/2023	ND	2.37	119	2.00	4.50	
Toluene*	<0.050	0.050	06/01/2023	ND	2.36	118	2.00	4.88	
Ethylbenzene*	<0.050	0.050	06/01/2023	ND	2.29	115	2.00	3.67	
Total Xylenes*	<0.150	0.150	06/01/2023	ND	6.94	116	6.00	2.84	
Total BTEX	<0.300	0.300	06/01/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	05/31/2023	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	05/31/2023	ND	175	87.6	200	1.30	
DRO >C10-C28*	<10.0	10.0	05/31/2023	ND	168	83.8	200	3.99	
EXT DRO >C28-C36	<10.0	10.0	05/31/2023	ND					

Surrogate: 1-Chlorooctane *97.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *97.3 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	05/31/2023	Sampling Date:	05/31/2023
Reported:	06/02/2023	Sampling Type:	Soil
Project Name:	EVGSAU 2418 - 001	Sampling Condition:	Cool & Intact
Project Number:	03D2057044	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.81660, -103.50212		

Sample ID: SS 03 @ .5' (H232754-03)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/01/2023	ND	2.37	119	2.00	4.50	
Toluene*	<0.050	0.050	06/01/2023	ND	2.36	118	2.00	4.88	
Ethylbenzene*	<0.050	0.050	06/01/2023	ND	2.29	115	2.00	3.67	
Total Xylenes*	<0.150	0.150	06/01/2023	ND	6.94	116	6.00	2.84	
Total BTEX	<0.300	0.300	06/01/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	05/31/2023	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	05/31/2023	ND	175	87.6	200	1.30	
DRO >C10-C28*	<10.0	10.0	05/31/2023	ND	168	83.8	200	3.99	
EXT DRO >C28-C36	<10.0	10.0	05/31/2023	ND					

Surrogate: 1-Chlorooctane *101 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *102 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	05/31/2023	Sampling Date:	05/31/2023
Reported:	06/02/2023	Sampling Type:	Soil
Project Name:	EVGSAU 2418 - 001	Sampling Condition:	Cool & Intact
Project Number:	03D2057044	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.81660, -103.50212		

Sample ID: SS 04 @ .5' (H232754-04)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/01/2023	ND	2.37	119	2.00	4.50	
Toluene*	<0.050	0.050	06/01/2023	ND	2.36	118	2.00	4.88	
Ethylbenzene*	<0.050	0.050	06/01/2023	ND	2.29	115	2.00	3.67	
Total Xylenes*	<0.150	0.150	06/01/2023	ND	6.94	116	6.00	2.84	
Total BTEX	<0.300	0.300	06/01/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	05/31/2023	ND	384	96.0	400	4.08	

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	05/31/2023	ND	175	87.6	200	1.30	
DRO >C10-C28*	<10.0	10.0	05/31/2023	ND	168	83.8	200	3.99	
EXT DRO >C28-C36	<10.0	10.0	05/31/2023	ND					

Surrogate: 1-Chlorooctane *67.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *68.7 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC
Project Manager: Kalei Jennings
Address: 822 Natl Parks Hwy
City: Carlsbad State: NM Zip: 88220
Phone #: 817-688-2503 Fax #:
Project #: 03D2051044 Project Owner: Maverick
Project Name: EVGSAU 2418-002
Project Location: (32.81660, -103.5012
Sampler Name:

BILL TO
P.O. #: A.A.
Company:
Attn:
Address:
City:
State: Zip:
Phone #:
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	BTEX	TPH	Chlorides
H232754-1	SS01 @ .5'	C	1			X					X		5/31/23	1010	X	X	X
2	SS02 @ .5'													1015			
3	SS03 @ .5'													1020			
4	SS04 @ .5'													1025			

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

Relinquished By: Date: 5-31-23 Time: 1110 Received By:
Relinquished By: Date: Time: Received By:

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

Delivered By: (Circle One) Sampler - UPS - Bus - Other:
Observed Temp. °C 5.4
Corrected Temp. °C 4.8
Sample Condition: Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No
CHECKED BY: (Initials) TB

Turnaround Time: Standard ☐ Rush ☒ 48hr
Thermometer ID #113
Correction Factor -0.6°C
Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No
Observed Temp. °C
Corrected Temp. °C

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

FORM-006 R 3.3 07/18/22

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Kalei Jennings
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 2/6/2023 9:45:30 AM Revision 1

JOB DESCRIPTION

Buckeye EVG 43-01
SDG NUMBER 03D2057035

JOB NUMBER

890-3926-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

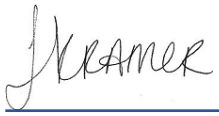
my EOL

Eurofins Carlsbad

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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2/6/2023 9:45:30 AM
Revision 1

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Ensolum
Project/Site: Buckeye EVG 43-01

Laboratory Job ID: 890-3926-1
SDG: 03D2057035

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: Buckeye EVG 43-01

Job ID: 890-3926-1
SDG: 03D2057035

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Ensolum
Project/Site: Buckeye EVG 43-01

Job ID: 890-3926-1
SDG: 03D2057035

Job ID: 890-3926-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3926-1

REVISION

The report being provided is a revision of the original report sent on 2/5/2023. The report (revision 1) is being revised due to Per client email, requesting site name update.

Report revision history

Receipt
The samples were received on 1/23/2023 4:24 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: FS01 (890-3926-1), FS02 (890-3926-2), FS03 (890-3926-3), FS04 (890-3926-4), SW01 (890-3926-5) and SW02 (890-3926-6).

