



July 18, 2023

**New Mexico Oil Conservation Division**

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

**Re: Closure Request  
EVGSAU 2963-001  
Incident Number NAPP2235371799  
Lea County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Maverick Permian, LLC (Maverick), has prepared this *Closure Request* to document assessment, excavation, and soil sampling activities performed at the EVGSAU 2963-001 (Site). The purpose of the Site assessment, excavation, and soil sampling activities was to address impacts to soil resulting from a flowline release onto the surrounding pasture. Based on excavation activities and laboratory analytical results from the soil sampling events, Maverick is submitting this *Closure Request*, describing remediation that has occurred and requesting closure for Incident Number NAPP2235371799.

**SITE DESCRIPTION AND RELEASE SUMMARY**

The Site is located in Unit J, Section 29, Township 17 South, Range 35 East, in Lea County, New Mexico (32.80368°, -103.47605°) and is associated with oil and gas exploration and production operations on State Land managed by the New Mexico State Land Office (NMSLO).

On November 30, 2022, a flowline failure resulted in the release of approximately 1.29 barrels (bbls) of crude oil and 3.02 barrels (bbls) of produced water onto the surrounding pasture. No fluids were recovered. Maverick reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on December 19, 2022. The release was assigned Incident Number NAPP2235371799.

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 February 15, 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 was fully executed by the NMSLO and received by Maverick on March 7, 2023. No additional cultural resource surveys were completed in connection with this release. A copy of the ROE Request for Remediation form and fully executed ROE Permit, are included in Appendix A.

**SITE CHARACTERIZATION AND CLOSURE CRITERIA**

The Site was characterized to assess applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC).

Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential Site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be between 51 feet and 100 feet below ground surface (bgs) based on regional groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well L-04829-S4, located approximately 0.35 miles west of the Site. The groundwater well has a reported depth to groundwater of 90 feet bgs. Ground surface elevation at the groundwater well location is 3,971 feet above mean sea level (amsl), which is at the same elevation as the Site. Two additional wells within 0.47 miles of the Site have reported depths to groundwater between 71.69 feet and 76.61 feet bgs. The groundwater well with the most recent depth to groundwater is United States Geological Survey (USGS) well 324759103284501, located approximately 0.4 miles west of the Site. The groundwater well has a reported depth to groundwater from December 1990 of 76.61 feet bgs. Ground surface elevation at the groundwater well location is 3,968 feet above mean sea level (amsl), which is approximately 3 feet lower in elevation than the Site. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well records are included in Appendix B.

The closest continuously flowing or significant watercourse to the Site is a freshwater pond, located approximately 2,140 feet west of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

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

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

A reclamation requirement of 600 mg/kg chloride and 100 mg/kg TPH was applied to the top 4 feet of the pasture area that was impacted by the release, per 19.15.29.13.D (1) NMAC for the top 4 feet of areas that will be reclaimed following remediation.

## EXCAVATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

On June 5, 2023, Ensolum personnel were at the Site to oversee excavation activities based on information provided on the Form C-141, visible staining in the release area, and field screening results. To direct excavation activities, soil was field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride utilizing Hach® chloride QuanTab® test strips. Excavation activities were performed using a backhoe and transport vehicles. The excavation was completed to depths ranging from 1-foot to 1.5 feet bgs.

Following removal of the impacted soil, 5-point composite soil samples were collected every 200 square feet from the floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by



thoroughly mixing. Composite soil samples FS01 through FS15 were collected from the floor of the excavation at depths ranging from 1-foot to 1.5 feet bgs. Due to the shallow depth of the excavation, sidewall samples were included in the floor samples. Additionally, assessment soil samples SS01 through SS04 were collected from a depth of 0.5 feet bgs around the excavation extent to confirm the lateral extent of the release. The excavation extent and soil sample locations were mapped utilizing a handheld GPS and are presented on Figure 2. Photographic documentation of the excavation 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 under strict chain-of-custody procedures to Cardinal Laboratories (Cardinal) in Carlsbad, New Mexico, for analyses of the following constituents of concern (COC): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH- GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for assessment samples SS01 through SS04 indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria and defined the lateral extent of the release. Laboratory analytical results for excavation floor samples FS01 through FS04 and FS06 through FS13 indicated all COC concentrations were compliant with the Site Closure Criteria and reclamation requirements. Laboratory analytical results for excavation floor samples FS05, FS14, and FS15 indicate TPH and/or chloride concentrations exceeded the reclamation requirement. Additional soil was removed in the vicinity of floor samples FS05, FS14, and FS15 and subsequent floor samples FS05A, FS14A, and FS15A were compliant with the reclamation requirements. The laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix D.

The excavation area measured 2,800 square feet. A total of approximately 100 cubic yards of impacted soil was removed, transported, and properly disposed of at R360 Environmental Solutions in Hobbs, New Mexico.

## CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the November 30, 2022, release of crude oil and produced water. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated all COC concentrations were compliant with the Site Closure Criteria and reclamation requirements. Additionally, the release was laterally defined to below the most stringent Table I Closure Criteria. Based on the laboratory analytical results, no further remediation was required. Maverick will backfill the excavation with material purchased locally, recontour the Site to match pre-existing site conditions and re-seed the disturbed area with an approved seed mixture.

Maverick believes the remedial actions completed are protective of human health, the environment, and groundwater. As such, Maverick respectfully requests closure for Incident Number NAPP2235371799. The NMOCD notifications are included in Appendix E and the Final C-141 is included in Appendix F. A Reclamation Plan for the disturbed pasture area is included in Appendix G for NMSLO review.

Maverick Permian, LLC  
Closure Request  
EVGSAU 2963-001

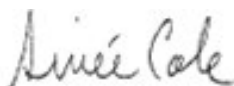
Page 4

If you have any questions or comments, please contact please contact Ms. Aimee Cole at (720) 384-7365 or [acole@ensolum.com](mailto:acole@ensolum.com).

Sincerely,  
**Ensolum, LLC**



Julianna Falcomata  
Staff Scientist



Aimee Cole  
Senior Managing Scientist

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

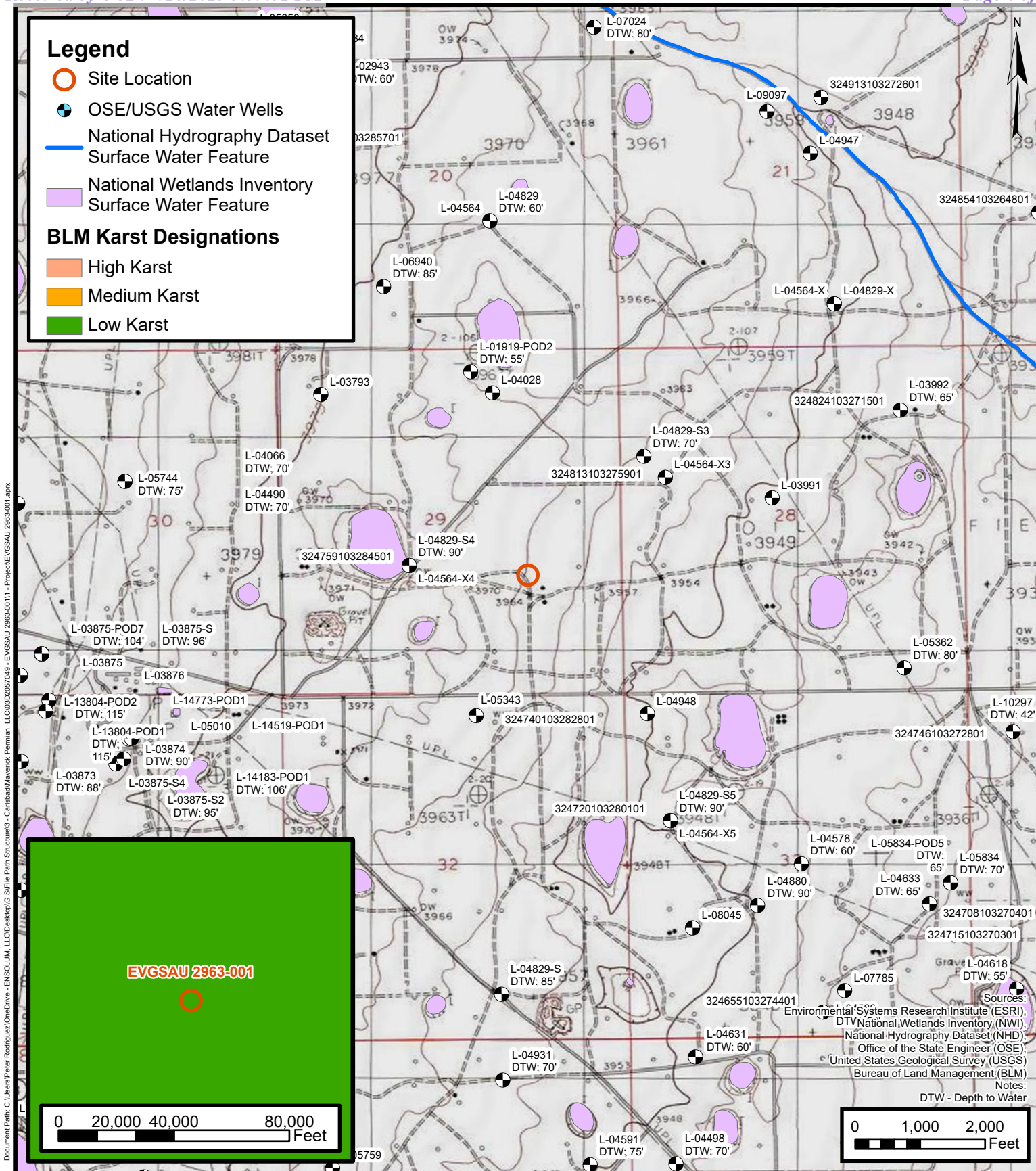
Appendices:

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





FIGURES



## Site Receptor Map

Maverick Permian, LLC

EVGSAU 2963-001

Incident ID: NAPP2235371799

Unit: J, Section: 29, Township: 17S, Range 35E  
 Lea County, New Mexico

FIGURE

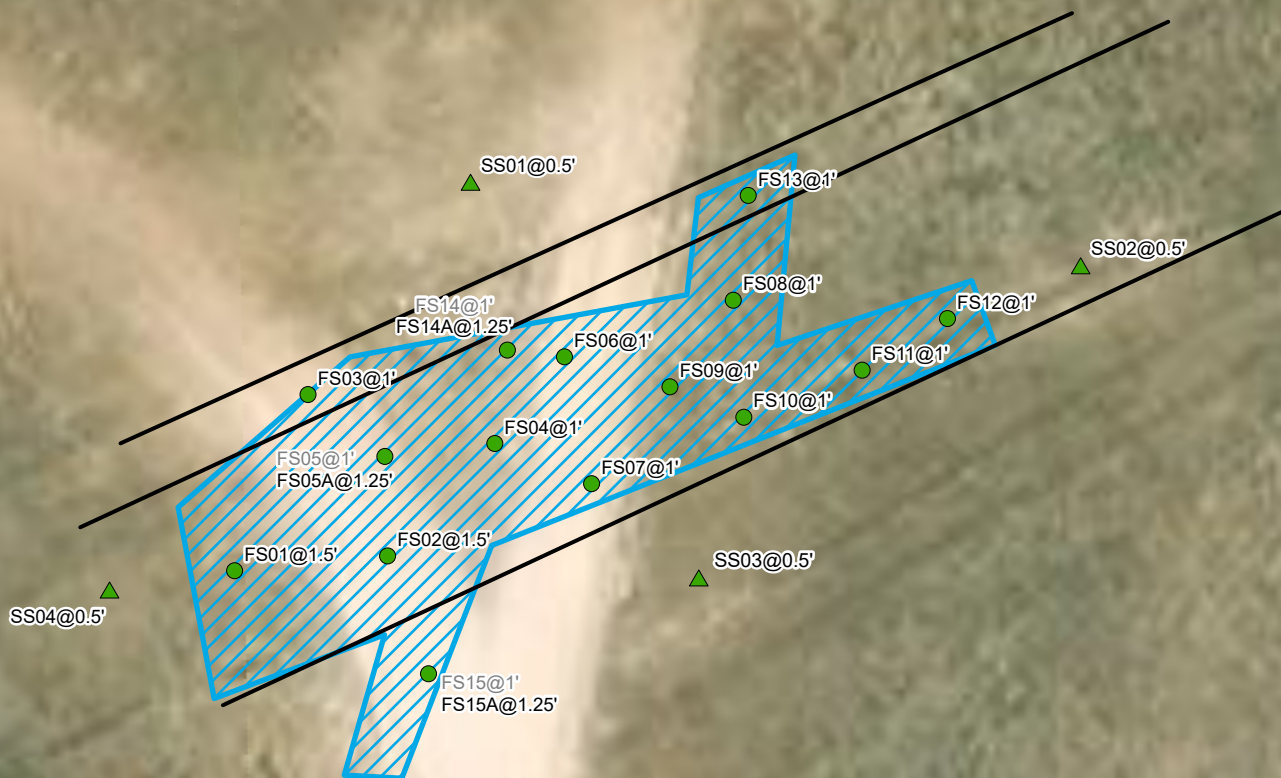
1



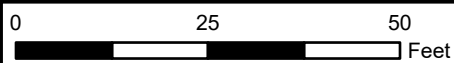


**Legend**

- Excavation Floor Sample in Compliance with Closure Criteria
- ▲ Assessment Sample in Compliance with Closure Criteria
- Utility Lines
- ▨ Excavation Extent



Notes:  
Sample ID @ Depth Below Ground Surface.



Sources: Environmental Systems Research Institute (ESRI)



## Excavation Soil Sample Locations

Maverick Permian, LLC  
EVGSAU 2963-001  
Incident Number: NAPP2235371799  
Unit J, Sec 29, T17S, R35E  
Lea County, New Mexico

**FIGURE**  
**2**



TABLES



**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
 EVGSAU 2963-001  
 Maverick Permian, LLC  
 Lea County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
Delineation Soil Samples										
SS01	06/06/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SS02	06/06/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
SS03	06/06/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SS04	06/06/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
Excavation Soil Samples										
FS01*	06/05/2023	1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
FS02*	06/05/2023	1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
FS03*	06/05/2023	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
FS04*	06/05/2023	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	256
FS05*	06/05/2023	1	<0.050	<0.300	<10.0	104	22.1	104	104	416
FS05A*	06/08/2023	1.25	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208
FS06*	06/05/2023	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208
FS07*	06/05/2023	1	<0.050	<0.300	<10.0	44.8	<10.0	44.8	44.8	256
FS08*	06/05/2023	1	<0.050	<0.300	<10.0	32.7	<10.0	32.7	32.7	192
FS09*	06/05/2023	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
FS10*	06/06/2023	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	336
FS11*	06/06/2023	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	448
FS12*	06/06/2023	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	400
FS13*	06/06/2023	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	432
FS14*	06/06/2023	1	<0.050	<0.300	<10.0	12.1	<10.0	12.1	12.1	608
FS14A*	06/08/2023	1.25	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
FS15*	06/06/2023	1	<0.050	<0.300	<10.0	24.3	<10.0	24.3	24.3	624
FS15A*	06/08/2023	1.25	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0

## Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in bold exceed the NMOCD Table 1 Closure Criteria or reclamation standard where applicable.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

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

Grey text represents samples that have been excavated



## APPENDIX A

# ROE Request for Remediation Form and ROE Permit

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**Stephanie Garcia Richard**  
**Commissioner of Public Lands**

**RIGHT OF ENTRY REQUEST FOR REMEDIATION**

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

Purpose of request: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Section \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_ Unit Letter \_\_\_\_\_

Qtr/Qtr \_\_\_\_\_ County \_\_\_\_\_

GPS Location (decimal degrees): Latitude \_\_\_\_\_ W Longitude \_\_\_\_\_ N

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

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

Square footage of spill impacted surface: \_\_\_\_\_

Estimated square footage of total disturbance: \_\_\_\_\_

Reclamation Plan (*attach addl. sheet if necessary*) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

