ENSOLUM

August 7, 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
Encore M State #8
Incident Number NAPP2316640406
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 and soil sampling activities at the Encore M State #8 (Site). The purpose of the Site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following a release of crude oil and produced water at the Site. Based on field observations, field screening activities, and soil sample laboratory analytical results, Maverick is submitting this Closure Request and requesting no further action for Incident Number NAPP2316640406.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit J, Section 19, Township 22 South, Range 37 East, in Lea County, New Mexico (32.3764878° N, -103.1988662° W) and is associated with oil and gas exploration and production operations on state land managed by the New Mexico State Land Office (NMSLO).

On May 31, 2023, a mechanical failure on the wellhead resulted in the release of approximately 0.5 barrels (bbls) of crude oil and 11 barrels (bbls) of produced water onto the surface of the well pad. A vacuum truck was immediately dispatched to the site and recovered 5 barrels of free-standing fluid. Maverick reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on June 14, 2023. The release was assigned Incident Number NAPP2316640406.

Since the release remained on the active well pad, an assessment of cultural properties had already been completed prior to the construction of the well pad and as such, the Cultural Properties Protection Rule (CPP) has been followed. No additional cultural resource surveys were completed in connection with this release. The release area is not expected to be reclaimed until the oil and gas well is plugged and abandoned and the well pad is reclaimed. The Reclamation Plan for this release will default to the NMSLO-approved Reclamation Plan for the well pad per 19.2.100.67 of the New Mexico Administrative Code (NMAC).

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 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 greater than 51 feet below ground surface (bgs) based on regional groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well 322235103121901, located approximately 0.4 miles west of the site. The groundwater well has a reported depth to groundwater of 108.94 feet bgs. Several other water wells within a 1.5 miles radius of the Site indicate regional depth to groundwater is greater than 51 feet bgs.

The closest continuously flowing water or significant watercourse to the Site is a riverine, located approximately 2.4 miles south of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is 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 1 Closure Criteria (Closure Criteria) apply:

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

SITE ASSESSMENT AND SOIL SAMPLE ACTIVITIES

Maverick conducted an initial scrape of the saturated soil immediately after identifying the release. On June 7, 2023, Ensolum personnel were at the Site to evaluate the release based on information provided on the Form C-141 and visual observations. As a result of the initial response efforts, no surface staining was visible during the Site visit. Assessment soil samples SS01 through SS04 were collected from a depth of 0.5 feet bgs around the scraped release extent to confirm the lateral extent of the release. The release extent and soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included in Appendix B.

On July 14, 2023, Ensolum personnel returned to the Site to complete assessment activities within the release extent to assess for the presence or absence of impacted soil. Nine boreholes (BH01 through BH09) were advanced within the release extent via hand auger to depths ranging from 1-foot to 3 feet bgs. Final depth of the boreholes was determined by field screening results indicating compliance with the most stringent Table I Closure Criteria or hand auger refusal (BH02). Soil from the boreholes was field screened at 1-foot intervals for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. Field screening results and observations for the boreholes were logged on lithologic soil sampling logs, which are

included in Appendix C. Two delineation soil samples were collected from each borehole for laboratory analysis; the sample with the highest field screening result and the sample from the final borehole depth. The borehole and delineation soil sample locations are depicted on Figure 2.

The assessment and delineation 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 in Carlsbad, New Mexico, for analysis of the following contaminants 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 4500.

Laboratory analytical results for assessment samples SS01 through SS04, collected around the release extent, indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria, and successfully defined the lateral extent of the release. Laboratory analytical results for the delineation samples collected from boreholes BH01 through BH09 indicated all COC concentrations were compliant with the Site Closure Criteria. Additionally, the release was vertically delineated to the most stringent Table I Closure Criteria by delineation soil samples BH01B, BH03C, BH04D, BH05C, BH06C, BH07A through BH09A. The laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix D.

CLOSURE REQUEST

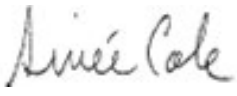
Site assessment activities were conducted at the Site to assess for the presence or absence of impacted soil resulting from the May 31, 2023, release of crude oil and produced water onto the surface of the well pad. Assessment soil samples were collected within and around the release extent from depths ranging from 0.5 feet to 3 feet bgs. Laboratory analytical results for the assessment soil samples indicated all COC concentrations were compliant with the Site Closure Criteria. Additionally, the release was laterally and vertically delineated to below the most stringent Table I Closure Criteria.