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-45266/5-A). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (890-3922-A-1-C MS) and (890-3922-A-1-D MSD). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-44792 and analytical batch 880-44926 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Ensolum
Project/Site: Buckeye EVG 43-01

Job ID: 890-3926-1
SDG: 03D2057035

Client Sample ID: FS01
Date Collected: 01/20/23 12:10
Date Received: 01/23/23 16:24
Sample Depth: 3'

Lab Sample ID: 890-3926-1
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		02/02/23 13:22	02/03/23 02:07	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/02/23 13:22	02/03/23 02:07	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/02/23 13:22	02/03/23 02:07	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		02/02/23 13:22	02/03/23 02:07	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/02/23 13:22	02/03/23 02:07	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/02/23 13:22	02/03/23 02:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*02/02/23 13:22*	*02/03/23 02:07*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*02/02/23 13:22*	*02/03/23 02:07*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			02/03/23 10:22	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/05/23 09:18	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/02/23 13:37	02/04/23 14:30	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/02/23 13:37	02/04/23 14:30	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/02/23 13:37	02/04/23 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*02/02/23 13:37*	*02/04/23 14:30*	*1*
o-Terphenyl	*104*		*70 - 130*	*02/02/23 13:37*	*02/04/23 14:30*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10600**	**F1**	100		mg/Kg			01/27/23 20:44	20

Client Sample ID: FS02
Date Collected: 01/20/23 12:15
Date Received: 01/23/23 16:24
Sample Depth: 0.5'

Lab Sample ID: 890-3926-2
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/02/23 13:22	02/03/23 02:33	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/02/23 13:22	02/03/23 02:33	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/02/23 13:22	02/03/23 02:33	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/02/23 13:22	02/03/23 02:33	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/02/23 13:22	02/03/23 02:33	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/02/23 13:22	02/03/23 02:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*02/02/23 13:22*	*02/03/23 02:33*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Buckeye EVG 43-01

Job ID: 890-3926-1
SDG: 03D2057035

Client Sample ID: FS02
Date Collected: 01/20/23 12:15
Date Received: 01/23/23 16:24
Sample Depth: 0.5'

Lab Sample ID: 890-3926-2
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*02/02/23 13:22*	*02/03/23 02:33*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			02/03/23 10:22	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			02/05/23 09:18	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/02/23 13:37	02/04/23 14:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/02/23 13:37	02/04/23 14:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/02/23 13:37	02/04/23 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*02/02/23 13:37*	*02/04/23 14:52*	*1*
o-Terphenyl	*102*		*70 - 130*	*02/02/23 13:37*	*02/04/23 14:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3670**		25.0	mg/Kg			01/27/23 21:03	5

Client Sample ID: FS03
Date Collected: 01/20/23 12:20
Date Received: 01/23/23 16:24
Sample Depth: 3'

Lab Sample ID: 890-3926-3
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/02/23 13:22	02/03/23 02:59	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/02/23 13:22	02/03/23 02:59	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/02/23 13:22	02/03/23 02:59	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/02/23 13:22	02/03/23 02:59	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/02/23 13:22	02/03/23 02:59	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/02/23 13:22	02/03/23 02:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*02/02/23 13:22*	*02/03/23 02:59*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*02/02/23 13:22*	*02/03/23 02:59*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/03/23 10:22	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			02/05/23 09:18	1

Client Sample Results

Client: Ensolum
Project/Site: Buckeye EVG 43-01

Job ID: 890-3926-1
SDG: 03D2057035

Client Sample ID: FS03
Date Collected: 01/20/23 12:20
Date Received: 01/23/23 16:24
Sample Depth: 3'

Lab Sample ID: 890-3926-3
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/02/23 13:37	02/04/23 15:13	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/02/23 13:37	02/04/23 15:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/02/23 13:37	02/04/23 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*02/02/23 13:37*	*02/04/23 15:13*	*1*
o-Terphenyl	*100*		*70 - 130*	*02/02/23 13:37*	*02/04/23 15:13*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3310**		24.9		mg/Kg			01/27/23 21:09	5

Client Sample ID: FS04
Date Collected: 01/20/23 12:25
Date Received: 01/23/23 16:24
Sample Depth: 0.5'

Lab Sample ID: 890-3926-4
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/02/23 13:22	02/03/23 03:25	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/02/23 13:22	02/03/23 03:25	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/02/23 13:22	02/03/23 03:25	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/02/23 13:22	02/03/23 03:25	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/02/23 13:22	02/03/23 03:25	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/02/23 13:22	02/03/23 03:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*02/02/23 13:22*	*02/03/23 03:25*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*02/02/23 13:22*	*02/03/23 03:25*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/03/23 10:22	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/05/23 09:18	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/02/23 13:37	02/04/23 15:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/02/23 13:37	02/04/23 15:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/02/23 13:37	02/04/23 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*02/02/23 13:37*	*02/04/23 15:34*	*1*
o-Terphenyl	*97*		*70 - 130*	*02/02/23 13:37*	*02/04/23 15:34*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Buckeye EVG 43-01

Job ID: 890-3926-1
SDG: 03D2057035

Client Sample ID: FS04
Date Collected: 01/20/23 12:25
Date Received: 01/23/23 16:24
Sample Depth: 0.5'

Lab Sample ID: 890-3926-4
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	78.8		4.95		mg/Kg			01/27/23 21:27	1

Client Sample ID: SW01
Date Collected: 01/20/23 12:45
Date Received: 01/23/23 16:24
Sample Depth: 0-3'

Lab Sample ID: 890-3926-5
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/02/23 13:22	02/03/23 03:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/02/23 13:22	02/03/23 03:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/02/23 13:22	02/03/23 03:51	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/02/23 13:22	02/03/23 03:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/02/23 13:22	02/03/23 03:51	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/02/23 13:22	02/03/23 03:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*02/02/23 13:22*	*02/03/23 03:51*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*02/02/23 13:22*	*02/03/23 03:51*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			02/03/23 10:22	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/05/23 09:18	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/02/23 13:37	02/04/23 16:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/02/23 13:37	02/04/23 16:17	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/02/23 13:37	02/04/23 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*02/02/23 13:37*	*02/04/23 16:17*	*1*
o-Terphenyl	*103*		*70 - 130*	*02/02/23 13:37*	*02/04/23 16:17*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8430		50.0		mg/Kg			01/27/23 21:34	10

Client Sample Results

Client: Ensolum
Project/Site: Buckeye EVG 43-01

Job ID: 890-3926-1
SDG: 03D2057035

Client Sample ID: SW02

Date Collected: 01/20/23 12:50
Date Received: 01/23/23 16:24
Sample Depth: 0-3'

