ENSOLUM

July 11, 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: Remediation Work Plan
EVGSAU 2437-001
Incident Number NAPP2303273838
Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum) on behalf of Maverick Permian, LLC (Maverick), has prepared the following *Remediation Work Plan* (*Work Plan*) to document the site assessment and excavation activities completed to date and propose a work plan to address the historical impacted soil identified at the EVGSAU 2437-001 flow line release (Site). The following *Work Plan* proposes additional excavation of impacted soil and installation of a 20-mil impermeable liner in the floor of the excavation.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit P, Section 24, Township 17 South, Range 34 East, in Lea County, New Mexico (32.816832° N, -103.506018° W) and is associated with oil and gas exploration and production operations on New Mexico State Land.

On January 10, 2023, corrosion of a flow line resulted in the release of approximately 2.67 barrels (bbls) of crude oil and 6.23 bbls of produced water into the surrounding pasture. No fluids were recovered. The release occurred on the surface of a historical/reclaimed Phillips Petroleum well pad (API 30-025-27337). Maverick reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on January 19, 2023. The release was assigned Incident Number NAPP2303273838.

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 March 17, 2023. 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 (RE-6494) was fully executed by the NMSLO and received by Maverick on April 11, 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 CHARATERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess applicability of Table 1, 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 and 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geologic Survey (USGS) Well 324854103301101, located approximately 925 feet southeast of the Site. The groundwater well has a reported depth to groundwater of 76.7 feet bgs and a total depth of 226 feet bgs. All wells used for depth to groundwater determination are depicted on Figure 1 and the referenced well records are included in Appendix B.

The closest continuously flowing or significant watercourse to the Site is a dry playa, located approximately 825 feet east of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). The Site is less than 1,000 feet to a water well. Site receptors are identified on Figure 1.

Based on the results of the Site Characterization, the following NMOCD Table 1 Closure Criteria (Closure Criteria) apply:

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

SITE ASSESSMENT ACTIVITIES

On January 11, 2023, Ensolum personnel completed a Site visit to evaluate the release extent based on information provided on the Form C-141 and visual observations. Assessment soil samples SS01 through SS09 were collected within and around the release from a depth of approximately 0.5 feet bgs, to assess the extent of the release. The soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The release extent and assessment soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included 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 at or below 4 degrees Celsius (°C) under strict chain-of-custody procedures to Cardinal Laboratories (Cardinal) in Carlsbad, New Mexico, for analysis of the following contaminants 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 assessment soil samples SS01 through SS05, collected within the release extent, indicated that BTEX, TPH, and chloride concentrations exceeded the Site Closure Criteria. Laboratory analytical results for assessment samples SS06 through SS09, collected around the release extent, indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria, and successfully defined the lateral extent of the release. The laboratory analytical results are summarized on the attached Table 1.

Based on visible staining in the release area, elevated field screening results, and laboratory analytical results for assessment soil samples SS01 through SS05, delineation and excavation activities were warranted.

EXCAVATION AND DELINEATION ACTIVITIES

Between January 18, 2023, and May 8, 2023, Ensolum personnel were at the Site to oversee excavation activities based on visible staining in the release area and laboratory analytical results for the assessment soil samples SS01 through SS05. Excavation activities were performed using a backhoe and transport vehicles. To direct excavation activities, soil was field screened for VOCs and chloride using a PID and chloride Hach® chloride QuanTab® test strips, respectively. Field screening results were declining with excavation depth, as expected, until a depth of approximately 3 feet bgs. At a 3 feet bgs, field screening results increased and there were visible indications of a historical pit on the reclaimed Phillips Petroleum well pad (API 30-025-27337). Upon encountering the historical pit, vertical excavation was halted. The excavation proceeded laterally within the release extent until field screening results indicated that excavation sidewalls were compliant with the Site Closure Criteria.

Following lateral excavation of the impacted soil, 5-point composite soil samples were collected every 200 square feet from the 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 SW01 through SW04 were collected from the sidewalls of the excavation at depths ranging from the ground surface to 3 feet bgs. The excavation extent and soil sample locations were mapped utilizing a handheld GPS and are presented on Figure 2. Photographic documentation was completed during the excavation activities. A photographic log is included in Appendix C. The soil samples were collected, handled, and analyzed as described above.

The excavation measured approximately 5,000 square feet in areal extent. A total of approximately 600 cubic yards of impacted soil was excavated, transported, and properly disposed at R360 Environmental Solutions in Hobbs, New Mexico.

On June 16, 2023, Ensolum personnel returned to the Site to complete vertical delieation of the historical pit encountered in the floor of the open excavation. Potholes PH01 and PH02 were advanced via track mounted backhoe within the 3-foot deep excavation to depths of 11 feet and 7 feet bgs, respectively. Soil from the potholes was field screened at depths ranging from 4 feet to 11 feet bgs using a PID and chloride Hach® chloride QuanTab® test strips. Field screening results indicated elevated TPH and/or chloride concentrations in pothole PH01 at depths ranging from 4 feet to 10 feet bgs and in pothole PH02 at depths ranging from 4 feet to 6 feet bgs. Two delineation samples were submitted for laboratory analysis from each pothole (PH01A/PH01G and PH02A/PH02D) from depths ranging from 4 feet to 10 feet bgs. Field screening results and observations from the potholes were documented on lithologic/soil sampling logs, which are included in Appendix C. The pothole locations are presented on Figure 2.

Laboratory analytical results for excavation sidewall samples SW01 through SW04 indicated all COC concentrations were compliant with the Site Closure Criteria. Laboratory analytical results for pothole delineation samples PH01A and PH02A, collected at a depth of 4 feet bgs, indicated that TPH and/or chloride concentrations exceeded the Site Closure Criteria within the historical pit. Laboratory analytical results for pothole delineation samples PH01G and PH02D, collected at depths of 10 feet and 7 feet bgs, respectively, indicated all COC concentrations were compliant with the Site Closure Criteria and provided vertical delineation of impacted soil within the historical pit. The laboratory analytical results are summarized on the attached Table 1 and the complete laboratory analytical reports are included in Appendix D.

PROPOSED REMEDIATION WORK PLAN

Maverick excavated approximately 600 cubic yards of impacted soil associated with the January 10, 2023, flow line release. However, historical impacts associated with a buried historical pit on the reclaimed Phillips Petroleum well pad were encountered in the floor of the excavation. Analytical results from the delineation soil sampling indicated soil containing elevated TPH and/or chloride concentrations is present across the 5,000 square foot excavation area and extends from a depth of 3 feet bgs to a maximum depth of 10 feet bgs. The impacted soil below 3 feet bgs is associated with a historical pit containing large pieces of concrete and has a discernable visible difference between the recent release and historical impacts (photos 3 and 4). Maverick is not responsible for remediation of historical impacts on another Operators well pad; however, in order to be protective of the environment, Maverick proposes excavation of the top four feet of soil within the release footprint and installation of a liner in the floor of the open excavation to mitigate further impacts to the subsurface.

Maverick requests approval to complete the following remediation activities:

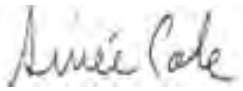
- Removal of an additional 1-foot of impacted soil from the floor of the excavation, resulting in a final excavation depth of 4 feet bgs.
- An additional estimated 185 cubic yards of impacted soil will be excavated and disposed of at a licensed disposal facility.
- Upon completion of excavation activities, a 20-mil impermeable liner will be installed over the historical pit to mitigate further impacts to the subsurface. The liner will be installed at 4 feet bgs within the open excavation.
- The excavation will be backfilled and recontoured to match pre-existing conditions. The disturbed pasture will be re-seeded with an approved seed mixture. A Reclamation Plan for the disturbed pasture area is included in Appendix F for NMSLO review.

Maverick will complete the excavation and liner installation activities within 90 days of the date of approval of this *Work Plan* by the NMOCD. NMOCD Notifications are included in Appendix G and the Form C-141 is included in Appendix H.

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

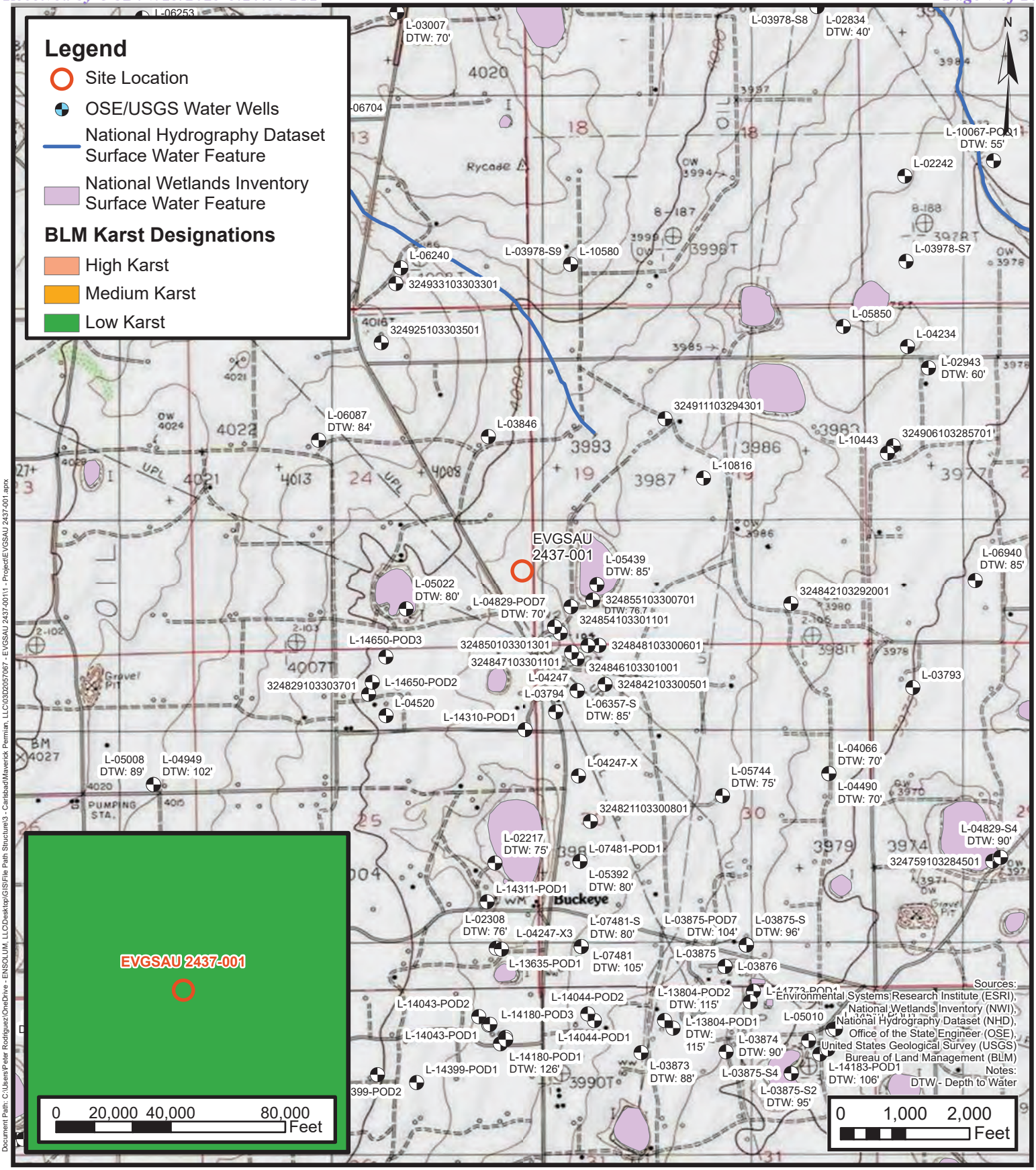
cc: Bryce Wagoner, Maverick Permian, LLC
New Mexico State Land Office

Appendices:

Figure 1	Site Receptor Map
Figure 2	Excavation and Delineation 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	Lithologic Soil Sampling Logs
Appendix E	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix F	NMSLO Reclamation Plan
Appendix G	NMOCD Notifications
Appendix H	Final C-141