Initial response efforts have mitigated impacts at the Site. Based on initial response efforts, depth to groundwater greater than 51 feet bgs, and soil sample laboratory analytical results compliant with the Site Closure Criteria, no further remediation is required. Maverick believes the remedial actions completed are protective of human health, the environment, and groundwater and respectfully requests closure for Incident Number NAPP2316640406. NMOCD notifications are provided in Appendix E and the Final C-141 is attached as Appendix F.

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

Sincerely,
Ensolum, LLC

Julianna Falcomata
Staff Geologist



Aimee Cole
Senior Managing Scientist

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

Appendices:

Figure 1	Site Receptor Map
Figure 2	Assessment and Delineation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Records
Appendix B	Photographic Log
Appendix C	Lithologic / Soil Sampling Logs
Appendix D	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix E	NMOCD Notifications
Appendix F	Final C-141

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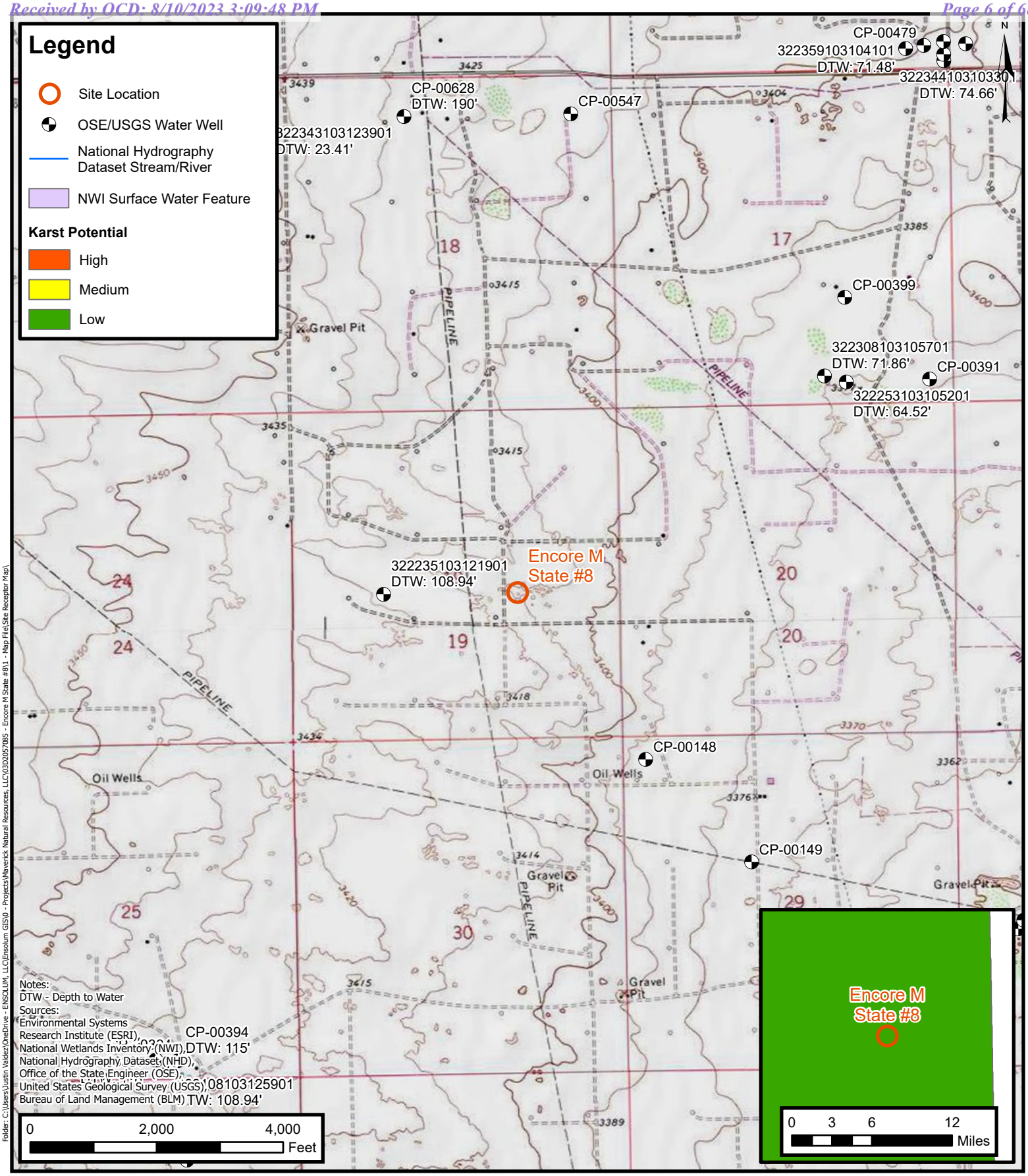
FIGURES