Lab Sample ID: 890-3926-6

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/02/23 13:22	02/03/23 04:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/02/23 13:22	02/03/23 04:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/02/23 13:22	02/03/23 04:17	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		02/02/23 13:22	02/03/23 04:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/02/23 13:22	02/03/23 04:17	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		02/02/23 13:22	02/03/23 04:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*02/02/23 13:22*	*02/03/23 04:17*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*02/02/23 13:22*	*02/03/23 04:17*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			02/03/23 10:22	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/05/23 09:18	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/02/23 13:37	02/04/23 16:38	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/02/23 13:37	02/04/23 16:38	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/02/23 13:37	02/04/23 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*02/02/23 13:37*	*02/04/23 16:38*	*1*
o-Terphenyl	*114*		*70 - 130*	*02/02/23 13:37*	*02/04/23 16:38*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**152**		4.98		mg/Kg			01/27/23 21:40	1

Surrogate Summary

Client: Ensolum
Project/Site: Buckeye EVG 43-01

Job ID: 890-3926-1
SDG: 03D2057035

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3919-A-16-C MS	Matrix Spike	92	107
890-3919-A-16-D MSD	Matrix Spike Duplicate	94	109
890-3926-1	FS01	95	102
890-3926-2	FS02	103	92
890-3926-3	FS03	109	105
890-3926-4	FS04	105	99
890-3926-5	SW01	104	94
890-3926-6	SW02	110	108
LCS 880-45266/1-A	Lab Control Sample	88	107
LCSD 880-45266/2-A	Lab Control Sample Dup	87	104
MB 880-45266/5-A	Method Blank	63 S1-	96

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3922-A-1-C MS	Matrix Spike	17 S1-	10 S1-
890-3922-A-1-D MSD	Matrix Spike Duplicate	14 S1-	9 S1-
890-3926-1	FS01	93	104
890-3926-2	FS02	91	102
890-3926-3	FS03	92	100
890-3926-4	FS04	88	97
890-3926-5	SW01	93	103
890-3926-6	SW02	104	114
LCS 880-45267/2-A	Lab Control Sample	87	91
LCSD 880-45267/3-A	Lab Control Sample Dup	85	90
MB 880-45267/1-A	Method Blank	112	123

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Buckeye EVG 43-01

Job ID: 890-3926-1
SDG: 03D2057035

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-45266/5-A
Matrix: Solid
Analysis Batch: 45278

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 45266

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/02/23 13:22	02/02/23 18:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/02/23 13:22	02/02/23 18:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/02/23 13:22	02/02/23 18:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/02/23 13:22	02/02/23 18:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/02/23 13:22	02/02/23 18:47	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/02/23 13:22	02/02/23 18:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*63*	*S1-*	*70 - 130*	*02/02/23 13:22*	*02/02/23 18:47*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*02/02/23 13:22*	*02/02/23 18:47*	*1*

Lab Sample ID: LCS 880-45266/1-A
Matrix: Solid
Analysis Batch: 45278

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 45266

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1088		mg/Kg		109	70 - 130		
Toluene			0.100	0.09587		mg/Kg		96	70 - 130		
Ethylbenzene			0.100	0.09476		mg/Kg		95	70 - 130		
m-Xylene & p-Xylene			0.200	0.1927		mg/Kg		96	70 - 130		
o-Xylene			0.100	0.1001		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: LCSD 880-45266/2-A
Matrix: Solid
Analysis Batch: 45278

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 45266

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09665		mg/Kg		97	70 - 130	12	35
Toluene			0.100	0.1019		mg/Kg		102	70 - 130	6	35
Ethylbenzene			0.100	0.1030		mg/Kg		103	70 - 130	8	35
m-Xylene & p-Xylene			0.200	0.2070		mg/Kg		103	70 - 130	7	35
o-Xylene			0.100	0.1036		mg/Kg		104	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 890-3919-A-16-C MS
Matrix: Solid
Analysis Batch: 45278

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 45266

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.100	0.1131		mg/Kg		113	70 - 130		
Toluene	<0.00201	U	0.100	0.1045		mg/Kg		104	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Buckeye EVG 43-01

Job ID: 890-3926-1
SDG: 03D2057035

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-3919-A-16-C MS
Matrix: Solid
Analysis Batch: 45278

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 45266

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.100	0.1062		mg/Kg		106	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.2118		mg/Kg		106	70 - 130
o-Xylene	<0.00201	U	0.100	0.1032		mg/Kg		103	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: 890-3919-A-16-D MSD
Matrix: Solid
Analysis Batch: 45278

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 45266

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0990	0.1138		mg/Kg		115	70 - 130	1	35
Toluene	<0.00201	U	0.0990	0.1035		mg/Kg		105	70 - 130	1	35
Ethylbenzene	<0.00201	U	0.0990	0.1029		mg/Kg		104	70 - 130	3	35
m-Xylene & p-Xylene	<0.00402	U	0.198	0.2053		mg/Kg		104	70 - 130	3	35
o-Xylene	<0.00201	U	0.0990	0.1018		mg/Kg		103	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-45267/1-A
Matrix: Solid
Analysis Batch: 45445

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 45267

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/02/23 13:37	02/04/23 08:56	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/02/23 13:37	02/04/23 08:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/02/23 13:37	02/04/23 08:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*02/02/23 13:37*	*02/04/23 08:56*	*1*
o-Terphenyl	*123*		*70 - 130*	*02/02/23 13:37*	*02/04/23 08:56*	*1*

Lab Sample ID: LCS 880-45267/2-A
Matrix: Solid
Analysis Batch: 45445

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 45267

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			999	888.9		mg/Kg		89	70 - 130
Diesel Range Organics (Over C10-C28)			999	860.4		mg/Kg		86	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Buckeye EVG 43-01

Job ID: 890-3926-1
SDG: 03D2057035

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-45267/2-A
Matrix: Solid
Analysis Batch: 45445

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 45267

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	87		70 - 130
o-Terphenyl	91		70 - 130

Lab Sample ID: LCSD 880-45267/3-A
Matrix: Solid
Analysis Batch: 45445

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 45267

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			999	802.7		mg/Kg		80	70 - 130	10	20
Diesel Range Organics (Over C10-C28)			999	831.7		mg/Kg		83	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	85		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: 890-3922-A-1-C MS
Matrix: Solid
Analysis Batch: 45445

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 45267

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	1001		mg/Kg		100	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	1023		mg/Kg		98	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	17	S1-	70 - 130
o-Terphenyl	10	S1-	70 - 130

Lab Sample ID: 890-3922-A-1-D MSD
Matrix: Solid
Analysis Batch: 45445

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 45267

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	849.9		mg/Kg		85	70 - 130	16	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	922.7		mg/Kg		88	70 - 130	10	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	14	S1-	70 - 130
o-Terphenyl	9	S1-	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Buckeye EVG 43-01