ENSOLUM

FIGURES

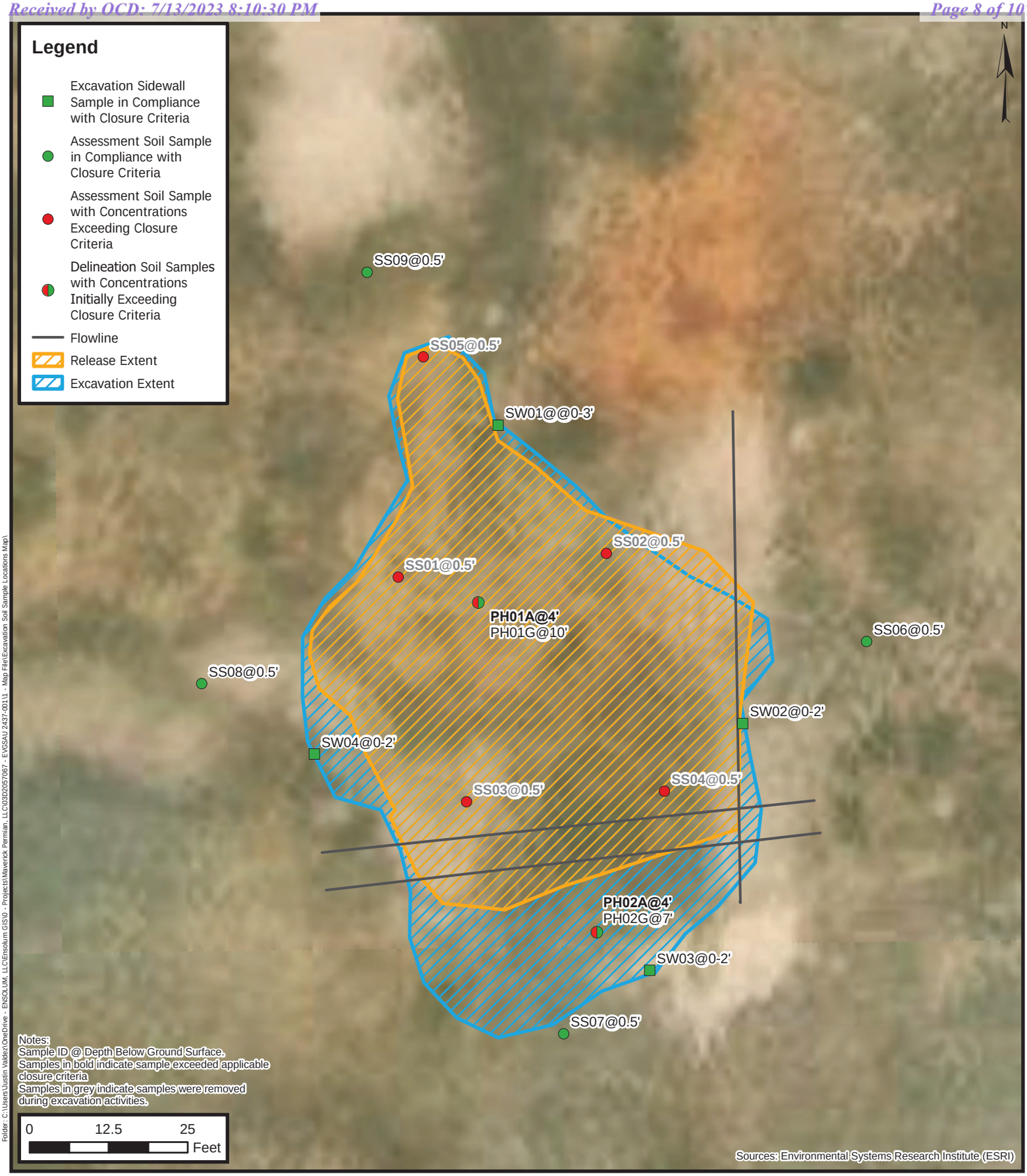


ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

Maverick Permian, LLC
EVGSAU 2437-001
Incident ID: NAPP2303273838
Unit: P, Section: 24, Township: 17S, Range 34E,
Lea County, New Mexico

FIGURE
1



Folder: C:\Users\Justin Valdez\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\Maverick Permian, LLC\03\20257067 - EVGSAU 2437-00111 - Map File\Excavation Soil Sample Locations Map\

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Excavation and Delineation Soil Sample Locations

Maverick Permian, LLC
EVGSAU 2437-001
Incident Number: NAPP2303273838
Unit P, Sec 24, T17S, R34E
Lea County, New Mexico

FIGURE 2

ENSOLUM

TABLES

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
EVGSAU 2437-001
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)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**100**	**600**
Assessment Soil Samples									
SS01	01/11/2023	0.5	**12.7**	**297**	4,660	32,100	4,570	**41,330**	**10,200**
SS02	01/11/2023	0.5	9.37	**289**	3,960	31,900	4,320	**40,180**	**8,290**
SS03	01/11/2023	0.5	**38.4**	**451**	3,390	12,000	1,730	**17,120**	**13,400**
SS04	01/11/2023	0.5	9.62	**260**	2,190	17,600	2,350	**22,140**	**13,600**
SS05	01/11/2023	0.5	0.152	0.825	7,210	<49.9	<49.9	**7,210**	49.1
SS06	01/11/2023	0.5	<0.0495	0.528	<50.0	50.1	<50.0	50.1	64.1
SS07	01/11/2023	0.5	<0.0497	<0.0994	<50.0	<50.0	<50.0	<50.0	347
SS08	01/11/2023	0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	234
SS09	06/01/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	48.0
Excavation Soil Samples									
SW01	06/05/2023	0-3	<0.050	0.300	<10.0	<10.0	<10.0	<10.0	80.0
SW02	06/05/2023	0-2	<0.050	0.300	<10.0	<10.0	<10.0	<10.0	64.0
SW03	06/05/2023	0-2	<0.050	0.300	<10.0	<10.0	<10.0	<10.0	80.0
SW04	06/14/2023	0-2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	48.0
Delineation Soil Samples									
PH01A	06/16/2023	4	<0.100	40.2	1,320	10,900	1,770	**13,990**	**17,200**
PH01G	06/16/2023	10	<0.050	<0.300	<10.0	<10.0	12.8	12.8	160
PH02A	06/16/2023	4	<0.050	3.87	44.3	399	57.2	**501**	**1,230**
PH02D	06/16/2023	7	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	400

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

TPH: Total Petroleum Hydrocarbon

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

Grey text represents samples that have been excavated

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

ENSOLUM

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: Maverick Natural Resources, LLC
Address: 1410 NW County Rd
City, State, Zip: Hobbs, NM 88240
Contact Person: Bryce Wagoner
Telephone #: (928) 241-1862
Email: Bryce.Wagoner@mavresources.com

Purpose of request: Request to remediate soil impacted by a release of crude oil and produced water at the Site. The soil will be excavated and transported to a licensed disposal facility. All remediation activities will comply with NMOCD spill rules (19.15.29 NMAC). We expect to complete activities within 3 weeks.

Section 24 Township 17S Range 34E Unit Letter P

Qtr/Qtr SE/SE County Lea

GPS Location (decimal degrees): Latitude 32.81668 W Longitude -103.50599 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: 4,162 sq. ft.

Estimated square footage of total disturbance: 63,275 sq. ft.

Reclamation Plan (*attach addl. sheet if necessary*) Maverick will backfill the excavation with clean backfill soil, including purchased topsoil for the upper 4 ft, if the excavation reaches that depth. The backfilled area will be contoured to match natural surroundings and seeded with an approved BLM seed mixture.

Driving directions from nearest state highway or road (*attach a map of the location*): From intersection of CR-50 (Buckeye Rd) and NM-238 N, head North on NM-238 N and continue for 0.72 miles. Turn right onto unnamed access road and continue for 0.32 miles. Turn left and follow to Site approximately 0.14 miles.

Lease number associated with the ROE request: B014040008

Well Name and/or Operator (if applicable): EVGSAU 2437-001

Time expected to complete remediation: 3 weeks

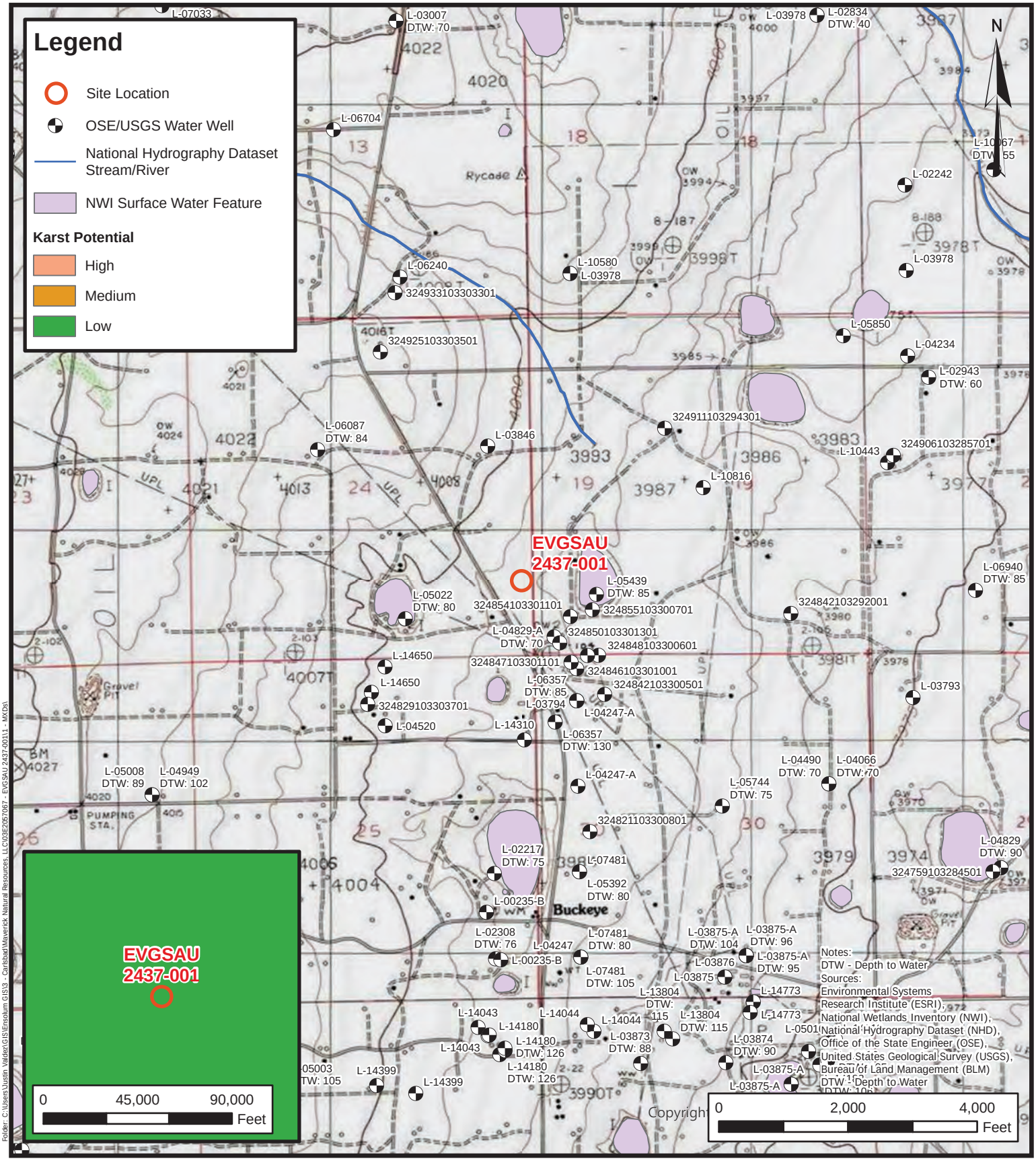
Personnel present on State Land crew and environmental oversight