Folder: C:\Users\Justin Valdez\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\Maverick Natural Resources, LLC\03202057085 - Encore M State #811 - Map File\Site Receptor Map)

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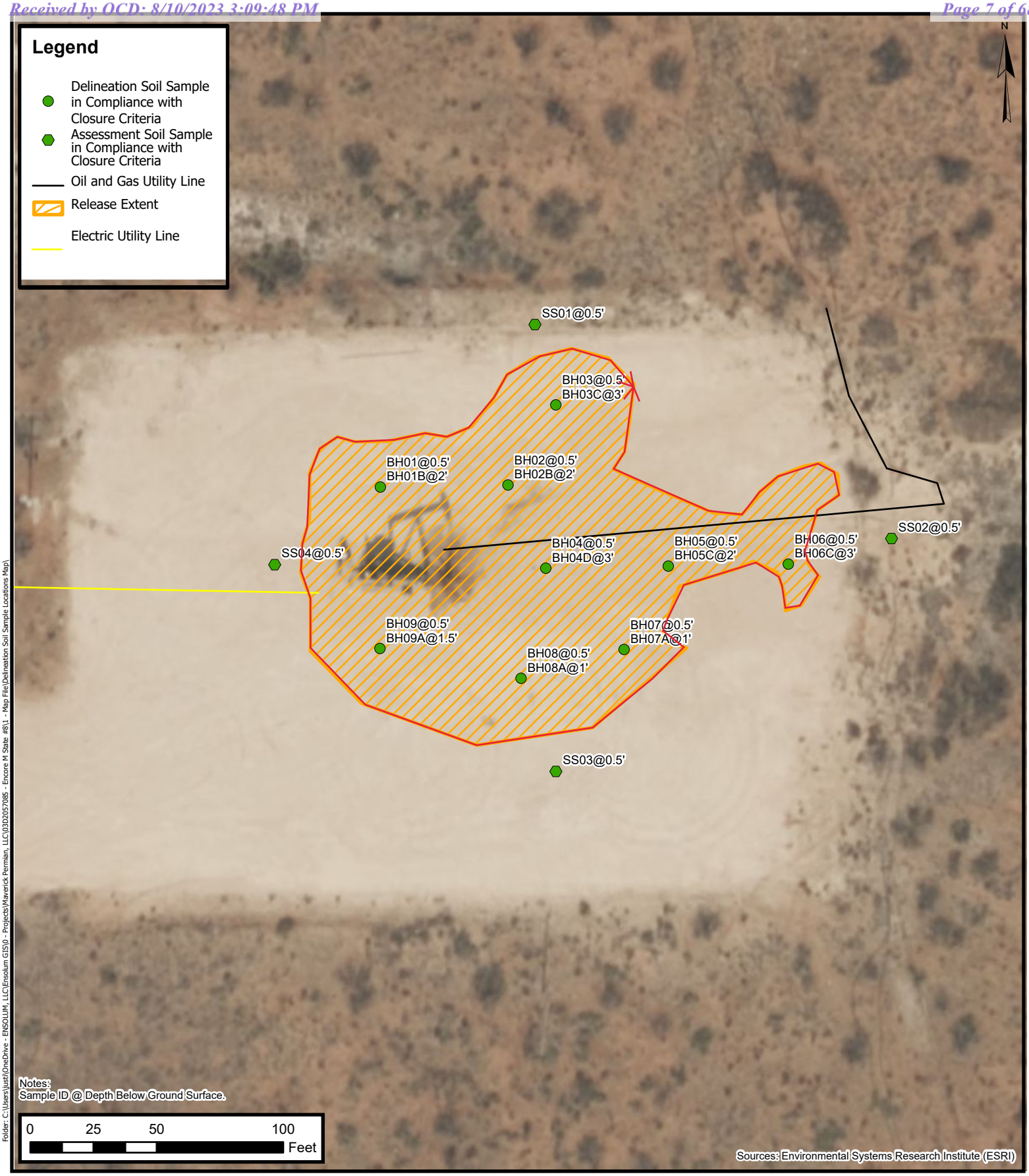
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