Job ID: 890-3926-1
SDG: 03D2057035

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-44792/1-A
Matrix: Solid
Analysis Batch: 44926

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			01/27/23 19:00	1

Lab Sample ID: LCS 880-44792/2-A
Matrix: Solid
Analysis Batch: 44926

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	266.0		mg/Kg		106	90 - 110		

Lab Sample ID: LCSD 880-44792/3-A
Matrix: Solid
Analysis Batch: 44926

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	265.4		mg/Kg		106	90 - 110	0	20

Lab Sample ID: 890-3926-1 MS
Matrix: Solid
Analysis Batch: 44926

Client Sample ID: FS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	10600	F1	5010	16480	F1	mg/Kg		117	90 - 110		

Lab Sample ID: 890-3926-1 MSD
Matrix: Solid
Analysis Batch: 44926

Client Sample ID: FS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10600	F1	5010	17000	F1	mg/Kg		128	90 - 110	3	20

QC Association Summary

Client: Ensolum
Project/Site: Buckeye EVG 43-01

Job ID: 890-3926-1
SDG: 03D2057035

GC VOA

Prep Batch: 45266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3926-1	FS01	Total/NA	Solid	5035	
890-3926-2	FS02	Total/NA	Solid	5035	
890-3926-3	FS03	Total/NA	Solid	5035	
890-3926-4	FS04	Total/NA	Solid	5035	
890-3926-5	SW01	Total/NA	Solid	5035	
890-3926-6	SW02	Total/NA	Solid	5035	
MB 880-45266/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-45266/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-45266/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3919-A-16-C MS	Matrix Spike	Total/NA	Solid	5035	
890-3919-A-16-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 45278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3926-1	FS01	Total/NA	Solid	8021B	45266
890-3926-2	FS02	Total/NA	Solid	8021B	45266
890-3926-3	FS03	Total/NA	Solid	8021B	45266
890-3926-4	FS04	Total/NA	Solid	8021B	45266
890-3926-5	SW01	Total/NA	Solid	8021B	45266
890-3926-6	SW02	Total/NA	Solid	8021B	45266
MB 880-45266/5-A	Method Blank	Total/NA	Solid	8021B	45266
LCS 880-45266/1-A	Lab Control Sample	Total/NA	Solid	8021B	45266
LCSD 880-45266/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	45266
890-3919-A-16-C MS	Matrix Spike	Total/NA	Solid	8021B	45266
890-3919-A-16-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	45266

Analysis Batch: 45344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3926-1	FS01	Total/NA	Solid	Total BTEX	
890-3926-2	FS02	Total/NA	Solid	Total BTEX	
890-3926-3	FS03	Total/NA	Solid	Total BTEX	
890-3926-4	FS04	Total/NA	Solid	Total BTEX	
890-3926-5	SW01	Total/NA	Solid	Total BTEX	
890-3926-6	SW02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 45267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3926-1	FS01	Total/NA	Solid	8015NM Prep	
890-3926-2	FS02	Total/NA	Solid	8015NM Prep	
890-3926-3	FS03	Total/NA	Solid	8015NM Prep	
890-3926-4	FS04	Total/NA	Solid	8015NM Prep	
890-3926-5	SW01	Total/NA	Solid	8015NM Prep	
890-3926-6	SW02	Total/NA	Solid	8015NM Prep	
MB 880-45267/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-45267/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-45267/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3922-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3922-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: Buckeye EVG 43-01

Job ID: 890-3926-1
SDG: 03D2057035

GC Semi VOA

Analysis Batch: 45445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3926-1	FS01	Total/NA	Solid	8015B NM	45267
890-3926-2	FS02	Total/NA	Solid	8015B NM	45267
890-3926-3	FS03	Total/NA	Solid	8015B NM	45267
890-3926-4	FS04	Total/NA	Solid	8015B NM	45267
890-3926-5	SW01	Total/NA	Solid	8015B NM	45267
890-3926-6	SW02	Total/NA	Solid	8015B NM	45267
MB 880-45267/1-A	Method Blank	Total/NA	Solid	8015B NM	45267
LCS 880-45267/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	45267
LCSD 880-45267/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	45267
890-3922-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	45267
890-3922-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	45267

Analysis Batch: 45491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3926-1	FS01	Total/NA	Solid	8015 NM	
890-3926-2	FS02	Total/NA	Solid	8015 NM	
890-3926-3	FS03	Total/NA	Solid	8015 NM	
890-3926-4	FS04	Total/NA	Solid	8015 NM	
890-3926-5	SW01	Total/NA	Solid	8015 NM	
890-3926-6	SW02	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 44792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3926-1	FS01	Soluble	Solid	DI Leach	
890-3926-2	FS02	Soluble	Solid	DI Leach	
890-3926-3	FS03	Soluble	Solid	DI Leach	
890-3926-4	FS04	Soluble	Solid	DI Leach	
890-3926-5	SW01	Soluble	Solid	DI Leach	
890-3926-6	SW02	Soluble	Solid	DI Leach	
MB 880-44792/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-44792/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-44792/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3926-1 MS	FS01	Soluble	Solid	DI Leach	
890-3926-1 MSD	FS01	Soluble	Solid	DI Leach	

Analysis Batch: 44926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3926-1	FS01	Soluble	Solid	300.0	44792
890-3926-2	FS02	Soluble	Solid	300.0	44792
890-3926-3	FS03	Soluble	Solid	300.0	44792
890-3926-4	FS04	Soluble	Solid	300.0	44792
890-3926-5	SW01	Soluble	Solid	300.0	44792
890-3926-6	SW02	Soluble	Solid	300.0	44792
MB 880-44792/1-A	Method Blank	Soluble	Solid	300.0	44792
LCS 880-44792/2-A	Lab Control Sample	Soluble	Solid	300.0	44792
LCSD 880-44792/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	44792
890-3926-1 MS	FS01	Soluble	Solid	300.0	44792
890-3926-1 MSD	FS01	Soluble	Solid	300.0	44792

Lab Chronicle

Client: Ensolum
Project/Site: Buckeye EVG 43-01

Job ID: 890-3926-1
SDG: 03D2057035

Client Sample ID: FS01
Date Collected: 01/20/23 12:10
Date Received: 01/23/23 16:24