Equipment & materials present on State Land Yes; backhoe or trackhoe and loader

$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.***

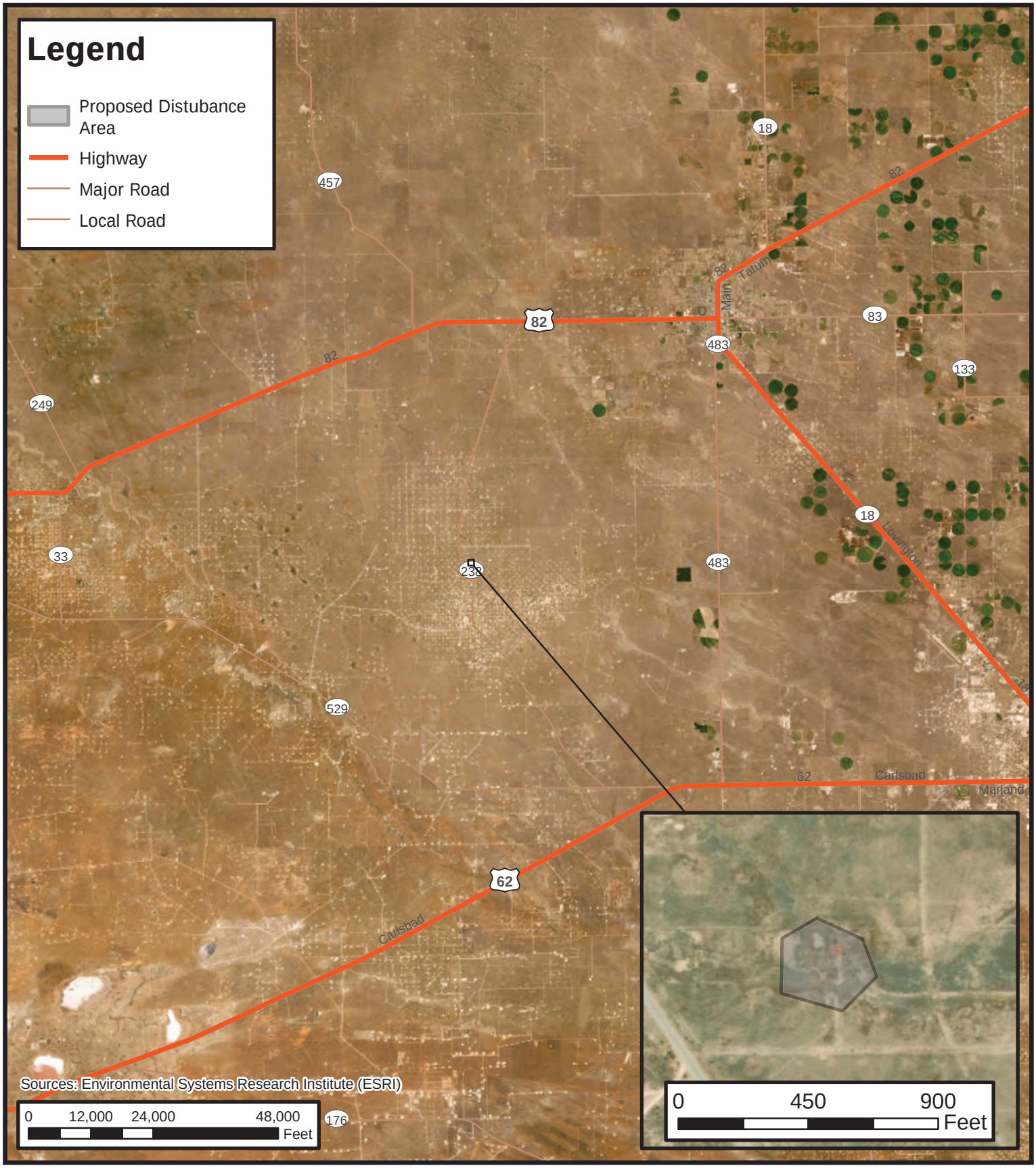


ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

Maverick Permian, LLC
EVGSAU 2437-001
Incident ID: NAPP2303273838
SESE, Sec 24, T17S, R34E
Lea County, New Mexico

FIGURE
1



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Right of Entry Site Map

Maverick Permian, LLC
EVGSAU 2437-001
Incident ID: NAPP2303273838
SESE, Sec 24, T17S, R34E
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

April 11, 2023

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

Attn: BryceWagoner

Re: Right-of-Entry Permit No.: **RE-6494/EVGSAU 2437-01**

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 – 6494

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 on the site of a produced water and crude oil spill (the "Premises"), **EVGSAU 2437-001,** Incident No. nAPP2303273838, and (2) conducting surface reclamation activities, including removal of equipment and debris, and any required remediation per 19.2.100.67 NMAC.

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

Section	Township	Range	Subdivision	County	Longitude/Latitude
24	17S	34E	SE4SE4	Lea	32.81668,-103.50599

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 affect.
H. Permittee shall be responsible for repair and restitution for damage to any Premises or improvements as a result of activities related to this 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 State Land: **Maverick Natural Resources personnel and contractors.**
L. Equipment and materials present on State Land: **Heavy equipment, trucks, and associated materials.**

5. SITE CONDITIONS

A. No surface disturbance, other than soil sampling, 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.

PERMITTEE SIGNATURE

DATE: 4/10/23

Bryce Wagoner

HSE Specialist

PERMITTEE NAME AND TITLE (PRINT)

SEAL:

BY: _____

Stephanie Garcia Richard
Commissioner of Public Lands

DATE: 04/11/2023

ENSOLUM

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	Twn	Rng	X	Y
	L 04829 POD7	3	3	3	19	17S	35E	640012	3631688*

Driller License:	99	**Driller Company:**	O.R. MUSSELWHITE WATER WELL SE		
Driller Name:	MUSSELWHITE, O.R. (LD)				
Drill Start Date:	03/25/1968	**Drill Finish Date:**	03/30/1968	**Plug Date:**	
Log File Date:	04/04/1968	**PCW Rcv Date:**	06/24/1968	**Source:**	Shallow
Pump Type:	SUBMER	**Pipe Discharge Size:**	200	**Estimated Yield:**	
Casing Size:	10.75	**Depth Well:**	210 feet	**Depth Water:**	70 feet

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

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

Click to hideNews Bulletins

- See the Water Data for the Nation Blog for the latest news and updates.

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 324854103301101

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 324854103301101 17S.35E.19.3332231

Lea County, New Mexico
Latitude 32°48'54", Longitude 103°30'11" NAD27
Land-surface elevation 3,992.5 feet above NGVD29
The depth of the well is 226 feet below land surface.
The depth of the hole is 226 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
1980-09-30		D	62610		3915.84	NGVD29	1	S			A
1980-09-30		D	62611		3917.35	NAVD88	1	S			A
1980-09-30		D	72019	76.66			1	S			A

Explanation

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

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Page Last Modified: 2023-01-16 15:04:20 EST
0.3 0.24 nadww01

ENSOLUM

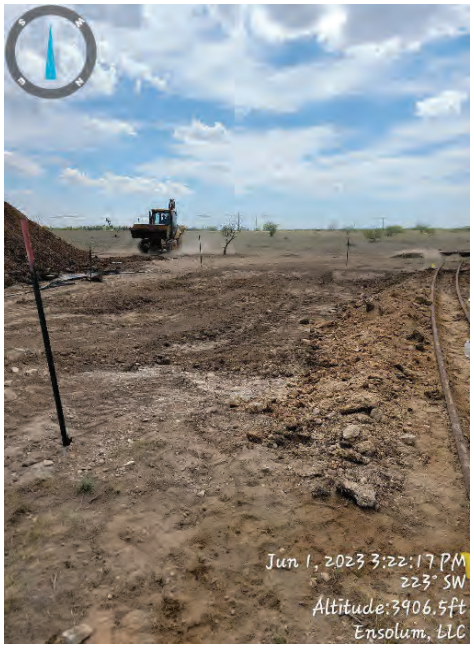
APPENDIX C

Photographic Log

ENSOLUM

Photographic Log
Maverick Natural Resources, LLC
EVGSAU 2437-001
NAPP2303273838

Photograph 1 Date: 01/11/23
Description: Soil staining in release footprint
View: Northeast



Photograph 2 Date: 06/01/23
Description: Excavation activities
View: Northwest

Photograph 3 Date: 06/01/23
Description: Historical pit

Photograph 4 Date: 06/01/23
Description: Historical pit

ENSOLUM

Photographic Log
Maverick Natural Resources, LLC
EVGSAU 2437-001
NAPP2303273838

Photograph 1 Date: 06/01/23
Description: Excavation activities

Photograph 2 Date: 06/01/23
Description: Excavation activities

Photograph 3 Date: 06/14/23
Description: Excavation activities

Photograph 4 Date: 06/14/23
Description: Excavation activities

ENSOLUM

APPENDIX D

Lithologic Soil Sampling Logs

ENSOLUM

	Sample Name: PH01	Date: 06/16/2023
	Site Name: EVGSAU-2437	
	Incident Number: NAPP2303273838	
	Job Number: : 03D2057067	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Julianna Falcomata	Method: Track hoe
32.816859, -103.506101	Hole Diameter: -	Total Depth: 11'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D						1		
D						2		
D						3		
D	10,236	1,339	Y	PH01A	4	4	SW	SAND: fine to medium grained, trace amounts medium sized gravel, poorly graded, heavily stained, strong hydrocarbon odor
D	7,392	1,653	Y	PH02B		5	SW	SAA
D	4,944	1,507	Y	PH02C		6	GM	GRAVEL: medium to fine grained, trace amounts of silty sand, poorly graded, heavily stained, strong hydrocarbon odor.
D	6,300	1,119	Y	PH02D		7	GM	GRAVEL: medium to fine grained, mod amounts of silty sand, poorly graded, heavily stained, strong hydrocarbon odor.
D	6,820	505	N	PH02E		8	GM	SAA
D	5,812	64.5	N	PH02F		9	GM	GRAVEL: medium to fine grained, mod amounts of silty sand, poorly graded, heavily stained, slight hydrocarbon odor.
D	2,934	36.7	N	PH02G		10	GM	SAA
D	246	1.9	N	PH02H	11	11	GM	GRAVEL: medium to fine grained, mod amounts of silty sand, poorly graded, no odor. **TD reached @ 11' bgs**

ENSOLUM

	Sample Name: PH02	Date: 06/16/2023
	Site Name: EVGSAU-2437	
	Incident Number: NAPP2303273838	
	Job Number: : 03D2057067	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Julianna Falcomata	Method: Track hoe
32.816715, -103.506042	Hole Diameter: -	Total Depth: 7'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						1		
						2		
						3		
D	1,360	451.5				4	SW	SAND: fine to medium grained, trace amounts of medium sized gravel, poorly graded, heavily stained, strong hydrocrbon ordor.
D	2,374	21.3				5	SW	SAA
D	1,080	3.6				6	GM	GRAVEL: medium to fine grained, trace amounts of silty sand, poorly graded, slight hydrocarbon odor.
D	420	0.2				7	GM	GRAVEL: medium to fine grained, mod amounts of silty sand, poorly graded, no odor.

ENSOLUM

APPENDIX E

Laboratory Analytical Reports & Chain of Custody Documentation

CARDINAL Laboratories

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

June 07, 2023

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: EVGSAU 2437 - 001

Enclosed are the results of analyses for samples received by the laboratory on 06/02/23 13:30.

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:	06/02/2023	Sampling Date:	06/01/2023
Reported:	06/07/2023	Sampling Type:	Soil
Project Name:	EVGSAU 2437 - 001	Sampling Condition:	Cool & Intact
Project Number:	03D2057067	Sample Received By:	Tamara Oldaker
Project Location:	32.81668-103.50599		

Sample ID: SS 05 A 1' (H232809-01)

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	06/05/2023	ND	1.90	94.8	2.00	4.10	
Toluene*	<0.050	0.050	06/05/2023	ND	1.98	98.9	2.00	2.24	
Ethylbenzene*	<0.050	0.050	06/05/2023	ND	1.88	93.8	2.00	3.25	
Total Xylenes*	<0.150	0.150	06/05/2023	ND	5.83	97.2	6.00	2.66	
Total BTEX	<0.300	0.300	06/05/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**288**	16.0	06/05/2023	ND	416	104	400	7.41	

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	06/05/2023	ND	158	79.1	200	0.728	
DRO >C10-C28*	<10.0	10.0	06/05/2023	ND	152	75.8	200	7.04	
EXT DRO >C28-C36	<10.0	10.0	06/05/2023	ND					

Surrogate: 1-Chlorooctane *67.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *66.0 %* *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:	06/02/2023	Sampling Date:	06/01/2023
Reported:	06/07/2023	Sampling Type:	Soil
Project Name:	EVGSAU 2437 - 001	Sampling Condition:	Cool & Intact
Project Number:	03D2057067	Sample Received By:	Tamara Oldaker
Project Location:	32.81668-103.50599		

Sample ID: SS 06 0.5' (H232809-02)

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	06/05/2023	ND	1.90	94.8	2.00	4.10	
Toluene*	<0.050	0.050	06/05/2023	ND	1.98	98.9	2.00	2.24	
Ethylbenzene*	<0.050	0.050	06/05/2023	ND	1.88	93.8	2.00	3.25	
Total Xylenes*	<0.150	0.150	06/05/2023	ND	5.83	97.2	6.00	2.66	
Total BTEX	<0.300	0.300	06/05/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	06/05/2023	ND	416	104	400	7.41	

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	06/05/2023	ND	158	79.1	200	0.728	
DRO >C10-C28*	<10.0	10.0	06/05/2023	ND	152	75.8	200	7.04	
EXT DRO >C28-C36	<10.0	10.0	06/05/2023	ND					

Surrogate: 1-Chlorooctane *76.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *72.1 %* *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: 3122 Nat'l Parks Hwy
City: Carlsbad State: NM Zip: 88220
Phone #: 817-683-2503 Fax #:
Project #: 03D2057067 Project Owner:
Project Name: EUCLID 2437-001
Project Location: 32.816684, -103.50599
Sampler Name: Juliana Falcomata

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

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL ✓	OTHER :	SAMPLING: DATE	TIME	BTEX	TPH	Chlorides
H232809																		
1	SS05A	1	C				X					X		06/01/23	1135	X	X	X
2	SS06	.5	C				X					X		↓	1140	↓	↓	↓

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: Falcomata Date: 6-2-23 Time: 1330 Received By: Tamara Oldaker
Relinquished By: Date: Time: Received By:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:
Observed Temp. °C 3.1 Corrected Temp. °C 2.5
Sample Condition Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No
CHECKED BY: (Initials) JO

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

Turnaround Time: Standard ☒ Rush ☐
Thermometer ID #113
Correction Factor -0.5°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 3.2 10/07/21

CARDINAL Laboratories

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

June 09, 2023

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: EVGSAU 2437 - 001

Enclosed are the results of analyses for samples received by the laboratory on 06/06/23 12:10.