Maverick Natural Resources, LLC
Encore M State #8
Incident Number: NA
Unit J, Sec 19, T22S, R37E
Lea County, New Mexico

FIGURE 1



Folder: C:\Users\just\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\Maverick Permian, LLC\03D2057085 - Encore M State #8\1 - Map File\Delineation Soil Sample Locations Map\

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Assessment and Delineation Soil Sample Locations

Maverick Permian, LLC
Encore M State #8
Incident Number: NAPP2316640406
Unit J, Sec 19, T22S, R37E
Lea County, New Mexico

FIGURE 2

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
ENCORE M STATE #8
Maverick Permian, LLC
Lea County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**1,000**	**2,500**	**10,000**
Assessment Soil Samples										
SS01	6/7/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
SS02	6/7/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SS03	6/7/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
SS04	6/7/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
Delineation Soil Samples										
BH01	7/14/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	368
BH01B	7/14/2023	2.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
BH02	7/14/2023	0.5	<0.050	<0.300	<10.0	96.6	15.0	96.6	112	2,120
BH02B	7/14/2023	2.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	848
BH03	7/14/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	3,600
BH03C	7/14/2023	3.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	176
BH04	7/14/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	6,400
BH04D	7/14/2023	3.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
BH05	7/14/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	848
BH05C	7/14/2023	2.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
BH06	7/14/2023	0.5	<0.050	<0.300	<10.0	56.0	<10.0	56.0	56.0	3,040
BH06C	7/14/2023	3.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
BH07	7/14/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,070
BH07A	7/14/2023	1.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
BH08	7/14/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
BH08A	7/14/2023	1.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
BH09	7/14/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
BH09A	7/14/2023	1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0

Notes:

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

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APPENDIX A

Referenced Well Records

New Mexico Office of the State Engineer
Water Right Summary

get image list

WR File Number: CP 00628 **Subbasin:** CP **Cross Reference:** -

Primary Purpose: SAN 72-12-1 SANITARY IN CONJUNCTION WITH A COMMERCIAL USE

Primary Status: PMT PERMIT

Total Acres: **Subfile:** - **Header:** -

Total Diversion: 3 **Cause/Case:** -

Owner: NORTHERN NATURAL GAS COMPANY

Documents on File

	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/ To	Acres	Diversion	Consumptive
get images	475196	72121	1980-11-03	PMT	LOG	CP 00628	T		3	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q 64	Q16	Q4	Sec	Tws	Rng	X	Y	Other Location Desc
CP 00628		Shallow		2	1	18	22S	37E	668892	3585888*	

***An (*) after northing value indicates UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	CP 00628	2	1		18	22S	37E	668892	3585888*

Driller License:	46	**Driller Company:**	ABBOTT BROTHERS COMPANY		
Driller Name:	ABBOTT, MURRELL				
Drill Start Date:	11/04/1980	**Drill Finish Date:**	11/19/1980	**Plug Date:**	
Log File Date:	12/10/1980	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	0 GPM
Casing Size:	7.00	**Depth Well:**	525 feet	**Depth Water:**	190 feet

Water Bearing Stratifications:	Top	Bottom	Description
	195	205	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	197	297

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

National Water Information System: Web Interface

USGS Water Resources

Data Category: Site Information GO

Geographic Area: United States

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

USGS 322235103121901 22S.37E.19.141144

Available data for this site SUMMARY OF ALL AVAILABLE DATA GO

Well Site

DESCRIPTION:

Latitude 32°22'35", Longitude 103°12'19" NAD27
Lea County, New Mexico , Hydrologic Unit 13070007
Well depth: 200 feet
Land surface altitude: 3,430 feet above NAVD88.
Well completed in "Other aquifers" (N9999OTHER) national aquifer.
Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1968-03-21	1970-12-01	2
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center
Email questions about this site to New Mexico Water Science Center Water-Data Inquiries

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Questions or Comments
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Title: NWIS Site Information for USA: Site Inventory
URL: https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=322235103121901