Lab Sample ID: 890-3926-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	45266	02/02/23 13:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	45278	02/03/23 02:07	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			45344	02/03/23 10:22	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45491	02/05/23 09:18	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	45267	02/02/23 13:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	45445	02/04/23 14:30	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	44792	01/26/23 08:32	CH	EET MID
Soluble	Analysis	300.0		20			44926	01/27/23 20:44	CH	EET MID

Client Sample ID: FS02
Date Collected: 01/20/23 12:15
Date Received: 01/23/23 16:24

Lab Sample ID: 890-3926-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	45266	02/02/23 13:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	45278	02/03/23 02:33	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			45344	02/03/23 10:22	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45491	02/05/23 09:18	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	45267	02/02/23 13:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	45445	02/04/23 14:52	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	44792	01/26/23 08:32	CH	EET MID
Soluble	Analysis	300.0		5			44926	01/27/23 21:03	CH	EET MID

Client Sample ID: FS03
Date Collected: 01/20/23 12:20
Date Received: 01/23/23 16:24

Lab Sample ID: 890-3926-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	45266	02/02/23 13:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	45278	02/03/23 02:59	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			45344	02/03/23 10:22	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45491	02/05/23 09:18	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	45267	02/02/23 13:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	45445	02/04/23 15:13	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	44792	01/26/23 08:32	CH	EET MID
Soluble	Analysis	300.0		5			44926	01/27/23 21:09	CH	EET MID

Client Sample ID: FS04
Date Collected: 01/20/23 12:25
Date Received: 01/23/23 16:24

Lab Sample ID: 890-3926-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	45266	02/02/23 13:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	45278	02/03/23 03:25	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			45344	02/03/23 10:22	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Buckeye EVG 43-01

Job ID: 890-3926-1
SDG: 03D2057035

Client Sample ID: FS04
Date Collected: 01/20/23 12:25
Date Received: 01/23/23 16:24

Lab Sample ID: 890-3926-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			45491	02/05/23 09:18	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	45267	02/02/23 13:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	45445	02/04/23 15:34	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	44792	01/26/23 08:32	CH	EET MID
Soluble	Analysis	300.0		1			44926	01/27/23 21:27	CH	EET MID

Client Sample ID: SW01
Date Collected: 01/20/23 12:45
Date Received: 01/23/23 16:24

Lab Sample ID: 890-3926-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	45266	02/02/23 13:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	45278	02/03/23 03:51	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			45344	02/03/23 10:22	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45491	02/05/23 09:18	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	45267	02/02/23 13:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	45445	02/04/23 16:17	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	44792	01/26/23 08:32	CH	EET MID
Soluble	Analysis	300.0		10			44926	01/27/23 21:34	CH	EET MID

Client Sample ID: SW02
Date Collected: 01/20/23 12:50
Date Received: 01/23/23 16:24

Lab Sample ID: 890-3926-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	45266	02/02/23 13:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	45278	02/03/23 04:17	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			45344	02/03/23 10:22	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45491	02/05/23 09:18	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	45267	02/02/23 13:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	45445	02/04/23 16:38	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	44792	01/26/23 08:32	CH	EET MID
Soluble	Analysis	300.0		1			44926	01/27/23 21:40	CH	EET MID

Laboratory References:
EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Buckeye EVG 43-01

Job ID: 890-3926-1
SDG: 03D2057035

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: Buckeye EVG 43-01

Job ID: 890-3926-1
SDG: 03D2057035

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International
EPA = US Environmental Protection Agency
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Ensolum
Project/Site: Buckeye EVG 43-01

Job ID: 890-3926-1
SDG: 03D2057035

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3926-1	FS01	Solid	01/20/23 12:10	01/23/23 16:24	3'
890-3926-2	FS02	Solid	01/20/23 12:15	01/23/23 16:24	0.5'
890-3926-3	FS03	Solid	01/20/23 12:20	01/23/23 16:24	3'
890-3926-4	FS04	Solid	01/20/23 12:25	01/23/23 16:24	0.5'
890-3926-5	SW01	Solid	01/20/23 12:45	01/23/23 16:24	0-3'
890-3926-6	SW02	Solid	01/20/23 12:50	01/23/23 16:24	0-3'

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	817-683-2503	Email:	kjennings@ensolum.com, hgreen@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	EVGSAU 2410-001	Turn Around	
Project Number:	03D2057035	☑ Routine ☐ Rush	
Project Location:	Lea	Due Date:	
Sampler's Name:	Peter Van Patten	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	TAM 007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	2.2
Total Containers:		Corrected Temperature:	2.0

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2SO_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
FS01	Soil	1/20/2023	1210	3'	Comp	1		x	x	x	
FS02	Soil	1/20/2023	1215	0.5'	Comp	1		x	x	x	
FS03	Soil	1/20/2023	1220	3'	Comp	1		x	x	x	
FS04	Soil	1/20/2023	1225	0.5'	Comp	1		x	x	x	
SW01	Soil	1/20/2023	1245	0'-3'	Comp	1		x	x	x	
SW02	Soil	1/20/2023	1250	0'-3'	Comp	1		x	x	x	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Peter Van Patten	Amanda Stuff	1-23-23 1629			
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3926-1
SDG Number: 03D2057035

Login Number: 3926
List Number: 1
Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3926-1
SDG Number: 03D2057035

Login Number: 3926
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 01/25/23 12:13 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

ENSOLUM

APPENDIX E

NMOCD Sampling Notifications

From: Nobui, Jennifer, EMNRD
To: Kalei Jennings
Cc: Bratcher, Michael, EMNRD; Hamlet, Robert, EMNRD; Harimon, Jocelyn, EMNRD
Subject: FW: [EXTERNAL] Extension Request- EVGSAU 2418-001 (Incident Number NAPP2231954757)
Date: Tuesday, February 7, 2023 4:49:53 PM
Attachments: image001.png
image002.png
image003.png
image004.png
image005.jpg

[**EXTERNAL EMAIL**]

Hello Kalei

OCD approves your request for a 90-day extension to May 08, 2023 to submit a remediation plan or closure report. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thanks,
Jennifer Nobui