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

Lease number associated with the ROE request: \_\_\_\_\_

Well Name and/or Operator (if applicable): \_\_\_\_\_

Time expected to complete remediation: \_\_\_\_\_

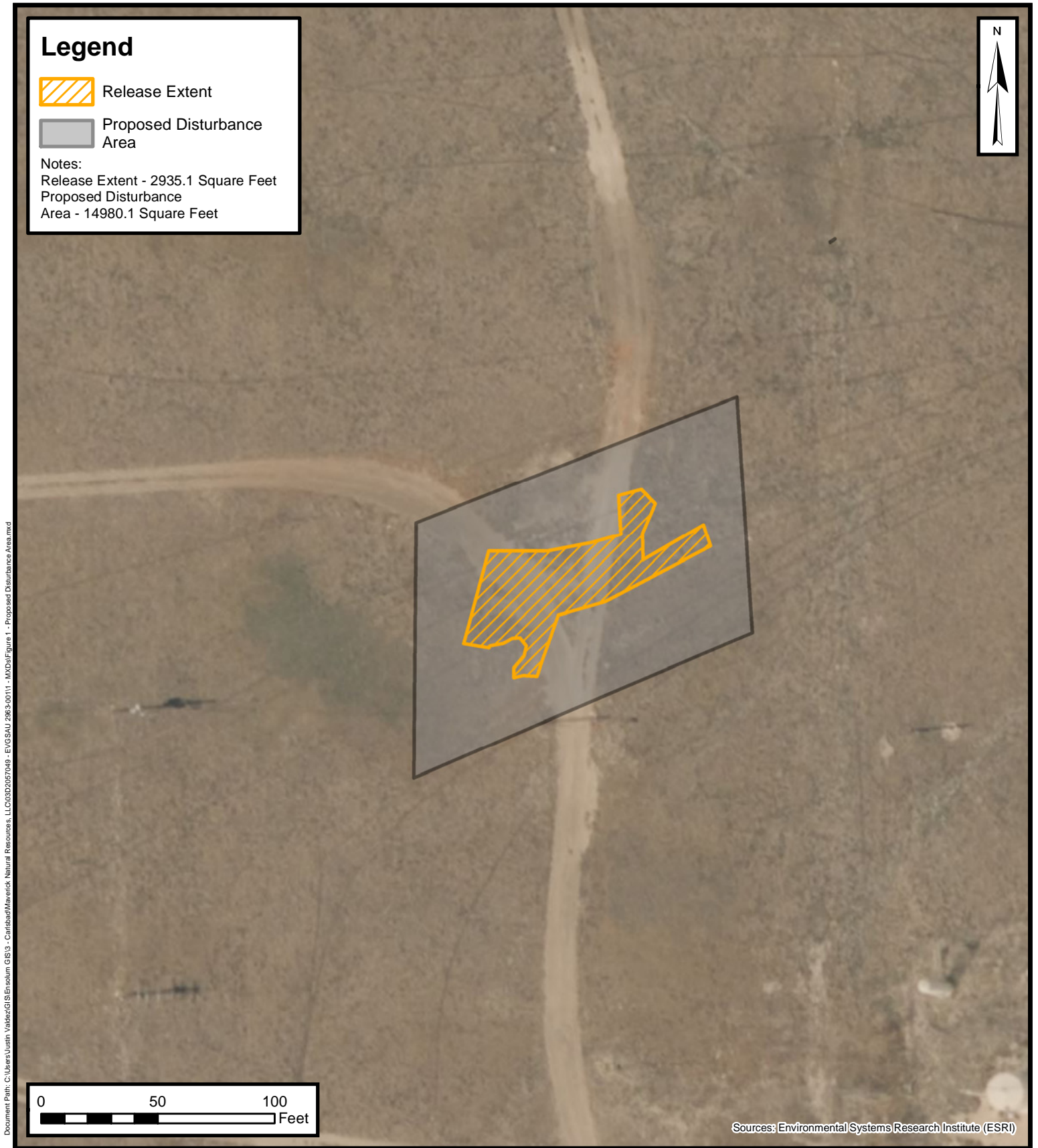
Personnel present on State Land \_\_\_\_\_

Equipment & materials present on State Land \_\_\_\_\_

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

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

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



## Proposed Disturbance Area

Incident Number: NAPP2235371799

Maverick Permian, LLC

EVGSAU 2963-001

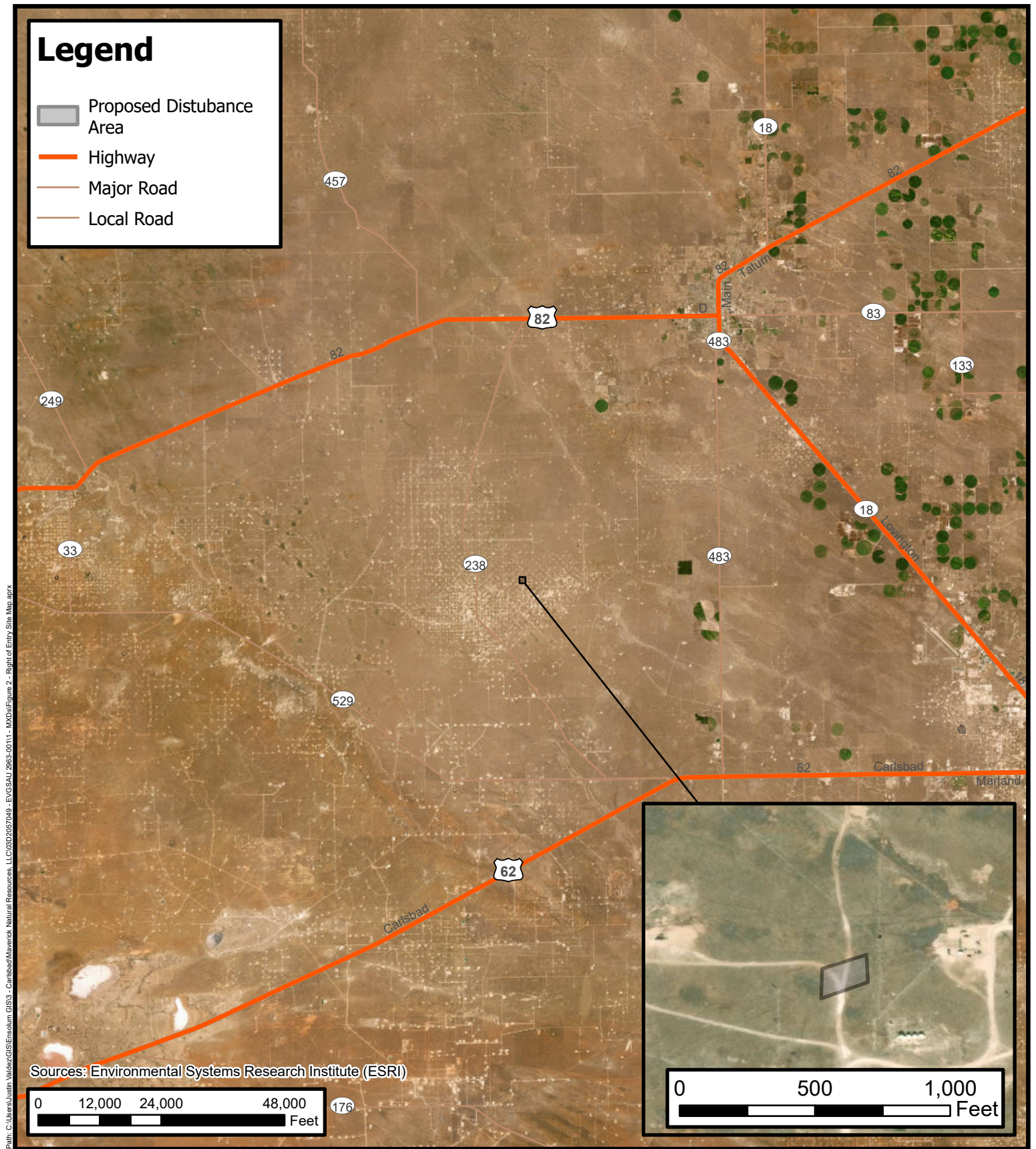
NWSE, S29, T17S, R35E

Lea County, New Mexico

FIGURE

1





## Right of Entry Site Map

Incident Number: NAPP2235371799  
Maverick Permian, LLC  
EVGSAU 2963-001  
NWSE, S29, T17S, R35E  
Lea County, New Mexico

FIGURE  
2



Stephanie Garcia Richard  
COMMISSIONER

*State of New Mexico*  
***Commissioner of Public Lands***

310 OLD SANTA FE TRAIL  
P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148

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

March 7, 2023

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

Attn: Bryce Wagoner

Re: Right-of-Entry Permit No.: **RE-6439/EVGSAU 2963-001 Remediation**

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 – 6439**

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

**Maverick Natural Resources, LLC**  
**1410 NW County Road**  
**Hobbs, NM 88240**

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

**1. RIGHT OF ENTRY ("ROE")**

The Commissioner grants to Permittee, and its authorized representatives, employees, and contractors, permission to use the state trust lands identified below (the "Premises"), and ingress and egress to the Premises, for the sole purposes of (1) surveying/conducting an environmental investigation due to a crude oil and produced water release (the "Premises"), **Incident # NAPP2235371799** and (2) conducting surface remediation and reclamation activities, including removal of equipment and debris, and any required remediation per 19.15.29.12 NMAC.