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:	06/06/2023	Sampling Date:	06/05/2023
Reported:	06/09/2023	Sampling Type:	Soil
Project Name:	EVGSAU 2437 - 001	Sampling Condition:	Cool & Intact
Project Number:	03D2057067	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.81668-103.50599		

Sample ID: SW 01 @ 0-3' (H232861-01)

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	06/07/2023	ND	2.37	119	2.00	2.10	
Toluene*	<0.050	0.050	06/07/2023	ND	2.32	116	2.00	1.75	
Ethylbenzene*	<0.050	0.050	06/07/2023	ND	2.28	114	2.00	1.46	
Total Xylenes*	<0.150	0.150	06/07/2023	ND	6.88	115	6.00	0.746	
Total BTEX	<0.300	0.300	06/07/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	06/07/2023	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	06/09/2023	ND	176	87.9	200	18.8	
DRO >C10-C28*	<10.0	10.0	06/09/2023	ND	171	85.7	200	22.1	
EXT DRO >C28-C36	<10.0	10.0	06/09/2023	ND					

Surrogate: 1-Chlorooctane *64.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *63.1 %* *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:	06/06/2023	Sampling Date:	06/05/2023
Reported:	06/09/2023	Sampling Type:	Soil
Project Name:	EVGSAU 2437 - 001	Sampling Condition:	Cool & Intact
Project Number:	03D2057067	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.81668-103.50599		

Sample ID: SW 02 @ 0-2' (H232861-02)

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	06/07/2023	ND	2.37	119	2.00	2.10	
Toluene*	<0.050	0.050	06/07/2023	ND	2.32	116	2.00	1.75	
Ethylbenzene*	<0.050	0.050	06/07/2023	ND	2.28	114	2.00	1.46	
Total Xylenes*	<0.150	0.150	06/07/2023	ND	6.88	115	6.00	0.746	
Total BTEX	<0.300	0.300	06/07/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	06/07/2023	ND	448	112	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	06/09/2023	ND	176	87.9	200	18.8	
DRO >C10-C28*	<10.0	10.0	06/09/2023	ND	171	85.7	200	22.1	
EXT DRO >C28-C36	<10.0	10.0	06/09/2023	ND					

Surrogate: 1-Chlorooctane *61.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *58.5 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	06/06/2023	Sampling Date:	06/05/2023
Reported:	06/09/2023	Sampling Type:	Soil
Project Name:	EVGSAU 2437 - 001	Sampling Condition:	Cool & Intact
Project Number:	03D2057067	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.81668-103.50599		

Sample ID: SW 03 @ 0-2' (H232861-03)

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	06/07/2023	ND	2.37	119	2.00	2.10	
Toluene*	<0.050	0.050	06/07/2023	ND	2.32	116	2.00	1.75	
Ethylbenzene*	<0.050	0.050	06/07/2023	ND	2.28	114	2.00	1.46	
Total Xylenes*	<0.150	0.150	06/07/2023	ND	6.88	115	6.00	0.746	
Total BTEX	<0.300	0.300	06/07/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	06/07/2023	ND	448	112	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	06/07/2023	ND	176	87.9	200	18.8	
DRO >C10-C28*	**112**	10.0	06/07/2023	ND	171	85.7	200	22.1	
EXT DRO >C28-C36	**29.6**	10.0	06/07/2023	ND					

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

Surrogate: 1-Chlorooctadecane *104 %* *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:	06/06/2023	Sampling Date:	06/05/2023
Reported:	06/09/2023	Sampling Type:	Soil
Project Name:	EVGSAU 2437 - 001	Sampling Condition:	Cool & Intact
Project Number:	03D2057067	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.81668-103.50599		

Sample ID: SW 04 @ 0-1' (H232861-04)

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	06/07/2023	ND	2.37	119	2.00	2.10	
Toluene*	<0.050	0.050	06/07/2023	ND	2.32	116	2.00	1.75	
Ethylbenzene*	<0.050	0.050	06/07/2023	ND	2.28	114	2.00	1.46	
Total Xylenes*	<0.150	0.150	06/07/2023	ND	6.88	115	6.00	0.746	
Total BTEX	<0.300	0.300	06/07/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	06/07/2023	ND	448	112	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	06/07/2023	ND	176	87.9	200	18.8	
DRO >C10-C28*	<10.0	10.0	06/07/2023	ND	171	85.7	200	22.1	
EXT DRO >C28-C36	<10.0	10.0	06/07/2023	ND					

Surrogate: 1-Chlorooctane *94.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *89.4 %* *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

Notes and Definitions

QR-04	The RPD for the BS/BSD was outside of historical limits.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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:	Haley Jennings
Address:	3122 Nat'l Parks Hwy
City:	Carlsbad, State: NM Zip: 88220
Phone #:	817-683-2503 Fax #:
Project #:	03D2057067 Project Owner: Maverick
Project Name:	EVGSAU 2437-001
Project Location:	(32.81668, -103.50599)
Sampler Name:	Julianna Falcomata

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
H232861-1	SW01 @ 0-3'	C	1			X					X		6/5/23	1015	X	X	X
2	SW02 @ 0-2'													1020			
3	SW03 @ 0-2'													1025			
4	SW04 @ 0-1'													1030			

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: 6-6-23	Received By:	
Julianna Falcomata	Time: 1210		
Relinquished By:	Date:	Received By:	
	Time:		

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

Delivered By: (Circle One)	Observed Temp. °C 2.1	Sample Condition Cool: ☑ Yes ☐ No	Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:	Corrected Temp. °C 1.5			

Turnaround Time: Standard ☒ Rush ☐
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

July 06, 2023

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: EVGSAU 2437 - 001

Enclosed are the results of analyses for samples received by the laboratory on 06/14/23 12:24.

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

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

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

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

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: EVGSAU 2437 - 001 Project Number: 03D2057067 Project Manager: KALEI JENNINGS Fax To:	Reported: 06-Jul-23 10:57

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SW 04 @ 0-2'	H233052-01	Soil	14-Jun-23 11:00	14-Jun-23 12:24

07/06/23 - Client changed the sample ID (see COC). This is the revised report and will replace the one sent on 06/16/23.

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 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: EVGSAU 2437 - 001 Project Number: 03D2057067 Project Manager: KALEI JENNINGS Fax To:	Reported: 06-Jul-23 10:57

SW 04 @ 0-2'

H233052-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**48.0**		16.0	mg/kg	4	3061428	AC	14-Jun-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	3061504	JH/	16-Jun-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3061504	JH/	16-Jun-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3061504	JH/	16-Jun-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3061504	JH/	16-Jun-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3061504	JH/	16-Jun-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*110 %*	*71.5-134*		*3061504*	JH/	*16-Jun-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	3061424	MS	15-Jun-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3061424	MS	15-Jun-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3061424	MS	15-Jun-23	8015B	
Surrogate: 1-Chlorooctane			*82.9 %*	*48.2-134*		*3061424*	MS	*15-Jun-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*85.7 %*	*49.1-148*		*3061424*	MS	*15-Jun-23*	*8015B*	

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 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: EVGSAU 2437 - 001 Project Number: 03D2057067 Project Manager: KALEI JENNINGS Fax To:	Reported: 06-Jul-23 10:57

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3061428 - 1:4 DI Water										
Blank (3061428-BLK1)				Prepared & Analyzed: 14-Jun-23						
Chloride	ND	16.0	mg/kg							
LCS (3061428-BS1)				Prepared & Analyzed: 14-Jun-23						
Chloride	416	16.0	mg/kg	400		104	80-120			
LCS Dup (3061428-BSD1)				Prepared & Analyzed: 14-Jun-23						
Chloride	448	16.0	mg/kg	400		112	80-120	7.41	20	

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 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: EVGSAU 2437 - 001 Project Number: 03D2057067 Project Manager: KALEI JENNINGS Fax To:	Reported: 06-Jul-23 10:57

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3061504 - Volatiles										
Blank (3061504-BLK1)				Prepared & Analyzed: 15-Jun-23						
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	*0.0540*		mg/kg	*0.0500*		*108*	*71.5-134*			
LCS (3061504-BS1)				Prepared & Analyzed: 15-Jun-23						
Benzene	2.23	0.050	mg/kg	2.00		111	82.8-130			
Toluene	2.21	0.050	mg/kg	2.00		110	86-128			
Ethylbenzene	2.21	0.050	mg/kg	2.00		111	85.9-128			
m,p-Xylene	4.37	0.100	mg/kg	4.00		109	89-129			
o-Xylene	2.09	0.050	mg/kg	2.00		104	86.1-125			
Total Xylenes	6.45	0.150	mg/kg	6.00		108	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	*0.0502*		mg/kg	*0.0500*		*100*	*71.5-134*			
LCS Dup (3061504-BSD1)				Prepared & Analyzed: 15-Jun-23						
Benzene	2.24	0.050	mg/kg	2.00		112	82.8-130	0.612	15.8	
Toluene	2.22	0.050	mg/kg	2.00		111	86-128	0.662	15.9	
Ethylbenzene	2.25	0.050	mg/kg	2.00		113	85.9-128	1.73	16	
m,p-Xylene	4.43	0.100	mg/kg	4.00		111	89-129	1.51	16.2	
o-Xylene	2.14	0.050	mg/kg	2.00		107	86.1-125	2.33	16.7	
Total Xylenes	6.57	0.150	mg/kg	6.00		109	88.2-128	1.78	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	*0.0509*		mg/kg	*0.0500*		*102*	*71.5-134*			

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 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: EVGSAU 2437 - 001 Project Number: 03D2057067 Project Manager: KALEI JENNINGS Fax To:	Reported: 06-Jul-23 10:57

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3061424 - General Prep - Organics										
Blank (3061424-BLK1)				Prepared & Analyzed: 14-Jun-23						
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	*38.7*		mg/kg	*49.6*		*78.0*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*42.2*		mg/kg	*50.0*		*84.5*	*49.1-148*			
LCS (3061424-BS1)				Prepared: 14-Jun-23 Analyzed: 15-Jun-23						
GRO C6-C10	200	10.0	mg/kg	200		100	78.5-124			
DRO >C10-C28	206	10.0	mg/kg	200		103	72.5-126			
Total TPH C6-C28	406	10.0	mg/kg	400		102	77.6-123			
Surrogate: 1-Chlorooctane	*54.3*		mg/kg	*49.6*		*109*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*55.5*		mg/kg	*50.0*		*111*	*49.1-148*			
LCS Dup (3061424-BSD1)				Prepared: 14-Jun-23 Analyzed: 15-Jun-23						
GRO C6-C10	189	10.0	mg/kg	200		94.7	78.5-124	5.53	17.7	
DRO >C10-C28	196	10.0	mg/kg	200		97.8	72.5-126	5.33	21	
Total TPH C6-C28	385	10.0	mg/kg	400		96.3	77.6-123	5.43	18.5	
Surrogate: 1-Chlorooctane	*51.6*		mg/kg	*49.6*		*104*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*52.4*		mg/kg	*50.0*		*105*	*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
Project Manager:	Kalei Jennings
Address:	3122 Nat'l Parks Hwy
City:	Carlsbad State: NM Zip: 88220
Phone #:	Fax #:
Project #:	EVGSAU 2437-001 Project Owner: Maverick
Project Name:	OSD2057067
Project Location:	32.81668, -103.50599
Sampler Name:	J. Falcomata

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	SAMPLING TIME	BTEX	TPH	Chlorides
H233052-1	SW03 ~~A~~ @ 0-2'	C	1			X					X		6/1/23	1100	X	X	X
	4 *																

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: Jalcomata — Date: 6-14-23 Time: 1224 — Received By: Tamara Oldaker

Relinquished By: — Date: — Time: — Received By:

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

All Results are emailed. Please provide Email address:

hjennings@ensolum.com * jfalcomata@ensolum.com

REMARKS:

* Customer requested Sample Id changes. 7/5/23

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

Observed Temp. °C 4.0 Corrected Temp. °C 3.4

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

CHECKED BY: (Initials) JB

Turnaround Time: Standard ☐ Rush ☒ 24 hr 48 hr

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 23, 2023

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: EVGSAU 2437 - 001

Enclosed are the results of analyses for samples received by the laboratory on 06/19/23 14:30.