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Tuesday, February 7, 2023 3:33 PM
To: Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: FW: [EXTERNAL] Extension Request- EVGSAU 2418-001 (Incident Number NAPP2231954757)

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
http:// **www.emnrd.nm.gov**

From: Kalei Jennings <kjennings@ensolum.com>
Sent: Tuesday, February 7, 2023 2:54 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Hadlie Green <hgreen@ensolum.com>; Josh Adams <jadams@ensolum.com>

Subject: [EXTERNAL] Extension Request- EVGSAU 2418-001 (Incident Number NAPP2231954757)

To Whom It May Concern,

EVGSAU 2418-001 (Incident Number NAPP2231954757)

Maverick Permian, LLC (Maverick) is requesting an extension for the current deadline of February 7, 2023, for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC for EVGSAU 2418-001 (Incident Number NAPP2231954757). The release was discovered on November 9, 2022, and initial site assessment activities have been completed. The release occurred on land owned by the State of New Mexico and a Right-of-Entry Request was submitted to the State on December 13, 2022, and the executed permit was not received until January 4, 2023. To complete additional remediation activities and submit a remediation work plan or closure report, Maverick requests a 90-day extension of this deadline until May 8, 2023.

Thank you,

Kalei Jennings
Senior Scientist
817-683-2503
Ensolum, LLC

From: Harimon, Jocelyn, EMNRD
To: Kalei Jennings
Subject: FW: [EXTERNAL] Maverick Permian - Sampling Notification (Week of 4/10/2023)
Date: Monday, April 10, 2023 11:03:23 AM
Attachments: image005.jpg
image006.png
image007.png
image008.png
image009.png

[**EXTERNAL EMAIL**]

Kalei,

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

JH

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
http:// **www.emnrd.nm.gov**

From: Enviro, OCD, EMNRD
Sent: Monday, April 10, 2023 10:02 AM
To: Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: FW: [EXTERNAL] Maverick Permian - Sampling Notification (Week of 4/10/2023)

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
http:// **www.emnrd.nm.gov**

From: Kalei Jennings <kjennings@ensolum.com>
Sent: Friday, April 7, 2023 1:13 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Subject: [EXTERNAL] Maverick Permian - Sampling Notification (Week of 4/10/2023)

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

All,

Maverick Permian, LLC (Maverick) plans to complete sampling activities at the following site the week of April 10, 2023.

- Grayburg Eumont Straw Battery/ NAPP2302036818
  - Sampling Date: 4/12/2023 & 4/13/2023
- MCA 254/ NAPP2302035947
  - Sampling Date: 4/12/2023 – 4/14/2023
- EVGSAU 2418-001 / NAPP2231954757
  - Sampling Date: 4/13/2023
- EVGSAU 2963-001/ NAPP2235371799
  - Sampling Date: 4/14/2023
- MCA 151 / NAPP2235377174
  - Sampling Date: 4/14/2023
- Leamex 018/ NAPP2234158858
  - Sampling Date: 4/13/2023 & 4/14/2023

Thank you,

Kalei Jennings
Senior Scientist
817-683-2503
Ensolum, LLC

From: Enviro, OCD, EMNRD
To: Kalei Jennings
Cc: Bratcher, Michael, EMNRD; Nobui, Jennifer, EMNRD
Subject: RE: [EXTERNAL] Maverick Permian - Sampling Notification (Week of 4/3/2023)
Date: Tuesday, April 4, 2023 9:16:29 AM
Attachments: image005.jpg
image006.png
image007.png
image008.png
image009.png

[**EXTERNAL EMAIL**]

Kalei,

Please be aware that notification requirements are **two business days**, per rule. You may proceed on your schedule. This, and all correspondence, should be included in the closure report to insure inclusion in the project file.

JH

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
http:// **www.emnrd.nm.gov**

From: Kalei Jennings <kjennings@ensolum.com>
Sent: Tuesday, April 4, 2023 8:11 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Subject: [EXTERNAL] Maverick Permian - Sampling Notification (Week of 4/3/2023)

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

All,

Maverick Permian, LLC (Maverick) plans to complete sampling activities at the following site the week of April 3, 2023.

- Grayburg Eumont Straw Battery/ NAPP2302036818
  - Sampling Date: 4/5/2023 & 4/6/2023
- Ruby Federal / NAPP2231448981

    - Sampling Date: 4/5 /2023 2023
- EVGSAU 2418-001 / NAPP2231954757
    - Sampling Date: 4/6/2023
- EVGSAU 2963-001/ NAPP2235371799
    - Sampling Date: 4/7/2023
- MCA 351/ NAPP2302034681
    - Sampling Date: 4/7/2023

Thank you,

Kalei Jennings
Senior Scientist
817-683-2503
Ensolum, LLC

From: Enviro, OCD, EMNRD
To: Kalei Jennings
Cc: Bratcher, Michael, EMNRD; Nobui, Jennifer, EMNRD
Subject: RE: [EXTERNAL] Maverick Permian - Sampling Notification (Week of 5/15/2023)
Date: Friday, May 12, 2023 5:08:14 PM
Attachments: image005.jpg
image006.png
image007.png
image008.png
image009.png

[**EXTERNAL EMAIL**]

Kalei,

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

JH

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
http:// **www.emnrd.nm.gov**

From: Kalei Jennings <kjennings@ensolum.com>
Sent: Friday, May 12, 2023 2:47 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Subject: [EXTERNAL] Maverick Permian - Sampling Notification (Week of 5/15/2023)

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

All,

Maverick Permian, LLC (Maverick) plans to complete sampling activities at the following site the week of May 15, 2023.

- EVGSAU 2418-001 / NAPP2231954757
  - Sampling Date: 5/17/2023 & 5/18/2023
- EVGSAU 2963-001/ NAPP2235371799
  - Sampling Date: 5/17/2023 & 5/18/2023

- MCA 400 / NAPP2305455050
    - Sampling Date: 5/17/2023
- EVGSAU 2437-001/ NAPP2303273838
    - Sampling Date: 5/17/2023 & 5/18/2023

Thank you,

Kalei Jennings
Senior Scientist
817-683-2503
Ensolum, LLC

From: Enviro, OCD, EMNRD
To: Kalei Jennings
Cc: Bratcher, Michael, EMNRD; Nobui, Jennifer, EMNRD
Subject: RE: [EXTERNAL] Maverick- Sampling Notification (Week of 01/16/2023)
Date: Thursday, January 12, 2023 9:33:41 AM
Attachments: image005.jpg
image006.png
image007.png
image008.png
image009.png

[**EXTERNAL EMAIL**]

Kalei,

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

JH

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
http:// **www.emnrd.nm.gov**

From: Kalei Jennings <kjennings@ensolum.com>
Sent: Wednesday, January 11, 2023 5:25 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Subject: [EXTERNAL] Maverick- Sampling Notification (Week of 01/16/2023)

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

All,

Maverick Natural Resources (Maverick) plans to complete final sampling activities at the following sites the week of January 16, 2023.