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

Section	Township	Range	Subdivision	County	Longitude/Latitude
29	17S	35E	NW4SE4	Lea	32.80368,-103.47605

**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**

RE-6439

- A. The issuance of this ROE does not guarantee that any subsequent lease, permit, or any other instrument will be issued to Permittee for the Premises.
- B. No blading or widening of any roads that provide access to the Premises is permitted under this ROE.
- C. No sale of any material extracted from the Premises is allowed under this ROE.
- D. Permittee shall observe all applicable federal, state, and local laws and regulations.
- E. Permittee shall take all reasonable precautions to prevent and suppress forest, brush, and grass fires and prevent pollution of waters on or in the vicinity of the Premises.
- F. Permittee shall not block or disrupt roads or trails commonly in use.
- G. This ROE is subject to any and all easements and rights-of-way previously granted and now in force and effect.
- H. Permittee shall be responsible for repair and restitution for damage to any Premises or improvements as a result of activities related to the ROE.
- I. Prior to entering the Premises, Permittee must identify and contact any existing surface lessees. The grant of this ROE does not allow access across private lands.
- J. Permittee may utilize this ROE upon its execution for inspection of the Premises and to conduct any necessary tests or inspections. Permittee may not conduct remediation or reclamation work until it has submitted a written plan for such work, and received State Land Office approval.
- K. Personnel present on Premises: **Maverick Natural Resources personnel and contractors.**
- L. Equipment and materials present on Premises: **Vehicles, heavy equipment, and associated equipment.**

#### **5. SITE CONDITIONS**

- A. No surface disturbance, other than soil tests, except as described in a reclamation plan submitted to and approved by the State Land Office.
- B. Access to the Premises shall be over existing roads.
- C. The natural environmental conditions that exist contemporaneously with this grant of ROE shall be preserved and protected. Permittee must follow all applicable environmental and cultural resource protection laws and regulations.

#### **6. INDEMNITY**

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

#### **7. SURVIVAL OF TERMS**

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

#### **8. NOTIFICATION**

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

RE-6439



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

  
\_\_\_\_\_  
PERMITTEE SIGNATURE

DATE: 3/6/23

Bryce Wagoner  
HSE Specialist II

PERMITTEE NAME AND TITLE (PRINT)

SEAL:

BY: 

Stephanie Garcia Richerson  
Commissioner of Public Lands

DATE: 03/07/2023





## APPENDIX B


### Referenced Well Records

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# New Mexico Office of the State Engineer

## Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)				(quarters are smallest to largest)				(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y		
L	04829 S4	2	3	29	17S	35E	642121	3630598*			
<hr/>											
Driller License:		46	Driller Company:			ABBOTT BROTHERS COMPANY					
Driller Name:		ABBOTT, MURRELL									
Drill Start Date:		05/14/1979	Drill Finish Date:			06/05/1979		Plug Date:			
Log File Date:		06/26/1979	PCW Rcv Date:			11/20/1979		Source:		Shallow	
Pump Type:		Pipe Discharge Size:					Estimated Yield:				
Casing Size:		12.75	Depth Well:			200 feet		Depth Water:		90 feet	
<hr/>											
Water Bearing Stratifications:					Top	Bottom	Description				
					90	200	Sandstone/Gravel/Conglomerate				
<hr/>											
Casing Perforations:					Top	Bottom					
					110	200					

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

1/24/23 9:52 AM

POINT OF DIVERSION SUMMARY

National Water Information System: Web Interface


USGS Water Resources

Data Category:  
Groundwater


Geographic Area:  
United States

GO

Click to hideNews Bulletins

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

Groundwater levels for the Nation

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

Search Results -- 1 sites found

Agency code = usgs

site\_no list =

- 324759103284501

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

USGS 324759103284501 17S.35E.29.32322

Lea County, New Mexico  
Latitude 32°48'14", Longitude 103°28'55" NAD27  
Land-surface elevation 3,971.00 feet above NGVD29  
The depth of the well is 200 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
1981-01-20			D 62610		3907.36	NGVD29	1	Z		
1981-01-20			D 62611		3908.85	NAVD88	1	Z		
1981-01-20			D 72019	63.64			1	Z		
1986-04-08			D 62610		3897.52	NGVD29	1	Z		
1986-04-08			D 62611		3899.01	NAVD88	1	Z		
1986-04-08			D 72019	73.48			1	Z		
1990-12-20			D 62610		3894.39	NGVD29	1	Z		
1990-12-20			D 62611		3895.88	NAVD88	1	Z		
1990-12-20			D 72019	76.61			1	Z		

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

Section	Code	Description
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	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

---

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Page Last Modified: 2023-06-13 16:44:32 EDT

0.32 0.29 nadww01



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### National Water Information System: Web Interface


USGS Water Resources

Data Category:  
Groundwater


Geographic Area:  
United States

GO

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Groundwater levels for the Nation

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

Search Results -- 1 sites found

Agency code = usgs  
site\_no list =

- 324813103275901

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

USGS 324813103275901 17S.35E.28.131443

Lea County, New Mexico  
Latitude 32°48'28", Longitude 103°28'09" NAD27  
Land-surface elevation 3,961.00 feet above NGVD29  
The depth of the well is 215 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

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>

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
1981-01-21			D 62610		3891.20	NGVD29	1	Z		
1981-01-21			D 62611		3892.68	NAVD88	1	Z		
1981-01-21			D 72019	69.80			1	Z		
1986-04-08			D 62610		3889.31	NGVD29	1	Z		
1986-04-08			D 62611		3890.79	NAVD88	1	Z		
1986-04-08			D 72019	71.69			1	Z		

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



Section	Code	Description
Status	1	Static
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

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**Title: Groundwater for USA: Water Levels**  
**URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>**



Page Contact Information: [USGS Water Data Support Team](#)  
Page Last Modified: 2023-06-13 16:45:57 EDT  
0.28 0.25 nadww01



## APPENDIX C

### Photographic Log

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## Photographic Log

Maverick Natural Resources, LLC

EVGSAU 2963-001

NAPP2235371799



Photograph 1

Date: 11/30/22

Description: Initial release

View: Southeast



Photograph 2

Date: 11/30/22

Description: Initial release

View: Southeast



Photograph 3

Date: 6/6/23

Description: Completed excavation

View: Northeast



Photograph 4

Date: 6/6/23

Description: Completed excavation

View: Southwest



## APPENDIX D

# Laboratory Analytical Reports and Chain - of-Custody Documentation

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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 2963

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/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

Cardinal Laboratories is accredited 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

Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS 01 @ .5'	H232860-01	Soil	06-Jun-23 08:50	06-Jun-23 12:10
SS 02 @ .5'	H232860-02	Soil	06-Jun-23 08:55	06-Jun-23 12:10
SS 03 @ .5'	H232860-03	Soil	06-Jun-23 09:00	06-Jun-23 12:10
SS 04 @ .5'	H232860-04	Soil	06-Jun-23 09:05	06-Jun-23 12:10
FS 10 @ 1'	H232860-05	Soil	06-Jun-23 10:00	06-Jun-23 12:10
FS 11 @ 1'	H232860-06	Soil	06-Jun-23 10:05	06-Jun-23 12:10
FS 12 @ 1'	H232860-07	Soil	06-Jun-23 10:10	06-Jun-23 12:10
FS 13 @ 1'	H232860-08	Soil	06-Jun-23 10:15	06-Jun-23 12:10
FS 14 @ 1'	H232860-09	Soil	06-Jun-23 10:20	06-Jun-23 12:10
FS 15 @ 1'	H232860-10	Soil	06-Jun-23 10:25	06-Jun-23 12:10
FS 01 @ 1.5'	H232860-11	Soil	05-Jun-23 11:10	06-Jun-23 12:10
FS 02 @ 1.5'	H232860-12	Soil	05-Jun-23 11:15	06-Jun-23 12:10
FS 03 @ 1'	H232860-13	Soil	05-Jun-23 13:05	06-Jun-23 12:10
FS 04 @ 1'	H232860-14	Soil	05-Jun-23 13:10	06-Jun-23 12:10
FS 05 @ 1'	H232860-15	Soil	05-Jun-23 13:15	06-Jun-23 12:10
FS 06 @ 1'	H232860-16	Soil	05-Jun-23 13:20	06-Jun-23 12:10
FS 07 @ 1'	H232860-17	Soil	05-Jun-23 13:25	06-Jun-23 12:10
FS 08 @ 1'	H232860-18	Soil	05-Jun-23 13:30	06-Jun-23 12:10
FS 09 @ 1'	H232860-19	Soil	05-Jun-23 13:35	06-Jun-23 12:10

06/07/23 - Client asked for a rerun of a couple of chloride samples (-07, -09 and -10). Sample -07 came out significantly lower. This is the revised report and will replace the one sent earlier today, 06/07/23.