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:	06/19/2023	Sampling Date:	06/16/2023
Reported:	06/23/2023	Sampling Type:	Soil
Project Name:	EVGSAU 2437 - 001	Sampling Condition:	Cool & Intact
Project Number:	03D2057067	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.81668-103.50599		

Sample ID: PH 01 A (H233149-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	06/23/2023	ND	1.85	92.5	2.00	2.76	
Toluene*	**3.50**	0.100	06/23/2023	ND	1.85	92.6	2.00	2.49	
Ethylbenzene*	**13.1**	0.100	06/23/2023	ND	1.90	94.8	2.00	2.68	
Total Xylenes*	**23.6**	0.300	06/23/2023	ND	5.79	96.5	6.00	1.73	
Total BTEX	**40.2**	0.600	06/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *129 %* *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	**17200**	16.0	06/20/2023	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**1320**	50.0	06/21/2023	ND	159	79.7	200	1.93	
DRO >C10-C28*	**10900**	50.0	06/21/2023	ND	158	79.1	200	2.15	
EXT DRO >C28-C36	**1770**	50.0	06/21/2023	ND					

Surrogate: 1-Chlorooctane *322 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *208 %* *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:	06/19/2023	Sampling Date:	06/16/2023
Reported:	06/23/2023	Sampling Type:	Soil
Project Name:	EVGSAU 2437 - 001	Sampling Condition:	Cool & Intact
Project Number:	03D2057067	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.81668-103.50599		

Sample ID: PH 01 G (H233149-02)

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	06/23/2023	ND	1.85	92.5	2.00	2.76	
Toluene*	<0.050	0.050	06/23/2023	ND	1.85	92.6	2.00	2.49	
Ethylbenzene*	<0.050	0.050	06/23/2023	ND	1.90	94.8	2.00	2.68	
Total Xylenes*	<0.150	0.150	06/23/2023	ND	5.79	96.5	6.00	1.73	
Total BTEX	<0.300	0.300	06/23/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	06/20/2023	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	06/21/2023	ND	159	79.7	200	1.93	
DRO >C10-C28*	<10.0	10.0	06/21/2023	ND	158	79.1	200	2.15	
EXT DRO >C28-C36	**12.8**	10.0	06/21/2023	ND					

Surrogate: 1-Chlorooctane *102 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *108 %* *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:	06/19/2023	Sampling Date:	06/16/2023
Reported:	06/23/2023	Sampling Type:	Soil
Project Name:	EVGSAU 2437 - 001	Sampling Condition:	Cool & Intact
Project Number:	03D2057067	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.81668-103.50599		

Sample ID: PH 02 A (H233149-03)

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	06/23/2023	ND	1.85	92.5	2.00	2.76	
Toluene*	**0.225**	0.050	06/23/2023	ND	1.85	92.6	2.00	2.49	
Ethylbenzene*	**1.20**	0.050	06/23/2023	ND	1.90	94.8	2.00	2.68	
Total Xylenes*	**2.44**	0.150	06/23/2023	ND	5.79	96.5	6.00	1.73	
Total BTEX	**3.87**	0.300	06/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *132 %* *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	**1230**	16.0	06/20/2023	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*	**44.3**	10.0	06/21/2023	ND	159	79.7	200	1.93	
DRO >C10-C28*	**399**	10.0	06/21/2023	ND	158	79.1	200	2.15	
EXT DRO >C28-C36	**57.2**	10.0	06/21/2023	ND					

Surrogate: 1-Chlorooctane *77.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *70.5 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	06/19/2023	Sampling Date:	06/16/2023
Reported:	06/23/2023	Sampling Type:	Soil
Project Name:	EVGSAU 2437 - 001	Sampling Condition:	Cool & Intact
Project Number:	03D2057067	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.81668-103.50599		

Sample ID: PH 02 D (H233149-04)

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	06/21/2023	ND	1.85	92.5	2.00	2.76	
Toluene*	<0.050	0.050	06/21/2023	ND	1.85	92.6	2.00	2.49	
Ethylbenzene*	<0.050	0.050	06/21/2023	ND	1.90	94.8	2.00	2.68	
Total Xylenes*	<0.150	0.150	06/21/2023	ND	5.79	96.5	6.00	1.73	
Total BTEX	<0.300	0.300	06/21/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**400**	16.0	06/20/2023	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	06/21/2023	ND	159	79.7	200	1.93	
DRO >C10-C28*	<10.0	10.0	06/21/2023	ND	158	79.1	200	2.15	
EXT DRO >C28-C36	<10.0	10.0	06/21/2023	ND					

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

Surrogate: 1-Chlorooctadecane *99.5 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
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	**BILL TO** P.O. #:	01.01.
Project Manager:	Kalei Jennings	Company:	
Address:	5122 Nat'l Parks Hwy	Attn:	
City:	Carlsbad State: NM Zip: 88220	Address:	
Phone #:	817-683-2503 Fax #:	City:	
Project #:	03D2057067 Project Owner: Maverick	State: Zip:	
Project Name:	EVGSAU 2437	Phone #:	
Project Location:	32.812668, -103.50599	Fax #:	
Sampler Name:	Jettianna Falcomata		

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
H233149																	
1	PH01A	G	1			X					X		6/16/23	0940	X	X	X
2	PH01B													1050			
3	PH02A													1205			
4	PH02D													1230			

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: Jettianna Falcomata	Date: 6-19-23 Time: 1430	Received By:	Verbal Result: ☐ Yes ☒ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address: hjennings@ensolum.com jfalcomata@ensolum.com
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 2.2 Corrected Temp. °C 1.6	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials) TO
			REMARKS:
			Turnaround Time: Standard ☒ Rush ☐ 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

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 1/18/2023 1:38:25 PM

JOB DESCRIPTION

EVGSU 2437-001
SDG NUMBER Lea County

JOB NUMBER

890-3833-1

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

Generated
1/18/2023 1:38:25 PM

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

Client: Ensolum
Project/Site: EVGSU 2437-001

Laboratory Job ID: 890-3833-1
SDG: Lea County

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

Qualifiers

GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
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: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

Job ID: 890-3833-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3833-1

Receipt
The samples were received on 1/11/2023 4:35 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 4.0°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SS01 (890-3833-1), SS02 (890-3833-2), SS03 (890-3833-3), SS04 (890-3833-4), SS05 (890-3833-5), SS06 (890-3833-6), SS07 (890-3833-7) and SS08 (890-3833-8).

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: SS01 (890-3833-1) and SS02 (890-3833-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: SS03 (890-3833-3) and SS04 (890-3833-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-43910 and analytical batch 880-43961 was outside control limits. Sample matrix interference and/or non-homogeneity is suspected.

Method 8021B: LCSD biased high. Since only an acceptable LCS is required per the method, the data has been qualified and reported. (LCSD 880-43910/2-A)

Method 8021B: Surrogate recovery for the following samples were outside control limits: SS01 (890-3833-1) and SS02 (890-3833-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-43991 and analytical batch 880-44129 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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: SS01 (890-3833-1), SS02 (890-3833-2), SS03 (890-3833-3), SS04 (890-3833-4), SS05 (890-3833-5), SS07 (890-3833-7), SS08 (890-3833-8), (MB 880-43909/1-A) and (890-3831-A-1-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.

HPLC/IC
Method 300_ORGFM_28D: The native sample, matrix spike, and matrix spike duplicate (MS/MSD) associated with preparation batch 880-43970 and analytical batch 880-44164 were performed at the same dilution. Due to the additional level of analyte present in the spiked samples, the concentration of Chloride in the MS/MSD was above the instrument calibration range. The data have been reported and qualified.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-43970 and analytical batch 880-44164 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: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

Client Sample ID: SS01

Lab Sample ID: 890-3833-1
Matrix: Solid
Date Collected: 01/11/23 13:15
Date Received: 01/11/23 16:35
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	12.7		0.498		mg/Kg		01/16/23 14:35	01/17/23 15:34	250
Toluene	93.1		0.498		mg/Kg		01/16/23 14:35	01/17/23 15:34	250
Ethylbenzene	85.9		0.498		mg/Kg		01/16/23 14:35	01/17/23 15:34	250
m-Xylene & p-Xylene	70.0		0.996		mg/Kg		01/16/23 14:35	01/17/23 15:34	250
o-Xylene	35.0		0.498		mg/Kg		01/16/23 14:35	01/17/23 15:34	250
Xylenes, Total	105		0.996		mg/Kg		01/16/23 14:35	01/17/23 15:34	250

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*471*	*S1+*	*70 - 130*	*01/13/23 13:50*	*01/16/23 16:24*	*50*
1,4-Difluorobenzene (Surr)	*70*		*70 - 130*	*01/13/23 13:50*	*01/16/23 16:24*	*50*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	297		0.996		mg/Kg			01/17/23 14:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	41300		500		mg/Kg			01/16/23 16:51	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	4660		500		mg/Kg		01/13/23 13:11	01/16/23 03:17	10
Diesel Range Organics (Over C10-C28)	32100		500		mg/Kg		01/13/23 13:11	01/16/23 03:17	10
Oil Range Organics (Over C28-C36)	4570		500		mg/Kg		01/13/23 13:11	01/16/23 03:17	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*196*	*S1+*	*70 - 130*	*01/13/23 13:11*	*01/16/23 03:17*	*10*
o-Terphenyl	*184*	*S1+*	*70 - 130*	*01/13/23 13:11*	*01/16/23 03:17*	*10*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10200		49.7		mg/Kg			01/17/23 16:52	10

Client Sample ID: SS02

Lab Sample ID: 890-3833-2
Matrix: Solid
Date Collected: 01/11/23 13:20
Date Received: 01/11/23 16:35
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	9.37	*+	0.0998		mg/Kg		01/13/23 13:50	01/16/23 16:44	50
Toluene	79.0		0.497		mg/Kg		01/16/23 14:35	01/17/23 15:55	250
Ethylbenzene	85.7		0.497		mg/Kg		01/16/23 14:35	01/17/23 15:55	250
m-Xylene & p-Xylene	74.6		0.994		mg/Kg		01/16/23 14:35	01/17/23 15:55	250
o-Xylene	40.5		0.497		mg/Kg		01/16/23 14:35	01/17/23 15:55	250
Xylenes, Total	115		0.994		mg/Kg		01/16/23 14:35	01/17/23 15:55	250

Client Sample Results

Client: Ensolum
Project/Site: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

Client Sample ID: SS02

Date Collected: 01/11/23 13:20
Date Received: 01/11/23 16:35
Sample Depth: 0.5'

Lab Sample ID: 890-3833-2

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*561*	*S1+*	*70 - 130*	*01/13/23 13:50*	*01/16/23 16:44*	*50*
1,4-Difluorobenzene (Surr)	*121*		*70 - 130*	*01/13/23 13:50*	*01/16/23 16:44*	*50*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	289		0.994		mg/Kg			01/17/23 14:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	40200		499		mg/Kg			01/16/23 16:51	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	3960		499		mg/Kg		01/13/23 13:11	01/16/23 03:38	10
Diesel Range Organics (Over C10-C28)	31900		499		mg/Kg		01/13/23 13:11	01/16/23 03:38	10
Oil Range Organics (Over C28-C36)	4320		499		mg/Kg		01/13/23 13:11	01/16/23 03:38	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*195*	*S1+*	*70 - 130*	*01/13/23 13:11*	*01/16/23 03:38*	*10*
o-Terphenyl	*187*	*S1+*	*70 - 130*	*01/13/23 13:11*	*01/16/23 03:38*	*10*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8290		50.3		mg/Kg			01/17/23 17:09	10

Client Sample ID: SS03

Date Collected: 01/11/23 13:25
Date Received: 01/11/23 16:35
Sample Depth: 0.5'

Lab Sample ID: 890-3833-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	38.4		0.994		mg/Kg		01/16/23 14:35	01/17/23 20:02	500
Toluene	170		0.994		mg/Kg		01/16/23 14:35	01/17/23 20:02	500
Ethylbenzene	111		0.994		mg/Kg		01/16/23 14:35	01/17/23 20:02	500
m-Xylene & p-Xylene	90.6		1.99		mg/Kg		01/16/23 14:35	01/17/23 20:02	500
o-Xylene	41.3		0.994		mg/Kg		01/16/23 14:35	01/17/23 20:02	500
Xylenes, Total	132		1.99		mg/Kg		01/16/23 14:35	01/17/23 20:02	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*466*	*S1+*	*70 - 130*	*01/13/23 13:50*	*01/16/23 21:35*	*50*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*01/13/23 13:50*	*01/16/23 21:35*	*50*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	451		1.99		mg/Kg			01/17/23 14:40	1

Client Sample Results

Client: Ensolum
Project/Site: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

Client Sample ID: SS03

Lab Sample ID: 890-3833-3
Matrix: Solid
Date Collected: 01/11/23 13:25
Date Received: 01/11/23 16:35
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	17100		250		mg/Kg			01/16/23 16:51	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	3390		250		mg/Kg		01/13/23 13:11	01/16/23 04:00	5
Diesel Range Organics (Over C10-C28)	12000		250		mg/Kg		01/13/23 13:11	01/16/23 04:00	5
Oil Range Organics (Over C28-C36)	1730		250		mg/Kg		01/13/23 13:11	01/16/23 04:00	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*153*	*S1+*	*70 - 130*	*01/13/23 13:11*	*01/16/23 04:00*	*5*
o-Terphenyl	*171*	*S1+*	*70 - 130*	*01/13/23 13:11*	*01/16/23 04:00*	*5*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13400		100		mg/Kg			01/17/23 17:15	20