- Oxy State F-1 / NAPP2235375291
- Jalmat 188 / NAPP2235373931
- Jalmat 170 / NAPP2233946698
- MCA 151 / NAPP2235377174

- EVGSAU 2418-001 / NAPP2231954757
- Buckeye 43-01 / NAPP2230752440
- Leamex 018 / NAPP2234158858
-

Thank you,

Kalei Jennings
Senior Scientist
817-683-2503
Ensolum, LLC

From: Enviro, OCD, EMNRD
To: Kalei Jennings
Cc: Bratcher, Michael, EMNRD; Nobui, Jennifer, EMNRD
Subject: RE: [EXTERNAL] Maverick- Sampling Notification (Week of 12/12/2022)
Date: Thursday, December 8, 2022 9:21:58 AM
Attachments: image005.jpg
image006.png
image007.png
image008.png
image009.png

[**EXTERNAL EMAIL**]

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
http:// **www.emnrd.nm.gov**

From: Kalei Jennings <kjennings@ensolum.com>
Sent: Wednesday, December 7, 2022 4:46 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Subject: [EXTERNAL] Maverick- Sampling Notification (Week of 12/12/2022)

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

All,

Maverick Natural Resources (Maverick) plans to complete final sampling activities at the following sites the week of December 12, 2022.

- Jalmat 170/ NAPP2233946698
- SEMU Eumont 117 / NAPP2231946665
- EVGSAU 2418-001 / NAPP2231954757

Thank you,

Kalei Jennings
Senior Scientist
817-683-2503
Ensolum, LLC

From: Nobui, Jennifer, EMNRD
To: Kalei Jennings
Cc: Bratcher, Michael, EMNRD; Harimon, Jocelyn, EMNRD; Hamlet, Robert, EMNRD
Subject: FW: [EXTERNAL] Extension Request- Buckeye Satellite 1 (EVGSAU 2418-001)- Incident Number NAPP2231954757
Date: Monday, May 8, 2023 4:26:28 PM
Attachments: image001.png
image002.png
image003.png
image004.png

[**EXTERNAL EMAIL**]

Hello Kalei

OCD approves your 90-day extension request to August 6, 2023 to submit a remediation plan or closure report. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thanks,
Jennifer Nobui

From: Kalei Jennings <kjennings@ensolum.com>
Sent: Friday, May 5, 2023 12:55 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Subject: [EXTERNAL] Extension Request- Buckeye Satellite 1 (EVGSAU 2418-001)- Incident Number NAPP2231954757

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

To Whom It May Concern,

Buckeye Satellite 1 (EVGSAU 2418-001)- Incident Number NAPP2231954757

Maverick Permian, LLC (Maverick) is requesting an extension for the current deadline of May 8, 2023, for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC for Buckeye Satellite 1 (EVGSAU 2418-001)- Incident Number NAPP2231954757. The release was discovered on November 9, 2022, and initial site assessment activities have been completed. The release occurred on land owned by the State of New Mexico and a Right-of-Entry Request was submitted to the State on January 13, 2023, and the executed permit was recently received. To complete additional remediation activities and submit a remediation work plan or closure report, Maverick requests a 90-day extension of this deadline until August 6, 2023.

Thank you,

Kalei Jennings
Senior Scientist
817-683-2503
Ensolum, LLC

ENSOLUM

APPENDIX F

Final C141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NAPP2231954757
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Maverick Permian, LLC	OGRID: 331199
Contact Name: Bryce Wagoner	Contact Telephone: 928-241-1862
Contact email: Bryce.Wagoner@mavresources.com	Incident # *(assigned by OCD)* NAPP2231954757
Contact mailing address: 1410 NW County Road Hobbs, NM 88240	

Location of Release Source

Latitude 32.81660 Longitude -103.50212
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: EVGSAU 2418-001	Site Type
Date Release Discovered November 9, 2022	API# *(if applicable)* 30-025-02085

Unit Letter	Section	Township	Range	County
M	19	17S	35E	Lea

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☒ Crude Oil	Volume Released (bbls) 0.1 bbl	Volume Recovered (bbls) 0 bbls
☒ Produced Water	Volume Released (bbls) 7.3 bbls	Volume Recovered (bbls) 0.1 bbls
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☒ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
The release was caused by a flowline rupture resulting in minor release. The release occurred off pad. The source of the release has been stopped and the impacted area has been secured. Initial response and removal of saturated soil from the release area has been completed.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2231954757
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

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.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name: Bryce Wagoner Title: Permian HSE Specialist II

Signature: Date: 11/15/2022

email: Bryce.Wagoner@mavresources.com Telephone: 928-241-1862

OCD Only

Received by: Jocelyn Harimon Date: 11/15/2022

NAPP2231954757

Pooled Fluids on the Surface										
	Length (ft.)	Width (ft.)	Depth (in)	# of Boundaries *edges of pool where depth is 0. don't count shared boundaries*	Oil-Water Ratio (%)	Pooled Area (ft^2)	Estimated Average Depth (ft.)	Pooled Volume (bbl.)	Volume of Oil in Subsurface (bbl.)	Volume of Water in Subsurface (bbl.)
Rectangle A					0.01	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle B					0.01	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle C						0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle D						0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle E						0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
							Total Volume (bbls):	**0.00**	**0.00**	**0.00**