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**SS 01 @ .5'**  
**H232860-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	32.0		16.0	mg/kg	4	3060617	AC	06-Jun-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3060620	MS	06-Jun-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134 3060620 MS 06-Jun-23 8021B

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	

Surrogate: 1-Chlorooctane 70.3 % 48.2-134 3060607 MS 06-Jun-23 8015B

Surrogate: 1-Chlorooctadecane 88.4 % 49.1-148 3060607 MS 06-Jun-23 8015B

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**SS 02 @ .5'**  
**H232860-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>48.0</b>		16.0	mg/kg	4	3060617	AC	06-Jun-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3060620	MS	06-Jun-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			97.0 %	71.5-134		3060620	MS	06-Jun-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			85.7 %	48.2-134		3060607	MS	06-Jun-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			106 %	49.1-148		3060607	MS	06-Jun-23	8015B	
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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**SS 03 @ .5'**  
**H232860-03 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>32.0</b>		16.0	mg/kg	4	3060617	AC	06-Jun-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3060620	MS	06-Jun-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			105 %	71.5-134		3060620	MS	06-Jun-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			75.3 %	48.2-134		3060607	MS	06-Jun-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			94.7 %	49.1-148		3060607	MS	06-Jun-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

SS 04 @ .5'  
H232860-04 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	32.0		16.0	mg/kg	4	3060617	AC	06-Jun-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3060620	MS	06-Jun-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			100 %	71.5-134		3060620	MS	06-Jun-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	

Surrogate: 1-Chlorooctane			92.8 %	48.2-134		3060607	MS	06-Jun-23	8015B	
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Surrogate: 1-Chlorooctadecane			115 %	49.1-148		3060607	MS	06-Jun-23	8015B	
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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**FS 10 @ 1'**  
**H232860-05 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>336</b>		16.0	mg/kg	4	3060617	AC	06-Jun-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3060620	MS	06-Jun-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			101 %	71.5-134		3060620	MS	06-Jun-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	

Surrogate: 1-Chlorooctane			82.7 %	48.2-134		3060607	MS	06-Jun-23	8015B	
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Surrogate: 1-Chlorooctadecane			103 %	49.1-148		3060607	MS	06-Jun-23	8015B	
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Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**FS 11 @ 1'**  
**H232860-06 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>448</b>		16.0	mg/kg	4	3060617	AC	06-Jun-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3060620	MS	06-Jun-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			100 %	71.5-134		3060620	MS	06-Jun-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	

Surrogate: 1-Chlorooctane			96.5 %	48.2-134		3060607	MS	06-Jun-23	8015B	
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Surrogate: 1-Chlorooctadecane			119 %	49.1-148		3060607	MS	06-Jun-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**FS 12 @ 1'**  
**H232860-07 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>400</b>		16.0	mg/kg	4	3060617	AC	06-Jun-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3060620	MS	06-Jun-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			104 %	71.5-134		3060620	MS	06-Jun-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			101 %	48.2-134		3060607	MS	06-Jun-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			122 %	49.1-148		3060607	MS	06-Jun-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**FS 13 @ 1'**  
**H232860-08 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>432</b>		16.0	mg/kg	4	3060617	AC	06-Jun-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050	0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Toluene*	<0.050	0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	3060620	MS	06-Jun-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	97.8 %	71.5-134	3060620	MS	06-Jun-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0	10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	

Surrogate: 1-Chlorooctane	77.6 %	48.2-134	3060607	MS	06-Jun-23	8015B	
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Surrogate: 1-Chlorooctadecane	94.4 %	49.1-148	3060607	MS	06-Jun-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**FS 14 @ 1'**  
**H232860-09 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>608</b>		16.0	mg/kg	4	3060617	AC	06-Jun-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3060620	MS	06-Jun-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			103 %	71.5-134		3060620	MS	06-Jun-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	
<b>DRO &gt;C10-C28*</b>	<b>12.1</b>		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	

Surrogate: 1-Chlorooctane			88.4 %	48.2-134		3060607	MS	06-Jun-23	8015B	
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Surrogate: 1-Chlorooctadecane			110 %	49.1-148		3060607	MS	06-Jun-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**FS 15 @ 1'**  
**H232860-10 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>624</b>		16.0	mg/kg	4	3060617	AC	06-Jun-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3060620	MS	06-Jun-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			104 %	71.5-134		3060620	MS	06-Jun-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	
<b>DRO &gt;C10-C28*</b>	<b>24.3</b>		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B	

Surrogate: 1-Chlorooctane			88.7 %	48.2-134		3060607	MS	06-Jun-23	8015B	
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Surrogate: 1-Chlorooctadecane			110 %	49.1-148		3060607	MS	06-Jun-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**FS 01 @ 1.5'****H232860-11 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>192</b>		16.0	mg/kg	4	3060617	AC	06-Jun-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050	0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B
Toluene*	<0.050	0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B
Ethylbenzene*	<0.050	0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B
Total Xylenes*	<0.150	0.150	mg/kg	50	3060620	MS	06-Jun-23	8021B
Total BTEX	<0.300	0.300	mg/kg	50	3060620	MS	06-Jun-23	8021B

Surrogate: 4-Bromofluorobenzene (PID)	103 %	71.5-134	3060620	MS	06-Jun-23	8021B
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0	10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B
DRO >C10-C28*	<10.0	10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B

Surrogate: 1-Chlorooctane	85.5 %	48.2-134	3060607	MS	06-Jun-23	8015B
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Surrogate: 1-Chlorooctadecane	106 %	49.1-148	3060607	MS	06-Jun-23	8015B
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**FS 02 @ 1.5'****H232860-12 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>192</b>		16.0	mg/kg	4	3060617	AC	06-Jun-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050	0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B
Toluene*	<0.050	0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B
Ethylbenzene*	<0.050	0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B
Total Xylenes*	<0.150	0.150	mg/kg	50	3060620	MS	06-Jun-23	8021B
Total BTEX	<0.300	0.300	mg/kg	50	3060620	MS	06-Jun-23	8021B

Surrogate: 4-Bromofluorobenzene (PID)	101 %	71.5-134	3060620	MS	06-Jun-23	8021B
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0	10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B
DRO >C10-C28*	<10.0	10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	3060607	MS	06-Jun-23	8015B

Surrogate: 1-Chlorooctane	93.0 %	48.2-134	3060607	MS	06-Jun-23	8015B
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Surrogate: 1-Chlorooctadecane	115 %	49.1-148	3060607	MS	06-Jun-23	8015B
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**FS 03 @ 1'**  
**H232860-13 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>144</b>		16.0	mg/kg	4	3060636	AC	06-Jun-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3060620	MS	06-Jun-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			102 %	71.5-134		3060620	MS	06-Jun-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3060608	MS	06-Jun-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3060608	MS	06-Jun-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3060608	MS	06-Jun-23	8015B	

Surrogate: 1-Chlorooctane			84.6 %	48.2-134		3060608	MS	06-Jun-23	8015B	
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Surrogate: 1-Chlorooctadecane			85.8 %	49.1-148		3060608	MS	06-Jun-23	8015B	
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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**FS 04 @ 1'**  
**H232860-14 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>256</b>		16.0	mg/kg	4	3060636	AC	06-Jun-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3060620	MS	06-Jun-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			103 %		71.5-134	3060620	MS	06-Jun-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3060608	MS	06-Jun-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3060608	MS	06-Jun-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3060608	MS	06-Jun-23	8015B	

Surrogate: 1-Chlorooctane			96.3 %		48.2-134	3060608	MS	06-Jun-23	8015B	
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Surrogate: 1-Chlorooctadecane			98.3 %		49.1-148	3060608	MS	06-Jun-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**FS 05 @ 1'**  
**H232860-15 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>416</b>		16.0	mg/kg	4	3060636	AC	06-Jun-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3060620	MS	06-Jun-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			106 %	71.5-134		3060620	MS	06-Jun-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3060608	MS	06-Jun-23	8015B	
<b>DRO &gt;C10-C28*</b>	<b>104</b>		10.0	mg/kg	1	3060608	MS	06-Jun-23	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>22.1</b>		10.0	mg/kg	1	3060608	MS	06-Jun-23	8015B	

Surrogate: 1-Chlorooctane			86.9 %	48.2-134		3060608	MS	06-Jun-23	8015B	
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Surrogate: 1-Chlorooctadecane			94.1 %	49.1-148		3060608	MS	06-Jun-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**FS 06 @ 1'**  
**H232860-16 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>208</b>		16.0	mg/kg	4	3060636	AC	06-Jun-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3060620	MS	06-Jun-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			99.6 %		71.5-134	3060620	MS	06-Jun-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3060608	MS	06-Jun-23	8015B	
<b>DRO &gt;C10-C28*</b>	<b>31.4</b>		10.0	mg/kg	1	3060608	MS	06-Jun-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3060608	MS	06-Jun-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			84.8 %		48.2-134	3060608	MS	06-Jun-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			90.9 %		49.1-148	3060608	MS	06-Jun-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**FS 07 @ 1'**  
**H232860-17 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>256</b>		16.0	mg/kg	4	3060636	AC	06-Jun-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3060620	MS	06-Jun-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			102 %	71.5-134		3060620	MS	06-Jun-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3060608	MS	06-Jun-23	8015B	
<b>DRO &gt;C10-C28*</b>	<b>44.8</b>		10.0	mg/kg	1	3060608	MS	06-Jun-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3060608	MS	06-Jun-23	8015B	