Client Sample ID: SS04

Lab Sample ID: 890-3833-4
Matrix: Solid
Date Collected: 01/11/23 13:30
Date Received: 01/11/23 16:35
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	9.62		1.00		mg/Kg		01/16/23 14:35	01/17/23 20:22	500
Toluene	74.8		1.00		mg/Kg		01/16/23 14:35	01/17/23 20:22	500
Ethylbenzene	73.8		1.00		mg/Kg		01/16/23 14:35	01/17/23 20:22	500
m-Xylene & p-Xylene	65.8		2.00		mg/Kg		01/16/23 14:35	01/17/23 20:22	500
o-Xylene	36.4		1.00		mg/Kg		01/16/23 14:35	01/17/23 20:22	500
Xylenes, Total	102		2.00		mg/Kg		01/16/23 14:35	01/17/23 20:22	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*423*	*S1+*	*70 - 130*	*01/13/23 13:50*	*01/16/23 21:56*	*50*
1,4-Difluorobenzene (Surr)	*120*		*70 - 130*	*01/13/23 13:50*	*01/16/23 21:56*	*50*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	260		2.00		mg/Kg			01/17/23 14:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	22100		250		mg/Kg			01/16/23 16:51	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	2190		250		mg/Kg		01/13/23 13:11	01/16/23 04:21	5
Diesel Range Organics (Over C10-C28)	17600		250		mg/Kg		01/13/23 13:11	01/16/23 04:21	5

Client Sample Results

Client: Ensolum
Project/Site: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

Client Sample ID: SS04

Lab Sample ID: 890-3833-4

Date Collected: 01/11/23 13:30
Date Received: 01/11/23 16:35
Matrix: Solid
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	2350		250		mg/Kg		01/13/23 13:11	01/16/23 04:21	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*161*	*S1+*	*70 - 130*	*01/13/23 13:11*	*01/16/23 04:21*	*5*
o-Terphenyl	*171*	*S1+*	*70 - 130*	*01/13/23 13:11*	*01/16/23 04:21*	*5*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13600		99.6		mg/Kg			01/17/23 17:21	20

Client Sample ID: SS05

Lab Sample ID: 890-3833-5

Date Collected: 01/11/23 13:35
Date Received: 01/11/23 16:35
Matrix: Solid
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.152	*+	0.0498		mg/Kg		01/13/23 13:50	01/16/23 22:17	25
Toluene	0.297		0.0498		mg/Kg		01/13/23 13:50	01/16/23 22:17	25
Ethylbenzene	0.145	*+	0.0498		mg/Kg		01/13/23 13:50	01/16/23 22:17	25
m-Xylene & p-Xylene	0.148		0.0996		mg/Kg		01/13/23 13:50	01/16/23 22:17	25
o-Xylene	0.0830		0.0498		mg/Kg		01/13/23 13:50	01/16/23 22:17	25
Xylenes, Total	0.231		0.0996		mg/Kg		01/13/23 13:50	01/16/23 22:17	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*01/13/23 13:50*	*01/16/23 22:17*	*25*
1,4-Difluorobenzene (Surr)	*121*		*70 - 130*	*01/13/23 13:50*	*01/16/23 22:17*	*25*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.825		0.0996		mg/Kg			01/17/23 14:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	7210		49.9		mg/Kg			01/16/23 16:51	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	7210		49.9		mg/Kg		01/13/23 13:11	01/16/23 01:29	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/13/23 13:11	01/16/23 01:29	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/13/23 13:11	01/16/23 01:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*01/13/23 13:11*	*01/16/23 01:29*	*1*
o-Terphenyl	*137*	*S1+*	*70 - 130*	*01/13/23 13:11*	*01/16/23 01:29*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49.1		4.97		mg/Kg			01/17/23 17:26	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

Client Sample ID: SS06

Lab Sample ID: 890-3833-6
Matrix: Solid
Date Collected: 01/11/23 13:40
Date Received: 01/11/23 16:35
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0495	U *+	0.0495		mg/Kg		01/13/23 13:50	01/16/23 22:37	25
Toluene	**0.155**		0.0495		mg/Kg		01/13/23 13:50	01/16/23 22:37	25
Ethylbenzene	**0.126**	*+	0.0495		mg/Kg		01/13/23 13:50	01/16/23 22:37	25
m-Xylene & p-Xylene	**0.148**		0.0990		mg/Kg		01/13/23 13:50	01/16/23 22:37	25
o-Xylene	**0.0994**		0.0495		mg/Kg		01/13/23 13:50	01/16/23 22:37	25
Xylenes, Total	**0.247**		0.0990		mg/Kg		01/13/23 13:50	01/16/23 22:37	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*01/13/23 13:50*	*01/16/23 22:37*	*25*
1,4-Difluorobenzene (Surr)	*123*		*70 - 130*	*01/13/23 13:50*	*01/16/23 22:37*	*25*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.528**		0.0990		mg/Kg			01/17/23 14:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**50.1**		50.0		mg/Kg			01/16/23 16:51	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		01/13/23 13:11	01/16/23 00:24	1
Diesel Range Organics (Over C10-C28)	**50.1**		50.0		mg/Kg		01/13/23 13:11	01/16/23 00:24	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/13/23 13:11	01/16/23 00:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*01/13/23 13:11*	*01/16/23 00:24*	*1*
o-Terphenyl	*127*		*70 - 130*	*01/13/23 13:11*	*01/16/23 00:24*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**64.1**		5.02		mg/Kg			01/17/23 17:32	1

Client Sample ID: SS07

Lab Sample ID: 890-3833-7
Matrix: Solid
Date Collected: 01/11/23 13:45
Date Received: 01/11/23 16:35
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0497	U *+	0.0497		mg/Kg		01/13/23 13:50	01/16/23 22:58	25
Toluene	**0.0839**		0.0497		mg/Kg		01/13/23 13:50	01/16/23 22:58	25
Ethylbenzene	<0.0497	U *+	0.0497		mg/Kg		01/13/23 13:50	01/16/23 22:58	25
m-Xylene & p-Xylene	<0.0994	U	0.0994		mg/Kg		01/13/23 13:50	01/16/23 22:58	25
o-Xylene	<0.0497	U	0.0497		mg/Kg		01/13/23 13:50	01/16/23 22:58	25
Xylenes, Total	<0.0994	U	0.0994		mg/Kg		01/13/23 13:50	01/16/23 22:58	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*01/13/23 13:50*	*01/16/23 22:58*	*25*

Client Sample Results

Client: Ensolum
Project/Site: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

Client Sample ID: SS07

Lab Sample ID: 890-3833-7
Matrix: Solid

Date Collected: 01/11/23 13:45
Date Received: 01/11/23 16:35
Sample Depth: 0.5'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*122*		*70 - 130*	*01/13/23 13:50*	*01/16/23 22:58*	*25*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0994	U	0.0994		mg/Kg			01/17/23 14:40	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			01/16/23 16:51	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		01/13/23 13:11	01/16/23 00:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/13/23 13:11	01/16/23 00:45	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/13/23 13:11	01/16/23 00:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*129*		*70 - 130*	*01/13/23 13:11*	*01/16/23 00:45*	*1*
o-Terphenyl	*145*	*S1+*	*70 - 130*	*01/13/23 13:11*	*01/16/23 00:45*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**347**		5.01		mg/Kg			01/17/23 17:38	1

Client Sample ID: SS08

Lab Sample ID: 890-3833-8
Matrix: Solid

Date Collected: 01/11/23 13:50
Date Received: 01/11/23 16:35
Sample Depth: 0.5'

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		01/13/23 13:50	01/16/23 19:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/13/23 13:50	01/16/23 19:51	1
Ethylbenzene	<0.00200	U *+	0.00200		mg/Kg		01/13/23 13:50	01/16/23 19:51	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/13/23 13:50	01/16/23 19:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/13/23 13:50	01/16/23 19:51	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/13/23 13:50	01/16/23 19:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*01/13/23 13:50*	*01/16/23 19:51*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*01/13/23 13:50*	*01/16/23 19:51*	*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			01/17/23 14:40	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			01/16/23 16:51	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

Client Sample ID: SS08

Date Collected: 01/11/23 13:50
Date Received: 01/11/23 16:35
Sample Depth: 0.5'

Lab Sample ID: 890-3833-8

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	<50.0	U	50.0		mg/Kg		01/13/23 13:11	01/16/23 01:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/13/23 13:11	01/16/23 01:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/13/23 13:11	01/16/23 01:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*131*	*S1+*	*70 - 130*	*01/13/23 13:11*	*01/16/23 01:50*	*1*
o-Terphenyl	*144*	*S1+*	*70 - 130*	*01/13/23 13:11*	*01/16/23 01:50*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**234**		24.9		mg/Kg			01/17/23 17:43	5

Surrogate Summary

Client: Ensolum
Project/Site: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-3832-A-8-E MS	Matrix Spike	107	102
890-3832-A-8-F MSD	Matrix Spike Duplicate	109	98
890-3833-1	SS01	471 S1+	70
890-3833-2	SS02	561 S1+	121
890-3833-3	SS03	466 S1+	77
890-3833-4	SS04	423 S1+	120
890-3833-5	SS05	103	121
890-3833-6	SS06	101	123
890-3833-7	SS07	97	122
890-3833-8	SS08	103	107
890-3838-A-61-E MS	Matrix Spike	102	84
890-3838-A-61-F MSD	Matrix Spike Duplicate	134 S1+	93
LCS 880-43910/1-A	Lab Control Sample	99	101
LCS 880-43991/1-A	Lab Control Sample	108	97
LCSD 880-43910/2-A	Lab Control Sample Dup	104	104
LCSD 880-43991/2-A	Lab Control Sample Dup	111	100
MB 880-43910/5-A	Method Blank	99	100
MB 880-43991/5-A	Method Blank	85	90

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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-3831-A-1-B MS	Matrix Spike	102	114
890-3831-A-1-C MSD	Matrix Spike Duplicate	107	119
890-3833-1	SS01	196 S1+	184 S1+
890-3833-2	SS02	195 S1+	187 S1+
890-3833-3	SS03	153 S1+	171 S1+
890-3833-4	SS04	161 S1+	171 S1+
890-3833-5	SS05	113	137 S1+
890-3833-6	SS06	108	127
890-3833-7	SS07	129	145 S1+
890-3833-8	SS08	131 S1+	144 S1+
LCS 880-43909/2-A	Lab Control Sample	104	126
LCSD 880-43909/3-A	Lab Control Sample Dup	105	126
MB 880-43909/1-A	Method Blank	179 S1+	227 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-43910/5-A
Matrix: Solid
Analysis Batch: 43961

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43910

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/13/23 13:50	01/16/23 14:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/13/23 13:50	01/16/23 14:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/13/23 13:50	01/16/23 14:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/13/23 13:50	01/16/23 14:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/13/23 13:50	01/16/23 14:39	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/13/23 13:50	01/16/23 14:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*77*		*1+ - 03+*	*+0/03/: 3 0356+*	*+0/02/: 3 0457*	*0*
0,4-Difluorobenzene (Surr)	*0++*		*1+ - 03+*	*+0/03/: 3 0356+*	*+0/02/: 3 0457*	*0*

Lab Sample ID: LCS 880-43910/1-A
Matrix: Solid
Analysis Batch: 43961

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43910

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1229		mg/Kg		123	70 - 130		
Toluene			0.100	0.1128		mg/Kg		113	70 - 130		
Ethylbenzene			0.100	0.1225		mg/Kg		122	70 - 130		
m-Xylene & p-Xylene			0.200	0.2218		mg/Kg		111	70 - 130		
o-Xylene			0.100	0.1119		mg/Kg		112	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*77*		*1+ - 03+*
0,4-Difluorobenzene (Surr)	*0+0*		*1+ - 03+*

Lab Sample ID: LCSD 880-43910/2-A
Matrix: Solid
Analysis Batch: 43961

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 43910

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1348	*+	mg/Kg		135	70 - 130	9	35
Toluene			0.100	0.1189		mg/Kg		119	70 - 130	5	35
Ethylbenzene			0.100	0.1308	*+	mg/Kg		131	70 - 130	7	35
m-Xylene & p-Xylene			0.200	0.2375		mg/Kg		119	70 - 130	7	35
o-Xylene			0.100	0.1194		mg/Kg		119	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*0+4*		*1+ - 03+*
0,4-Difluorobenzene (Surr)	*0+4*		*1+ - 03+*

Lab Sample ID: 890-3832-A-8-E MS
Matrix: Solid
Analysis Batch: 43961

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 43910

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00202	U *+ F2 F1	0.101	0.09977		mg/Kg		99	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

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

Lab Sample ID: 890-3832-A-8-E MS
Matrix: Solid
Analysis Batch: 43961

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 43910

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	<0.00202	U F2 F1	0.101	0.07955		mg/Kg		79	70 - 130
Ethylbenzene	<0.00202	U *+ F2 F1	0.101	0.08884		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	<0.00403	U F2 F1	0.202	0.1628		mg/Kg		81	70 - 130
o-Xylene	<0.00202	U F2 F1	0.101	0.08464		mg/Kg		84	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*0+1*		*1+ - 03+*
0,4-Difluorobenzene (Surr)	*0+:*		*1+ - 03+*