Subsurface Fluids										
	Length (ft.)	Width (ft.)	Depth (in.)	Saturation (%) **10% in consolidated sediments after rain to 50% in sand with no precipitation*	Oil-Water Ratio (%)	Area (ft^2)	Volume (bbl.)	Estimated Volume in Subsurface (bbl.)	Volume of Oil in Subsurface (bbl.)	Volume of Water in Subsurface (bbl.)
Rectangle A	40.0	13.0	12.0	0.1	0.01	520.0	92.6	7.4	0.07	7.3
Rectangle B				0.1	0.01	0.0	0.0	0.0	0.00	0.0
Rectangle C				0.1	0.01	0.0	0.0	0.0	0.00	0.0
Rectangle D				0.1	0.01	0.0	0.0	0.0	0.00	0.0
Rectangle E				0.1	0.01	0.0	0.0	0.0	0.00	0.0
Rectangle F						0.0	0.0	0.0	0.00	0.0
Rectangle G						0.0	0.0	0.0	0.00	0.0
Rectangle H						0.0	0.0	0.0	0.00	0.0
Rectangle I						0.0	0.0	0.0	0.00	0.0
Rectangle J						0.0	0.0	0.0	0.00	0.0
							Total Volume (bbls):	**7.40**	**0.07**	**7.33**

TOTAL RELEASE VOLUME (bbls):	**7.4**

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Operator: Maverick Permian LLC 1111 Bagby Street Suite 1600 Houston, TX 77002	OGRID: 331199
	Action Number: 159068
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	11/15/2022

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2231954757
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	51-100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☒ Yes ☐ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☒ Yes ☐ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☒ Yes ☐ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ No

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

Characterization Report Checklist: ***Each of the following items must be included in the report.***

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2231954757
District RP	
Facility ID	
Application ID	

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

Printed Name: Bryce Wagoner Title: Permian HSE Specialist II

Signature: Date:

email: Bryce.Wagoner@mavresources.com Telephone: 928-241-1862

OCD Only

Received by: Shelly Wells Date: 7/7/2023

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2231954757
District RP	
Facility ID	
Application ID	

Closure

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

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

☑ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☑ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

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

☑ Description of remediation activities

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.

Printed Name: Bryce Wagoner Title: Permian HSE Specialist II

Signature: Date:

email: Bryce.Wagoner@mavresources.com Telephone: 928-241-1862

OCD Only

Received by: Shelly Wells Date: 7/7/23

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Nelson Velez Date: 09/29/2023

Printed Name: Nelson Velez Title: Environmental Specialist - Adv

ENSOLUM

APPENDIX G

NMSLO Reclamation Plan

Reclamation Plan

The release occurred in a pasture area and as such, reclamation requirements set forth in 19.15.29.13.D (1) NMAC for the top 4 feet of areas that will be reclaimed following remediation were applied.

The following Reclamation Plan addresses reclamation of the off-pad excavation area and has been developed through review and application of the *Revegetation Guidelines Handbook for Southeastern New Mexico* – Version 1-1, authored by NMSLO and dated 2018, and 19.2.100.67 NMAC – *Surface Reclamation on State Oil and Gas Leases*:

- The excavation will be backfilled with locally sourced caliche and topsoil to match surrounding grade. A minimum of 1-foot of topsoil will be placed on top of the caliche to support vegetative growth within the disturbed area;
- Soil in the vicinity of the release in the pasture will be assessed for the proper application of *Table 3 - Revegetation Plans, Codes, and Soil Types for Southeastern New Mexico*;
- The backfilled areas will be seeded utilizing a weed-free seed mix designed listed in the table below;

Common Name and Preferred Variety	Scientific Name	PLS Per Acre
Annual Quick-cover Grass		
Oats	*Avena sativa*	1.00
Cool Season Grass		
Western Wheatgrass	*Agropyron smithii*	2.50
Warm-Season Grass		
Black or Blue Grama	*Boutela gracilis var. Alma*	1.50
Little Bluestem	*Schizachyrium scoparium*	0.50
Sand Dropseed	*Sporobolus cryptandrus*	0.50
Sand Bluestem	*Andropogon hallii*	1.00
Indiangrass	*Sorghastrum nutans*	0.50
Sideoats Grama	*Bouteloua curtipendula var. Vaughn*	2.00
Wildflowers/ Forbs		
White prairie clover	*Dalea candida*	0.10
Scarlet globemallow	*Sphaeralcea coccinea*	0.10
Chia Sage	*Salvia columbariae*	0.10
Annual sunflower	*Helianthus annuus*	0.10
Annual buckwheat	*Eriogonum annuum*	0.10

- The seed mixture will be distributed with one or more of the following methods: push broadcaster seed spreader, tractor operated broadcast seed spreader, and/or drill seeding based on Site conditions and contractor availability;
- Application of the seed mixture will be at a coverage of 10 pounds of seeds per acre of reclaimed pasture with distribution by a drilling method or 20 pounds of seeds per acre of reclaimed pasture with distribution by a broadcast method;

- Erosion control management is not anticipated since the proposed excavation area is relatively flat; however, in the event erosion control management is necessary to support vegetation growth and minimize erosion until the root structures take hold, the application of the following best management practices (BMPs) could potentially include:
    - Prompt revegetation with mulching and contouring the ground surface to limit surface water flow;
    - The placement of waddles in areas with a propensity for high run off rates;
    - Straw cover if high winds are anticipated to support moisture retention and limit wind from blowing seeds away before they have had time to germinate; and/or
    - Other erosional control best management practices (BMP) as necessary to support timely and healthy regrowth of vegetation in disturbed areas;
- Backfilling of the excavation will be scheduled and communicated with NMSLO prior to initiation;
- Seeding is anticipated to be completed in the Fall when temperatures and precipitation are most conducive for vegetation growth. In general, seeding should occur approximately one month after the last frost in the Spring up until approximately one month prior to the first fall frost. NMSLO has recognized the optimal time to seed is between July and early September, which will be the preferred timeframe for this Site;
- If seeding occurs outside of the 180 days approved in the current fully executed ROE Permit, a new ROE Permit will be executed prior to entering the pasture for reclamation activities;
- Annual inspections (at a minimum) will take place on the location until revegetation is consistent with local natural vegetation density. The Site will be inspected the following Fall to assess the success of regrowth. If necessary, an additional application of the NMSLO-approved pure live seed mixture will be applied as well as any needed BMPs will be installed to support growth and limit erosion; and
- Upon completion of revegetation, a copy of the C-103 submitted to NMOCD will also be submitted to NMSLO for final inspection and release.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
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District III
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Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 237144

CONDITIONS

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 237144
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	9/29/2023