Surrogate: 1-Chlorooctane			84.4 %	48.2-134		3060608	MS	06-Jun-23	8015B	
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Surrogate: 1-Chlorooctadecane			92.5 %	49.1-148		3060608	MS	06-Jun-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**FS 08 @ 1'**  
**H232860-18 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>192</b>		16.0	mg/kg	4	3060636	AC	06-Jun-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3060620	MS	06-Jun-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			102 %	71.5-134		3060620	MS	06-Jun-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3060608	MS	06-Jun-23	8015B	
<b>DRO &gt;C10-C28*</b>	<b>32.7</b>		10.0	mg/kg	1	3060608	MS	06-Jun-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3060608	MS	06-Jun-23	8015B	

Surrogate: 1-Chlorooctane			83.5 %	48.2-134		3060608	MS	06-Jun-23	8015B	
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Surrogate: 1-Chlorooctadecane			88.9 %	49.1-148		3060608	MS	06-Jun-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**FS 09 @ 1'**  
**H232860-19 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>80.0</b>		16.0	mg/kg	4	3060636	AC	06-Jun-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3060620	MS	06-Jun-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3060620	MS	06-Jun-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			101 %	71.5-134		3060620	MS	06-Jun-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3060608	MS	06-Jun-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3060608	MS	06-Jun-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3060608	MS	06-Jun-23	8015B	

Surrogate: 1-Chlorooctane			86.9 %	48.2-134		3060608	MS	06-Jun-23	8015B	
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Surrogate: 1-Chlorooctadecane			88.9 %	49.1-148		3060608	MS	06-Jun-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**Inorganic Compounds - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3060617 - 1:4 DI Water****Blank (3060617-BLK1)**

Prepared &amp; Analyzed: 06-Jun-23

Chloride	ND	16.0	mg/kg						
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**LCS (3060617-BS1)**

Prepared &amp; Analyzed: 06-Jun-23

Chloride	448	16.0	mg/kg	400	112	80-120			
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**LCS Dup (3060617-BSD1)**

Prepared &amp; Analyzed: 06-Jun-23

Chloride	432	16.0	mg/kg	400	108	80-120	3.64	20	
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**Batch 3060636 - 1:4 DI Water****Blank (3060636-BLK1)**

Prepared &amp; Analyzed: 06-Jun-23

Chloride	ND	16.0	mg/kg						
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**LCS (3060636-BS1)**

Prepared &amp; Analyzed: 06-Jun-23

Chloride	448	16.0	mg/kg	400	112	80-120			
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**LCS Dup (3060636-BSD1)**

Prepared &amp; Analyzed: 06-Jun-23

Chloride	432	16.0	mg/kg	400	108	80-120	3.64	20	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**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
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**Batch 3060620 - Volatiles****Blank (3060620-BLK1)**

Prepared &amp; Analyzed: 06-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)	ND		mg/kg	0.0500		97.4	71.5-134			

**LCS (3060620-BS1)**

Prepared &amp; Analyzed: 06-Jun-23

Benzene	2.21	0.050	mg/kg	2.00		111	81.4-118			
Toluene	2.24	0.050	mg/kg	2.00		112	88.7-121			
Ethylbenzene	2.31	0.050	mg/kg	2.00		115	86.1-120			
m,p-Xylene	4.54	0.100	mg/kg	4.00		114	88.2-124			
o-Xylene	2.25	0.050	mg/kg	2.00		112	84.9-118			
Total Xylenes	6.79	0.150	mg/kg	6.00		113	87.3-122			
Surrogate: 4-Bromofluorobenzene (PID)	0.0528		mg/kg	0.0500		106	71.5-134			

**LCS Dup (3060620-BSD1)**

Prepared &amp; Analyzed: 06-Jun-23

Benzene	2.39	0.050	mg/kg	2.00		120	81.4-118	7.90	15.8	BS-3
Toluene	2.42	0.050	mg/kg	2.00		121	88.7-121	7.78	15.9	
Ethylbenzene	2.46	0.050	mg/kg	2.00		123	86.1-120	6.58	16	BS-3
m,p-Xylene	4.90	0.100	mg/kg	4.00		122	88.2-124	7.60	16.2	
o-Xylene	2.41	0.050	mg/kg	2.00		120	84.9-118	6.82	16.7	BS-3
Total Xylenes	7.31	0.150	mg/kg	6.00		122	87.3-122	7.34	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	0.0516		mg/kg	0.0500		103	71.5-134			

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**Petroleum Hydrocarbons by GC FID - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3060607 - General Prep - Organics****Blank (3060607-BLK1)**

Prepared &amp; Analyzed: 06-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	35.0		mg/kg	49.6		70.7	48.2-134		
Surrogate: 1-Chlorooctadecane	39.7		mg/kg	50.0		79.5	49.1-148		

**LCS (3060607-BS1)**

Prepared &amp; Analyzed: 06-Jun-23

GRO C6-C10	193	10.0	mg/kg	200		96.4	78.5-124		
DRO >C10-C28	183	10.0	mg/kg	200		91.3	72.5-126		
Total TPH C6-C28	375	10.0	mg/kg	400		93.9	77.6-123		
Surrogate: 1-Chlorooctane	40.6		mg/kg	49.6		81.9	48.2-134		
Surrogate: 1-Chlorooctadecane	43.9		mg/kg	50.0		87.7	49.1-148		

**LCS Dup (3060607-BSD1)**

Prepared &amp; Analyzed: 06-Jun-23

GRO C6-C10	160	10.0	mg/kg	200		79.9	78.5-124	18.7	17.7	QR-04
DRO >C10-C28	173	10.0	mg/kg	200		86.4	72.5-126	5.55	21	
Total TPH C6-C28	333	10.0	mg/kg	400		83.1	77.6-123	12.1	18.5	
Surrogate: 1-Chlorooctane	39.9		mg/kg	49.6		80.5	48.2-134			
Surrogate: 1-Chlorooctadecane	43.7		mg/kg	50.0		87.3	49.1-148			

**Batch 3060608 - General Prep - Organics****Blank (3060608-BLK1)**

Prepared &amp; Analyzed: 06-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	37.6		mg/kg	49.6		75.9	48.2-134			
Surrogate: 1-Chlorooctadecane	39.6		mg/kg	50.0		79.2	49.1-148			

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: EVGSAU 2963  
Project Number: 03D2057049  
Project Manager: KALEI JENNINGS  
Fax To:

Reported:  
07-Jun-23 16:49

**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
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**Batch 3060608 - General Prep - Organics****LCS (3060608-BS1)**

Prepared &amp; Analyzed: 06-Jun-23

GRO C6-C10	209	10.0	mg/kg	200		105	78.5-124			
DRO >C10-C28	211	10.0	mg/kg	200		106	72.5-126			
Total TPH C6-C28	420	10.0	mg/kg	400		105	77.6-123			
Surrogate: 1-Chlorooctane	51.7		mg/kg	49.6		104	48.2-134			
Surrogate: 1-Chlorooctadecane	52.7		mg/kg	50.0		105	49.1-148			

**LCS Dup (3060608-BS1)**

Prepared &amp; Analyzed: 06-Jun-23

GRO C6-C10	164	10.0	mg/kg	200		81.8	78.5-124	24.5	17.7	QR-04
DRO >C10-C28	171	10.0	mg/kg	200		85.6	72.5-126	20.9	21	
Total TPH C6-C28	335	10.0	mg/kg	400		83.7	77.6-123	22.7	18.5	QR-04
Surrogate: 1-Chlorooctane	41.4		mg/kg	49.6		83.6	48.2-134			
Surrogate: 1-Chlorooctadecane	41.5		mg/kg	50.0		82.9	49.1-148			

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---

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### Notes and Definitions

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

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

---

Celey D. Keene, Lab Director/Quality Manager



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

Company Name: Ensolium, LLC						<b>BILL TO</b>								<b>ANALYSIS REQUEST</b>						
Project Manager: Haley Jennings						P.O. #:														
Address: 3122 Nat'l Parks Hwy						Company: A.A.														
City: Courtland State: NM Zip: 88220						Attn:														
Phone #: 817-683-2503 Fax #:						Address:														
Project #: 03D2057049 Project Owner: Maverick						City:														
Project Name: QUICSAU 2963						State: Zip:														
Project Location: 32,80868,-103.47605						Phone #:														
Sampler Name: Julianna Falconara						Fax #:														
FOR LAB USE ONLY																				
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV.	SAMPLING														
				GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER :	ACID/BASE: ICE / COOL OTHER :	DATE TIME														
H232860					<input checked="" type="checkbox"/>															
1	SS01 @ .5'	C	1	X	X	6/6/23 0850	X	X	X											
2	SS02 @ .5'					0855														
3	SS03 @ .5'					0900														
4	SS04 @ .5'					0905														
5	FS 10 @ 1'					1000														
6	FS 11 @ 1'					1005														
7	FS 12 @ 1'					1010														
8	FS 13 @ 1'					1015														
9	FS 14 @ 1'					1020														
10	FS 15 @ 1'					1025														