Lab Sample ID: 890-3832-A-8-F MSD
Matrix: Solid
Analysis Batch: 43961

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 43910

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U *+ F2 F1	0.0990	0.007699	F2 F1	mg/Kg		8	70 - 130	171	35
Toluene	<0.00202	U F2 F1	0.0990	0.01331	F2 F1	mg/Kg		13	70 - 130	143	35
Ethylbenzene	<0.00202	U *+ F2 F1	0.0990	0.007250	F2 F1	mg/Kg		7	70 - 130	170	35
m-Xylene & p-Xylene	<0.00403	U F2 F1	0.198	0.007591	F2 F1	mg/Kg		4	70 - 130	182	35
o-Xylene	<0.00202	U F2 F1	0.0990	0.003161	F2 F1	mg/Kg		3	70 - 130	186	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*0+7*		*1+ - 03+*
0,4-Difluorobenzene (Surr)	*7C*		*1+ - 03+*

Lab Sample ID: MB 880-43991/5-A
Matrix: Solid
Analysis Batch: 44129

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43991

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/16/23 14:35	01/17/23 12:29	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/16/23 14:35	01/17/23 12:29	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/16/23 14:35	01/17/23 12:29	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/16/23 14:35	01/17/23 12:29	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/16/23 14:35	01/17/23 12:29	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/16/23 14:35	01/17/23 12:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*O6*		*1+ - 03+*	*+0/02/: 3 045 36*	*+0/01/: 3 0: 5 7*	*0*
0,4-Difluorobenzene (Surr)	*7+*		*1+ - 03+*	*+0/02/: 3 045 36*	*+0/01/: 3 0: 5 7*	*0*

Lab Sample ID: LCS 880-43991/1-A
Matrix: Solid
Analysis Batch: 44129

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43991

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09402		mg/Kg		94	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

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

Lab Sample ID: LCS 880-43991/1-A
Matrix: Solid
Analysis Batch: 44129

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43991

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Toluene			0.100	0.1033		mg/Kg		103	70 - 130		
Ethylbenzene			0.100	0.09664		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene			0.200	0.2150		mg/Kg		107	70 - 130		
o-Xylene			0.100	0.1176		mg/Kg		118	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*0+C*		*1+ - 03+*
0,4-Difluorobenzene (Surr)	*71*		*1+ - 03+*

Lab Sample ID: LCSD 880-43991/2-A
Matrix: Solid
Analysis Batch: 44129

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 43991

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1023		mg/Kg		102	70 - 130	8	35
Toluene			0.100	0.1067		mg/Kg		107	70 - 130	3	35
Ethylbenzene			0.100	0.09902		mg/Kg		99	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.2172		mg/Kg		109	70 - 130	1	35
o-Xylene			0.100	0.1197		mg/Kg		120	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*000*		*1+ - 03+*
0,4-Difluorobenzene (Surr)	*0++*		*1+ - 03+*

Lab Sample ID: 890-3838-A-61-E MS
Matrix: Solid
Analysis Batch: 44129

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 43991

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U F1	0.0998	0.06666	F1	mg/Kg		67	70 - 130		
Toluene	<0.00199	U	0.0998	0.08616		mg/Kg		86	70 - 130		
Ethylbenzene	<0.00199	U	0.0998	0.09887		mg/Kg		99	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1769		mg/Kg		89	70 - 130		
o-Xylene	<0.00199	U	0.0998	0.09305		mg/Kg		93	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*0+:*		*1+ - 03+*
0,4-Difluorobenzene (Surr)	*C4*		*1+ - 03+*

Lab Sample ID: 890-3838-A-61-F MSD
Matrix: Solid
Analysis Batch: 44129

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 43991

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.100	0.06608	F1	mg/Kg		66	70 - 130	1	35
Toluene	<0.00199	U	0.100	0.07566		mg/Kg		76	70 - 130	13	35
Ethylbenzene	<0.00199	U	0.100	0.08076		mg/Kg		81	70 - 130	20	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1847		mg/Kg		92	70 - 130	4	35

QC Sample Results

Client: Ensolum
Project/Site: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

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

Lab Sample ID: 890-3838-A-61-F MSD
Matrix: Solid
Analysis Batch: 44129

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 43991

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
o-Xylene	<0.00199	U	0.100	0.1021		mg/Kg		102	70 - 130	9	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*034*	*S0h*	*1+ - 03+*
0,4-Difluorobenzene (Surr)	*73*		*1+ - 03+*

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

Lab Sample ID: MB 880-43909/1-A
Matrix: Solid
Analysis Batch: 43947

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43909

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/13/23 13:11	01/15/23 19:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/13/23 13:11	01/15/23 19:47	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/13/23 13:11	01/15/23 19:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
0-c t lorooa9Tne	*017*	*S0h*	*1+ - 03+*	*+0/03/: 3 0350 0*	*+0/06/: 3 0754 1*	*0*
o-peryt en8l	*: : 1*	*S0h*	*1+ - 03+*	*+0/03/: 3 0350 0*	*+0/06/: 3 0754 1*	*0*

Lab Sample ID: LCS 880-43909/2-A
Matrix: Solid
Analysis Batch: 43947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43909

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	945.3		mg/Kg		95	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	932.4		mg/Kg		93	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
0-c t lorooa9Tne	*0+4*		*1+ - 03+*
o-peryt en8l	*0: 2*		*1+ - 03+*

Lab Sample ID: LCSD 880-43909/3-A
Matrix: Solid
Analysis Batch: 43947

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 43909

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	907.9		mg/Kg		91	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	939.3		mg/Kg		94	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
0-c t lorooa9Tne	*0+6*		*1+ - 03+*

QC Sample Results

Client: Ensolum
Project/Site: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

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

Lab Sample ID: LCSD 880-43909/3-A
Matrix: Solid
Analysis Batch: 43947

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 43909

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-peryt en8l	*0: 2*		*1+ - 03+*

Lab Sample ID: 890-3831-A-1-B MS
Matrix: Solid
Analysis Batch: 43947

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 43909

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	907.3		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1114		mg/Kg		108	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
0-c t lorooa9Tne	*0+:*		*1+ - 03+*
o-peryt en8l	*004*		*1+ - 03+*

Lab Sample ID: 890-3831-A-1-C MSD
Matrix: Solid
Analysis Batch: 43947

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 43909

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	<49.9	U	997	944.2		mg/Kg		92	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.9	U	997	1175		mg/Kg		115	70 - 130	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
0-c t lorooa9Tne	*0+1*		*1+ - 03+*
o-peryt en8l	*007*		*1+ - 03+*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-43970/1-A
Matrix: Solid
Analysis Batch: 44164

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			01/17/23 14:54	1

Lab Sample ID: LCS 880-43970/2-A
Matrix: Solid
Analysis Batch: 44164

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride			250	246.3		mg/Kg		99	90 - 110

QC Sample Results

Client: Ensolum
Project/Site: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-43970/3-A
Matrix: Solid
Analysis Batch: 44164

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	245.9		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 890-3835-A-1-H MS
Matrix: Solid
Analysis Batch: 44164

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1370		248	1517	E 4	mg/Kg		59	90 - 110		

Lab Sample ID: 890-3835-A-1-I MSD
Matrix: Solid
Analysis Batch: 44164

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1370		248	1515	E 4	mg/Kg		58	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

GC VOA

Prep Batch: 43910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3833-1	SS01	Total/NA	Solid	5035	
890-3833-2	SS02	Total/NA	Solid	5035	
890-3833-3	SS03	Total/NA	Solid	5035	
890-3833-4	SS04	Total/NA	Solid	5035	
890-3833-5	SS05	Total/NA	Solid	5035	
890-3833-6	SS06	Total/NA	Solid	5035	
890-3833-7	SS07	Total/NA	Solid	5035	
890-3833-8	SS08	Total/NA	Solid	5035	
MB 880-43910/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-43910/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-43910/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3832-A-8-E MS	Matrix Spike	Total/NA	Solid	5035	
890-3832-A-8-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 43961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3833-1	SS01	Total/NA	Solid	8021B	43910
890-3833-2	SS02	Total/NA	Solid	8021B	43910
890-3833-3	SS03	Total/NA	Solid	8021B	43910
890-3833-4	SS04	Total/NA	Solid	8021B	43910
890-3833-5	SS05	Total/NA	Solid	8021B	43910
890-3833-6	SS06	Total/NA	Solid	8021B	43910
890-3833-7	SS07	Total/NA	Solid	8021B	43910
890-3833-8	SS08	Total/NA	Solid	8021B	43910
MB 880-43910/5-A	Method Blank	Total/NA	Solid	8021B	43910
LCS 880-43910/1-A	Lab Control Sample	Total/NA	Solid	8021B	43910
LCSD 880-43910/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	43910
890-3832-A-8-E MS	Matrix Spike	Total/NA	Solid	8021B	43910
890-3832-A-8-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	43910

Prep Batch: 43991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3833-1	SS01	Total/NA	Solid	5035	
890-3833-2	SS02	Total/NA	Solid	5035	
890-3833-3	SS03	Total/NA	Solid	5035	
890-3833-4	SS04	Total/NA	Solid	5035	
MB 880-43991/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-43991/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-43991/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3838-A-61-E MS	Matrix Spike	Total/NA	Solid	5035	
890-3838-A-61-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 44129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3833-1	SS01	Total/NA	Solid	8021B	43991
890-3833-2	SS02	Total/NA	Solid	8021B	43991
890-3833-3	SS03	Total/NA	Solid	8021B	43991
890-3833-4	SS04	Total/NA	Solid	8021B	43991
MB 880-43991/5-A	Method Blank	Total/NA	Solid	8021B	43991
LCS 880-43991/1-A	Lab Control Sample	Total/NA	Solid	8021B	43991
LCSD 880-43991/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	43991

QC Association Summary

Client: Ensolum
Project/Site: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

GC VOA (Continued)

Analysis Batch: 44129 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3838-A-61-E MS	Matrix Spike	Total/NA	Solid	8021B	43991
890-3838-A-61-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	43991

Analysis Batch: 44174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3833-1	SS01	Total/NA	Solid	Total BTEX	
890-3833-2	SS02	Total/NA	Solid	Total BTEX	
890-3833-3	SS03	Total/NA	Solid	Total BTEX	
890-3833-4	SS04	Total/NA	Solid	Total BTEX	
890-3833-5	SS05	Total/NA	Solid	Total BTEX	
890-3833-6	SS06	Total/NA	Solid	Total BTEX	
890-3833-7	SS07	Total/NA	Solid	Total BTEX	
890-3833-8	SS08	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 43909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3833-1	SS01	Total/NA	Solid	8015NM Prep	
890-3833-2	SS02	Total/NA	Solid	8015NM Prep	
890-3833-3	SS03	Total/NA	Solid	8015NM Prep	
890-3833-4	SS04	Total/NA	Solid	8015NM Prep	
890-3833-5	SS05	Total/NA	Solid	8015NM Prep	
890-3833-6	SS06	Total/NA	Solid	8015NM Prep	
890-3833-7	SS07	Total/NA	Solid	8015NM Prep	
890-3833-8	SS08	Total/NA	Solid	8015NM Prep	
MB 880-43909/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-43909/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-43909/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3831-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3831-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 43947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3833-1	SS01	Total/NA	Solid	8015B NM	43909
890-3833-2	SS02	Total/NA	Solid	8015B NM	43909
890-3833-3	SS03	Total/NA	Solid	8015B NM	43909
890-3833-4	SS04	Total/NA	Solid	8015B NM	43909
890-3833-5	SS05	Total/NA	Solid	8015B NM	43909
890-3833-6	SS06	Total/NA	Solid	8015B NM	43909
890-3833-7	SS07	Total/NA	Solid	8015B NM	43909
890-3833-8	SS08	Total/NA	Solid	8015B NM	43909
MB 880-43909/1-A	Method Blank	Total/NA	Solid	8015B NM	43909
LCS 880-43909/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	43909
LCSD 880-43909/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	43909
890-3831-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	43909
890-3831-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	43909

Analysis Batch: 44066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3833-1	SS01	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

GC Semi VOA (Continued)