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Relinquished By: <i>J. Salomata</i>		Date: <i>6-6-23</i>		Received By: <i>J. Salomata</i>		Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #:	
Time: <i>1210</i>						All Results are emailed. Please provide Email address:	
Relinquished By:		Date:		Received By:		Email address: <i>hennings@ensolum.com</i> <i>jsalomata@ensolum.com</i>	
Time:						REMARKS:	
Delivered By: (Circle One)		Observed Temp. °C <i>2.1</i>		Sample Condition		Turnaround Time: <i>nAPP 2235371799</i>	
Sampler - UPS - Bus - Other:		Corrected Temp. °C <i>1.5</i>		Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/>		CHECKED BY: (Initials) <i>JS</i>	
FORM-006 R 3.3 07/18/22						Thermometer ID #113 Correction Factor -0.6°C	
						Standard <input type="checkbox"/> Rush <input checked="" type="checkbox"/> <i>24hr.</i>	
						Bacteria (only) Sample Condition Cool Intact Observed Temp. °C <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No Corrected Temp. °C	

† Cardinal cannot accept verbal changes. Please email changes to [celey.keene@cardinallabsnm.com](mailto:celey.keene@cardinallabsnm.com)

† Cardinal cannot accept verbal changes. Please email changes to [celey.keene@cardinallabsnm.com](mailto:celey.keene@cardinallabsnm.com)





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---

June 09, 2023

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: EVGSAU 2963 - 001

Enclosed are the results of analyses for samples received by the laboratory on 06/08/23 10:42.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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: 06/08/2023  
Reported: 06/09/2023  
Project Name: EVGSAU 2963 - 001  
Project Number: 03D2057049  
Project Location: MAVERICK 32.80368-103.47605

Sampling Date: 06/08/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Brandi Bautista

**Sample ID: FS 05 A @ 1.25' (H232932-01)**

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	06/08/2023	ND	2.19	110	2.00	2.29	
Toluene*	<0.050	0.050	06/08/2023	ND	2.29	114	2.00	2.50	
Ethylbenzene*	<0.050	0.050	06/08/2023	ND	2.37	118	2.00	2.70	
Total Xylenes*	<0.150	0.150	06/08/2023	ND	7.00	117	6.00	2.62	
Total BTEX	<0.300	0.300	06/08/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	06/08/2023	ND	416	104	400	3.92	

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	209	105	200	2.55	
DRO >C10-C28*	<10.0	10.0	06/09/2023	ND	194	96.9	200	3.56	
EXT DRO >C28-C36	<10.0	10.0	06/09/2023	ND					

Surrogate: 1-Chlorooctane 91.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 06/08/2023  
Reported: 06/09/2023  
Project Name: EVGSAU 2963 - 001  
Project Number: 03D2057049  
Project Location: MAVERICK 32.80368-103.47605

Sampling Date: 06/08/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Brandi Bautista

**Sample ID: FS 14 A @ 1.25' (H232932-02)**

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	06/08/2023	ND	2.19	110	2.00	2.29		
Toluene*	<0.050	0.050	06/08/2023	ND	2.29	114	2.00	2.50		
Ethylbenzene*	<0.050	0.050	06/08/2023	ND	2.37	118	2.00	2.70		
Total Xylenes*	<0.150	0.150	06/08/2023	ND	7.00	117	6.00	2.62		
Total BTEx	<0.300	0.300	06/08/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	06/08/2023	ND	416	104	400	3.92		

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	209	105	200	2.55	
DRO >C10-C28*	<10.0	10.0	06/09/2023	ND	194	96.9	200	3.56	
EXT DRO >C28-C36	<10.0	10.0	06/09/2023	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 06/08/2023  
Reported: 06/09/2023  
Project Name: EVGSAU 2963 - 001  
Project Number: 03D2057049  
Project Location: MAVERICK 32.80368-103.47605

Sampling Date: 06/08/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Brandi Bautista

**Sample ID: FS 15 A @ 1.25' (H232932-03)**

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	06/08/2023	ND	2.28	114	2.00	0.381	QM-07
Toluene*	<0.050	0.050	06/08/2023	ND	2.28	114	2.00	0.566	
Ethylbenzene*	<0.050	0.050	06/08/2023	ND	2.22	111	2.00	0.943	QM-07
Total Xylenes*	<0.150	0.150	06/08/2023	ND	6.73	112	6.00	1.62	QM-07
Total BTEX	<0.300	0.300	06/08/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	06/08/2023	ND	416	104	400	3.92		

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	209	105	200	2.55	
DRO >C10-C28*	<10.0	10.0	06/09/2023	ND	194	96.9	200	3.56	
EXT DRO >C28-C36	<10.0	10.0	06/09/2023	ND					

Surrogate: 1-Chlorooctane 133 % 48.2-134

Surrogate: 1-Chlorooctadecane 124 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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---

### Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

---

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

---

Celey D. Keene, Lab Director/Quality Manager



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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 6 of 6

Company Name: <u>Ensolum, LLC</u>		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>																							
Project Manager: <u>Halei Jennings</u>		P.O. #: <u>A.A</u>																									
Address: <u>3122 Nat'l Parks Hwy</u>		Company:																									
City: <u>Carlsbad</u> State: <u>NM</u> Zip: <u>88220</u>		Attn:																									
Phone #: <u>817-683-2503</u> Fax #:		Address:																									
Project #: <u>03D2057049</u> Project Owner: <u>Mawerick</u>		City:																									
Project Name: <u>EUGISAU 2963-001</u>		State: Zip:																									
Project Location: <u>32.80368, -103.47605</u>		Phone #:																									
Sampler Name: <u>Juliana Fallomata</u>		Fax #:																									
FOR LAB USE ONLY				MATRIX		PRESERV.		SAMPLING																			
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME													
<u>H232932</u>																											
1	FS05A @ 1.25'	✓	1			X				✓	✓		6/8/23	0915	X	X	X										
2	FS14A @ 1.25'	✓	1			✓				✓	✓		0920	0920	✓	✓	✓										
3	FS15A @ 1.25'	✓	1			✓				✓	✓		0925	0925	✓	✓	✓										

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 rendered by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <u>Juliana Fallomata</u>	Date: <u>6-8-23</u> Time: <u>10:42</u>	Received By: <u>Brandi Bautista</u>	Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #:
Relinquished By:	Date:	Received By:	All Results are emailed. Please provide Email address:
	Time:		<u>jennings@ensolum.com, jfallomata@ensolum.com</u>
Delivered By: (Circle One)		Observed Temp. °C: <u>6.8°C</u>	Turnaround Time: <u>24hr.</u>
Sampler - UPS - Bus - Other:		Corrected Temp. °C: <u>5.4°C</u>	Standard <input type="checkbox"/> Rush <input checked="" type="checkbox"/>
Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Checked By: (Initials) <u>JB</u>	Bacteria (only) Sample Condition Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No
			Thermometer ID #113 Correction Factor -0.6°C

FORM-006 R 3.3 07/18/22

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



## APPENDIX E

# NMOCD Sampling Notifications

---

**From:** [Enviro, OCD, EMNRD](#)  
**To:** [Kalei Jennings](#)  
**Cc:** [Bratcher, Michael, EMNRD](#); [Nobui, Jennifer, EMNRD](#)  
**Subject:** RE: [EXTERNAL] Maverick Permian - Sampling Notification (Week of 3/20/2023)  
**Date:** Thursday, March 16, 2023 10:16:44 AM  
**Attachments:** [image005.jpg](#)  
[image006.png](#)  
[image007.png](#)  
[image008.png](#)  
[image009.png](#)

---

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

Kalei,

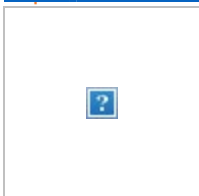
Kalei,

Thank you for the notification. The notification requirement is two full business days which for sampling on Monday would be at the latest at the end of the workday on Wednesday. If you can please provide specific times and dates of sampling in all future communications also, 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.

Thank you for your cooperation.

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](mailto:Jocelyn.Harimon@emnrd.nm.gov)  
<http://www.emnrd.nm.gov>



---

**From:** Kalei Jennings <kjennings@ensolum.com>  
**Sent:** Thursday, March 16, 2023 7:29 AM  
**To:** Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>  
**Subject:** [EXTERNAL] Maverick Permian - Sampling Notification (Week of 3/20/2023)

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 sites the week of March 20, 2023.