Analysis Batch: 44066 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3833-2	SS02	Total/NA	Solid	8015 NM	
890-3833-3	SS03	Total/NA	Solid	8015 NM	
890-3833-4	SS04	Total/NA	Solid	8015 NM	
890-3833-5	SS05	Total/NA	Solid	8015 NM	
890-3833-6	SS06	Total/NA	Solid	8015 NM	
890-3833-7	SS07	Total/NA	Solid	8015 NM	
890-3833-8	SS08	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 43970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3833-1	SS01	Soluble	Solid	DI Leach	
890-3833-2	SS02	Soluble	Solid	DI Leach	
890-3833-3	SS03	Soluble	Solid	DI Leach	
890-3833-4	SS04	Soluble	Solid	DI Leach	
890-3833-5	SS05	Soluble	Solid	DI Leach	
890-3833-6	SS06	Soluble	Solid	DI Leach	
890-3833-7	SS07	Soluble	Solid	DI Leach	
890-3833-8	SS08	Soluble	Solid	DI Leach	
MB 880-43970/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-43970/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-43970/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3835-A-1-H MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3835-A-1-I MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 44164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3833-1	SS01	Soluble	Solid	300.0	43970
890-3833-2	SS02	Soluble	Solid	300.0	43970
890-3833-3	SS03	Soluble	Solid	300.0	43970
890-3833-4	SS04	Soluble	Solid	300.0	43970
890-3833-5	SS05	Soluble	Solid	300.0	43970
890-3833-6	SS06	Soluble	Solid	300.0	43970
890-3833-7	SS07	Soluble	Solid	300.0	43970
890-3833-8	SS08	Soluble	Solid	300.0	43970
MB 880-43970/1-A	Method Blank	Soluble	Solid	300.0	43970
LCS 880-43970/2-A	Lab Control Sample	Soluble	Solid	300.0	43970
LCSD 880-43970/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	43970
890-3835-A-1-H MS	Matrix Spike	Soluble	Solid	300.0	43970
890-3835-A-1-I MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	43970

Lab Chronicle

Client: Ensolum
Project/Site: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

Client Sample ID: SS01

Date Collected: 01/11/23 13:15
Date Received: 01/11/23 16:35

Lab Sample ID: 890-3833-1

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			5.02 g	5 mL	43910	01/13/23 13:50	MNR	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	43961	01/16/23 16:24	MNR	EET MID
Total/NA	Prep	5035			5.02 g	5 mL	43991	01/16/23 14:35	MNR	EET MID
Total/NA	Analysis	8021B		250	5 mL	5 mL	44129	01/17/23 15:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44174	01/17/23 14:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			44066	01/16/23 16:51	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	43909	01/13/23 13:11	DM	EET MID
Total/NA	Analysis	8015B NM		10	1 uL	1 uL	43947	01/16/23 03:17	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	43970	01/16/23 09:20	KS	EET MID
Soluble	Analysis	300.0		10			44164	01/17/23 16:52	CH	EET MID

Client Sample ID: SS02

Date Collected: 01/11/23 13:20
Date Received: 01/11/23 16:35

Lab Sample ID: 890-3833-2

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			5.01 g	5 mL	43910	01/13/23 13:50	MNR	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	43961	01/16/23 16:44	MNR	EET MID
Total/NA	Prep	5035			5.03 g	5 mL	43991	01/16/23 14:35	MNR	EET MID
Total/NA	Analysis	8021B		250	5 mL	5 mL	44129	01/17/23 15:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44174	01/17/23 14:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			44066	01/16/23 16:51	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	43909	01/13/23 13:11	DM	EET MID
Total/NA	Analysis	8015B NM		10	1 uL	1 uL	43947	01/16/23 03:38	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	43970	01/16/23 09:20	KS	EET MID
Soluble	Analysis	300.0		10			44164	01/17/23 17:09	CH	EET MID

Client Sample ID: SS03

Date Collected: 01/11/23 13:25
Date Received: 01/11/23 16:35

Lab Sample ID: 890-3833-3

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			4.97 g	5 mL	43910	01/13/23 13:50	MNR	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	43961	01/16/23 21:35	MNR	EET MID
Total/NA	Prep	5035			5.03 g	5 mL	43991	01/16/23 14:35	MNR	EET MID
Total/NA	Analysis	8021B		500	5 mL	5 mL	44129	01/17/23 20:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44174	01/17/23 14:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			44066	01/16/23 16:51	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43909	01/13/23 13:11	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	43947	01/16/23 04:00	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	43970	01/16/23 09:20	KS	EET MID
Soluble	Analysis	300.0		20			44164	01/17/23 17:15	CH	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

Client Sample ID: SS04

Date Collected: 01/11/23 13:30
Date Received: 01/11/23 16:35

Lab Sample ID: 890-3833-4

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			4.96 g	5 mL	43910	01/13/23 13:50	MNR	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	43961	01/16/23 21:56	MNR	EET MID
Total/NA	Prep	5035			4.99 g	5 mL	43991	01/16/23 14:35	MNR	EET MID
Total/NA	Analysis	8021B		500	5 mL	5 mL	44129	01/17/23 20:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44174	01/17/23 14:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			44066	01/16/23 16:51	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	43909	01/13/23 13:11	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	43947	01/16/23 04:21	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	43970	01/16/23 09:20	KS	EET MID
Soluble	Analysis	300.0		20			44164	01/17/23 17:21	CH	EET MID

Client Sample ID: SS05

Date Collected: 01/11/23 13:35
Date Received: 01/11/23 16:35

Lab Sample ID: 890-3833-5

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			5.02 g	5 mL	43910	01/13/23 13:50	MNR	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	43961	01/16/23 22:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44174	01/17/23 14:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			44066	01/16/23 16:51	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	43909	01/13/23 13:11	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43947	01/16/23 01:29	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	43970	01/16/23 09:20	KS	EET MID
Soluble	Analysis	300.0		1			44164	01/17/23 17:26	CH	EET MID

Client Sample ID: SS06

Date Collected: 01/11/23 13:40
Date Received: 01/11/23 16:35

Lab Sample ID: 890-3833-6

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			5.05 g	5 mL	43910	01/13/23 13:50	MNR	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	43961	01/16/23 22:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44174	01/17/23 14:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			44066	01/16/23 16:51	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43909	01/13/23 13:11	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43947	01/16/23 00:24	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	43970	01/16/23 09:20	KS	EET MID
Soluble	Analysis	300.0		1			44164	01/17/23 17:32	CH	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

Client Sample ID: SS07

Lab Sample ID: 890-3833-7
Matrix: Solid
Date Collected: 01/11/23 13:45
Date Received: 01/11/23 16:35

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	43910	01/13/23 13:50	MNR	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	43961	01/16/23 22:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44174	01/17/23 14:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			44066	01/16/23 16:51	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43909	01/13/23 13:11	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43947	01/16/23 00:45	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	43970	01/16/23 09:20	KS	EET MID
Soluble	Analysis	300.0		1			44164	01/17/23 17:38	CH	EET MID

Client Sample ID: SS08

Lab Sample ID: 890-3833-8
Matrix: Solid
Date Collected: 01/11/23 13:50
Date Received: 01/11/23 16:35

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	43910	01/13/23 13:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43961	01/16/23 19:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44174	01/17/23 14:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			44066	01/16/23 16:51	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	43909	01/13/23 13:11	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43947	01/16/23 01:50	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	43970	01/16/23 09:20	KS	EET MID
Soluble	Analysis	300.0		5			44164	01/17/23 17:43	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: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

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: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

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	MCAWW	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

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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: EVGSU 2437-001

Job ID: 890-3833-1
SDG: Lea County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3833-1	SS01	Solid	01/11/23 13:15	01/11/23 16:35	0.5'
890-3833-2	SS02	Solid	01/11/23 13:20	01/11/23 16:35	0.5'
890-3833-3	SS03	Solid	01/11/23 13:25	01/11/23 16:35	0.5'
890-3833-4	SS04	Solid	01/11/23 13:30	01/11/23 16:35	0.5'
890-3833-5	SS05	Solid	01/11/23 13:35	01/11/23 16:35	0.5'
890-3833-6	SS06	Solid	01/11/23 13:40	01/11/23 16:35	0.5'
890-3833-7	SS07	Solid	01/11/23 13:45	01/11/23 16:35	0.5'
890-3833-8	SS08	Solid	01/11/23 13:50	01/11/23 16:35	0.5'

Chain of Custody

eurofins | Environment Testing Xenco

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 Jenning	Bill to: (if different)	accounting@ensolum.com
Company Name:	Ensolum	Company Name:	
Address:	3122 National parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	817 683 2503	Email:	Kjennings@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:	EVGSU 2437-001	Turn Around	
Project Number:	03D2057067	☒ Routine ☐ Rush	
Project Location:	Lea Co.	Due Date:	
Sampler's Name:	J. Gable	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:	THM007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	4.3
Total Containers:		Corrected Temperature:	4.3

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	BTEX 8021	TPH TX1005 8015	Chloride 300	Sample Comments
SS01	S	1/11/23	1315	.5	G	1		X	X	X	
SS02			1320	.5							
SS03			1325	.5							
SS04			1330	.5							
SS05			1335	.5							
SS06			1340	.5							
SS07			1345	.5							
SS08	S	1/11/23	1350	.5	G	1		X	X	X	

890-3833 Chain of Custody

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		1/11/23 1635	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3833-1
SDG Number: Lea County

Login Number: 3833
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: 890-3833-1
SDG Number: Lea County

Login Number: 3833
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 01/13/23 10:36 AM

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 F
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.

ENSOLUM

APPENDIX G

NMOCD Notifications

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 3:08:14 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; Velez, Nelson, EMNRD
Subject: RE: [EXTERNAL] Maverick Permian - Sampling Notification (Week of 5/29/2023)
Date: Friday, May 26, 2023 10:31:14 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: Thursday, May 25, 2023 3:53 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Subject: [EXTERNAL] Maverick Permian - Sampling Notification (Week of 5/29/2023)

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 29, 2023.

- EVGSAU 2963-001/ NAPP2235371799
  - Sampling Date: 6/1/2023 & 6/2/2023
- EVGSAU 2437-001/ NAPP2303273838
  - Sampling Date: 5/30/2023 & 5/31/2023

- MCA 351/ NAPP2302034681
    - Sampling Date: 6/1/2023 & 6/2/2023

Thank you,

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

From: Buchanan, Michael, EMNRD
To: Kalei Jennings; Enviro, OCD, EMNRD; Velez, Nelson, EMNRD
Cc: Aimee Cole
Subject: RE: [EXTERNAL] Maverick- Sampling Notification (Week of 7/3/2023)
Date: Monday, July 3, 2023 1:01:25 PM
Attachments: image005.jpg
image006.png
image007.png
image008.png
image009.png

[**EXTERNAL EMAIL**]

Good afternoon,

Thank you for the notification. Please include a copy of this and all notifications in the C-141, remedial and/or closure reports to ensure the notifications are documented in the project file.

Regards,

Mike Buchanan ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
8801 Horizon Blvd. NE | Albuquerque, NM 87113
| michael.buchanan@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd

From: Kalei Jennings <kjennings@ensolum.com>
Sent: Monday, July 3, 2023 1:14 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Aimee Cole <acole@ensolum.com>
Subject: [EXTERNAL] Maverick- Sampling Notification (Week of 7/3/2023)

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

All,

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

- MCA 204 / NAPP2311751602
  - Sampling Date: 7/6/2023 & 7/7/2023

MCA #1 South Transfer Line / NAPP2314650185
    - Sampling Date: 7/6/2023
- EVGSAU 2437-001 / NAPP2303273838
    - Sampling Date: 7/6/2023

Thank you,

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

ENSOLUM

APPENDIX H
Final C-141

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	NAPP2303273838
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)* NAPP2303273838
Contact mailing address: 1410 NW County Road Hobbs, NM 88240	

Location of Release Source

Latitude 32.816832 Longitude -103.506018
(NAD 83 in decimal degrees to 5 decimal places)

Site Name EVGSAU 2437-001	Site Type
Date Release Discovered January 10, 2023	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
P	24	17S	34E	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) 2.67 bbls	Volume Recovered (bbls) 0
☒ Produced Water	Volume Released (bbls) 6.23 bbls	Volume Recovered (bbls) 0
	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 internal corrosion on a flow line. The release occurred off pad. The source of the release has been stopped and the impacted area has been secured.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2303273838
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: __1/19/2023_____

email: _____Bryce.Wagoner@mavresources.com____ Telephone: ___928-241-1862_____

OCD Only

Received by: _____ Date: _____

NAPP2303273838

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						0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle B						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	50.0	50.0	0.8	0.3	0.30	2500.0	29.7	8.9	2.67	6.2
Rectangle B						0.0	0.0	0.0	0.00	0.0
Rectangle C						0.0	0.0	0.0	0.00	0.0
Rectangle D						0.0	0.0	0.0	0.00	0.0
Rectangle E						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):	**8.90**	**2.67**	**6.23**

TOTAL RELEASE VOLUME (bbls):	**8.9**

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2303273838
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	NAPP2303273838
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: 07/13/2023

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

OCD Only

Received by: Shelly Wells Date: 7/14/2023

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2303273838
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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: 07/13/2023

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

OCD Only

Received by: Shelly Wells Date: 7/14/2023

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: Nelson Velez Date: 10/04/2023

Remediation plan approved as written. Remediation Due date updated to January 2, 2024.

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

Action 240131

CONDITIONS

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 240131
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Remediation plan approved as written. Remediation Due date updated to January 2, 2024.	10/4/2023