- SEMU Permian 37 / NAPP2305453661
- EVGSAU 2963-001/ NAPP2235371799
- Grayburg Eumont Straw Battery/ NAPP2302036818
- MCA 351/ NAPP2302034681
- MCA 254/ NAPP2302035947
- MCA 400/NAPP2305455050

Thank you,



**Kalei Jennings**

Senior Scientist

817-683-2503

**Ensolum, LLC**



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

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

Kalei,

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

JH

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



---

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

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

All,

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

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



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

Thank you,



**Kalei Jennings**

Senior Scientist

817-683-2503

**Ensolum, LLC**



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

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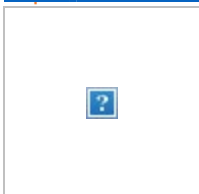
[ \*\*EXTERNAL EMAIL \*\* ]

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](mailto:Jocelyn.Harimon@emnrd.nm.gov)  
[http:// www.emnrd.nm.gov](http://www.emnrd.nm.gov)



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

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



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**From:** Kalei Jennings <[kjennings@ensolum.com](mailto:kjennings@ensolum.com)>

**Sent:** Friday, April 7, 2023 1:13 PM

**To:** Enviro, OCD, EMNRD <[OCD.Enviro@emnrd.nm.gov](mailto:OCD.Enviro@emnrd.nm.gov)>

**Subject:** [EXTERNAL] Maverick Permian - Sampling Notification (Week of 4/10/2023)

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

All,

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

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

Thank you,



**Kalei Jennings**

Senior Scientist

817-683-2503

**Ensolum, LLC**



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

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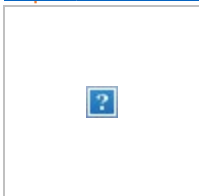
[ \*\*EXTERNAL EMAIL\*\* ]

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](mailto:Jocelyn.Harimon@emnrd.nm.gov)  
[http:// www.emnrd.nm.gov](http://www.emnrd.nm.gov)



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**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 12:31:14 PM  
**Attachments:** [image005.jpg](#)  
[image006.png](#)  
[image007.png](#)  
[image008.png](#)  
[image009.png](#)

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[ \*\*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](mailto:Jocelyn.Harimon@emnrd.nm.gov)  
[http:// www.emnrd.nm.gov](http://www.emnrd.nm.gov)



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**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**





## APPENDIX F

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	NAPP2235371799
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: <a href="mailto:Bryce.Wagoner@mavresources.com">Bryce.Wagoner@mavresources.com</a>	Incident # (assigned by OCD) NAPP2235371799
Contact mailing address: 1410 NW County Road Hobbs, NM 88240	

### Location of Release Source

Latitude 32.80368 Longitude -103.47605  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: EVGSAU 2963-001	Site Type
Date Release Discovered November 30, 2022	API# (if applicable) 30-025-20828

Unit Letter	Section	Township	Range	County
J	29	17S	35E	Lea

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 1.29 bbls	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 3.02 bbls	Volume Recovered (bbls) 0 bbls
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

#### Cause of Release

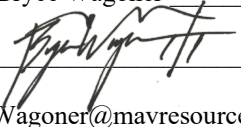
The release was caused by a flowline leak resulting in a non-reportable release. The release occurred off pad. The source of the release has been stopped and the impacted area has been secured. The C-141 is being used to document and close out the remediation process. Initial response and removal of saturated soil from the release area has been completed.

Incident ID	NAPP2235371799
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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*

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> 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: <u>Bryce Wagoner</u> Title: <u>Permian HSE Specialist II</u> Signature:  Date: <u>12/19/2022</u> email: <u>Bryce.Wagoner@mavresources.com</u> Telephone: <u>928-241-1862</u>
<b><u>OCD Only</u></b> Received by: _____ Date: _____

NAPP2235371799

Pooled Fluids on the Surface										
	Length (ft.)	Width (ft.)	Depth (in)	# of Boundaries <i>*edges of pool where depth is 0 . don't count shared boundaries</i>	Oil-Water Ratio (%)	Pooled Area (ft²)	Estimated Average Depth (ft.)	Pooled Volume (bbl.)	Volume of Oil in Subsurface (bbl.)	Volume of Water in Subsurface (bbl.)
Rectangle A					0.01	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle B					0.01	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle C						0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle D						0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle E						0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Total Volume (bbls):								0.00	0.00	0.00

Subsurface Fluids										
	Length (ft.)	Width (ft.)	Depth (in.)	Saturation (%) <i>*10% in consolidated sediments after rain to 50% in sand with no precipitation</i>	Oil-Water Ratio (%)	Area (ft²)	Volume (bbl.)	Estimated Volume in Subsurface (bbl.)	Volume of Oil in Subsurface (bbl.)	Volume of Water in Subsurface (bbl.)
Rectangle A	55.0	11.0	6.0	0.1	0.20	605.0	53.8	4.3	0.86	3.4
Rectangle B				0.1	0.01	0.0	0.0	0.0	0.00	0.0
Rectangle C				0.1	0.01	0.0	0.0	0.0	0.00	0.0
Rectangle D				0.1	0.01	0.0	0.0	0.0	0.00	0.0
Rectangle E				0.1	0.01	0.0	0.0	0.0	0.00	0.0
Rectangle F						0.0	0.0	0.0	0.00	0.0
Rectangle G						0.0	0.0	0.0	0.00	0.0
Rectangle H						0.0	0.0	0.0	0.00	0.0
Rectangle I						0.0	0.0	0.0	0.00	0.0
Rectangle J						0.0	0.0	0.0	0.00	0.0
Total Volume (bbls):								4.31	0.86	3.45

TOTAL RELEASE VOLUME (bbls):	4.3
------------------------------	-----

Incident ID	NAPP2235371799
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?	<u>51-100</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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.

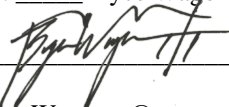


State of New Mexico  
Oil Conservation Division

Incident ID	NAPP2235371799
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: 07/18/2023

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

**OCD Only**

Received by: Shelly Wells Date: 7/18/2023

Incident ID	NAPP2235371799
District RP	
Facility ID	
Application ID	

## Closure

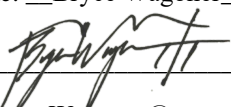
The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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

Printed Name: Bryce Wagoner Title: Permian HSE Specialist II

Signature: 

Date: 07/18/2023

email: Bryce.Wagoner@mavresources.com

Telephone: 928-241-1862

### OCD Only

Received by: Shelly Wells

Date: 7/18/2023

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

Closure Approved by: Nelson Velez Date: 10/06/2023

Printed Name: Nelson Velez

Title: Environmental Specialist - Adv



## APPENDIX G

### NMSLO Reclamation Plan

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## 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
<b>Annual Quick-cover Grass</b>		
Oats	<i>Avena sativa</i>	1.00
<b>Cool Season Grass</b>		
Western Wheatgrass	<i>Agropyron smithii</i>	2.50
<b>Warm-Season Grass</b>		
Black or Blue Grama	<i>Boutela gracilis</i> var. <i>Alma</i>	1.50
Little Bluestem	<i>Schizachyrium scoparium</i>	0.50
Sand Dropseed	<i>Sporobolus cryptandrus</i>	0.50
Sand Bluestem	<i>Andropogon hallii</i>	1.00
Indiangrass	<i>Sorghastrum nutans</i>	0.50
Sideoats Grama	<i>Bouteloua curtipendula</i> var. <i>Vaughn</i>	2.00
<b>Wildflowers/ Forbs</b>		
White prairie clover	<i>Dalea candida</i>	0.10
Scarlet globemallow	<i>Sphaeralcea coccinea</i>	0.10
Chia Sage	<i>Salvia columbariae</i>	0.10
Annual sunflower	<i>Helianthus annuus</i>	0.10
Annual buckwheat	<i>Eriogonum annuum</i>	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 wattles in areas with a propensity for high run off rates;
  - Straw cover if high winds are anticipated to support moisture retention and limit wind from blowing seeds away before they have had time to germinate; and/or
  - Other erosional control best management practices (BMP) as necessary to support timely and healthy regrowth of vegetation in disturbed areas;
- Backfilling of the excavation will be scheduled and communicated with NMSLO prior to initiation;
- Seeding is anticipated to be completed in the Fall when temperatures and precipitation are most conducive for vegetation growth. In general, seeding should occur approximately one month after the last frost in the Spring up until approximately one month prior to the first fall frost. NMSLO has recognized the optimal time to seed is between July and early September, which will be the preferred timeframe for this Site;
- If seeding occurs outside of the 180 days approved in the current fully executed ROE Permit, a new ROE Permit will be executed prior to entering the pasture for reclamation activities;
- Annual inspections (at a minimum) will take place on the location until revegetation is consistent with local natural vegetation density. The Site will be inspected the following Fall to assess the success of regrowth. If necessary, an additional application of the NMSLO-approved pure live seed mixture will be applied as well as any needed BMPs will be installed to support growth and limit erosion; and
- Upon completion of revegetation, a copy of the C-103 submitted to NMOCD will also be submitted to NMSLO for final inspection and release.

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
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 241770

CONDITIONS

Operator:  Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID:  331199
	Action Number:  241770
	Action Type:  [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	10/6/2023