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- 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 =
- 322235103121901

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

USGS 322235103121901 22S.37E.19.141144

Lea County, New Mexico
Latitude 32°22'35", Longitude 103°12'19" NAD27
Land-surface elevation 3,430 feet above NAVD88
The depth of the well is 200 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measur
1968-03-21		D	62610		3319.71	NGVD29	1	Z		
1968-03-21		D	62611		3321.14	NAVD88	1	Z		
1968-03-21		D	72019	108.86			1	Z		
1970-12-01		D	62610		3319.63	NGVD29	1	Z		
1970-12-01		D	62611		3321.06	NAVD88	1	Z		
1970-12-01		D	72019	108.94			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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APPENDIX B

Photographic Log

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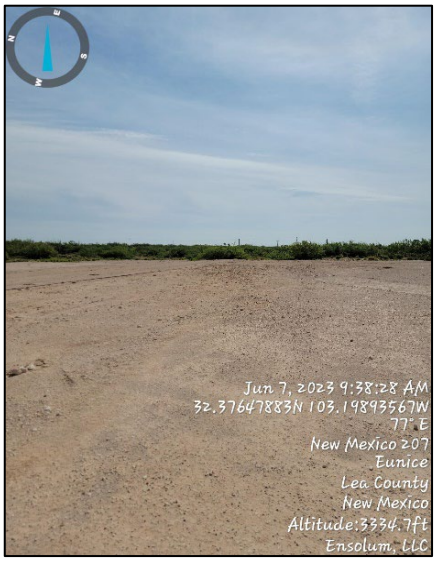
Photographic Log
Maverick Permian, LLC
Encore M State #8
NAPP2316640406

Photograph: 1 Date: 5/31/2023
Description: Initial release extent.
View: East



Photograph: 2 Date: 6/7/2023
Description: Release area after surface scraping.
View: East

Photograph: 3 Date: 7/14/2023
Description: Release area during delineation activities.
View: West

Photograph: 4 Date: 7/14/2023
Description: Delineation activities
View: Southwest

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APPENDIX C

Lithologic Soil Sampling Logs

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	Sample Name: BH01	Date: 7/14/23
	Site Name: Encore M State #8	
	Incident Number: NAPP2316640406	
	Job Number: 03D2057085	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Ronni Hayes	Method: Hand auger
Coordinates:	Hole Diameter: 4"	Total Depth:

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	3,297.8	0.9	Y	BH01	0.5	0.5	SP-SM	SAND, some limestone gravel, tan, noncohesive, odor, staining, poorly sorted
Moist	1,019.20	1.1	Y	BH01A	1	1	SP-SM	SAND, little gravel, poorly sorted, light brown, noncohesive, odor, staining,
Moist	548.8	0.6	N	BH01B	2	2	SP-SM	SAND, medium brown, noncohesive, no odor, no staining, very fine to fine, poorly sorted
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

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	Sample Name: BH02	Date: 7/14/23
	Site Name: Encore M State #8	
	Incident Number: NAPP2316640406	
	Job Number: 03D2057085	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Ronni Hayes	Method: Hand auger
Coordinates:	Hole Diameter: 4"	Total Depth:

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Dry	1,730.40	1.4	Y	BH02	0.5	0.5	SP-SM	SAND, some limestone gravel, tan, noncohesive, odor, staining, poorly sorted
Moist	1,288.0	0.5	Y	BH02A	1	1	SP-SM	SAND, little gravel, poorly sorted, light brown, noncohesive, odor, staining,
Moist	1192.8	0.2	N	BH02B	2	2	SP-SM	SAND, medium brown, noncohesive, odor, staining, poorly sorted, some limestone gravel TD at 2 ft bgs Refusal at 2 ft bgs

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Sample Name: BH03	Date: 7/14/23
Site Name: Encore M State #8	
Incident Number: NAPP2316640406	
Job Number: 03D2057085	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Ronni Hayes / Method: Hand auger
Coordinates:	Hole Diameter: 4" / Total Depth:

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	3,292.8	0.7	Y	BH03	0.5	0.5	SP-SM	SAND, some limestone gravel, tan, noncohesive, odor, staining, poorly sorted
Moist	1,730.40	0.8	Y	BH03A	1	1	SP-SM	SAND, little gravel, poorly sorted, light brown, noncohesive, odor, staining,
Moist	1,103.20	0.5	N	BH03B	2	2	SP-SM	SAND, medium brown, noncohesive, no odor, no staining, very fine to fine, poorly sorted
Moist	403.2	0.5	N	BH03C	3	3	SAA	SAA
								TD at 3 ft bgs

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	Sample Name: BH04	Date: 7/14/23
	Site Name: Encore M State #8	
	Incident Number: NAPP2316640406	
	Job Number: 03D2057085	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Ronni Hayes	Method: Hand auger
Coordinates:	Hole Diameter: 4"	Total Depth:

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	4,452.0	0.7	Y	BH04	0.5	0.5	SP-SM	SAND, some limestone gravel, tan, noncohesive, odor, staining, poorly sorted
Moist	2,122.40	0.3	Y	BH04A	1	1	SP-SM	SAND, little gravel, poorly sorted, light brown, noncohesive, odor, staining,
Moist	1848	1.2		BH04B	1.5	1.5	SAA	SAA
Moist	806.40	0.5		BH04C	2	2	SP-SM	SAND, medium brown, noncohesive, no odor, no staining, very fine to fine, poorly sorted
Moist	498.4	0.7		BH04D	3	3	SAA	SAA

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	Sample Name: BH05	Date: 7/14/23
	Site Name: Encore M State #8	
	Incident Number: NAPP2316640406	
	Job Number: 03D2057085	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Ronni Hayes	Method: Hand auger
Coordinates:	Hole Diameter: 4"	Total Depth:

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Dry	6160	0.4	Y	BH05	0.5	0.5	SP-SM	SAND, some limestone gravel, tan, noncohesive, odor, staining, poorly sorted
Moist	1,005.8	0	Y	BH05A	1	1	SP-SM	SAND, little gravel, poorly sorted, light brown, noncohesive, odor, staining,
Moist	268.80	1.6	N	BH05B	1.5	1.5	SAA	SAA, no odor, no staining
Moist	352.8	1	N	BH05C	2	2	SP-SM	SAND, medium brown, noncohesive, no odor, no staining, poorly sorted, some limestone gravel

ENSOLUM

	Sample Name: BH06	Date: 7/14/23
	Site Name: Encore M State #8	
	Incident Number: NAPP2316640406	
	Job Number: 03D2057085	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Ronni Hayes	Method: Hand auger
Coordinates:	Hole Diameter: 4"	Total Depth:

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Dry	2811.2	0	Y	BH06	0.5	0.5	SP-SM	SAND, some limestone gravel, tan, noncohesive, odor, staining, poorly sorted
Moist	2,279.2	0	Y	BH06A	1	1	SP-SM	SAND, little gravel, poorly sorted, light brown, noncohesive, odor, staining,
Moist	229.6	2.1	N	BH06B	2	2	SP-SM	SAND, medium brown, noncohesive, odor, no staining, poorly sorted, some limestone gravel
Moist	<173.8	0.7	N	BH06C	3	3	SAA	SAA, no odor

ENSOLUM

	Sample Name: BH08	Date: 7/14/23
	Site Name: Encore M State #8	
	Incident Number: NAPP2316640406	
	Job Number: 03D2057085	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Ronni Hayes	Method: Hand auger
Coordinates:	Hole Diameter: 4"	Total Depth:

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	448.0	0.7	Y	BH08	0.5	0.5	SP-SM	SAND, some limestone gravel, tan, noncohesive, odor, staining, poorly sorted
Moist	<173.8	1	N	BH08A	1	1	SP-SM	SAND, little gravel, poorly sorted, light brown, noncohesive, no odor, no staining,
								TD at 1 ft bgs

ENSOLUM

	Sample Name: BH09	Date: 7/14/23
	Site Name: Encore M State #8	
	Incident Number: NAPP2316640406	
	Job Number: 03D2057085	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Ronni Hayes	Method: Hand auger
Coordinates:	Hole Diameter: 4"	Total Depth:

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	<173.8	1.9	Y	BH09	0.5	0.5	SP-SM	SAND, some limestone gravel, tan, noncohesive, odor, staining, poorly sorted
						1	SP-SM	
Moist	<173.8	0.8	N	BH09A	1.5	1.5	SP-SM	SAND, little gravel, poorly sorted, medium brown, noncohesive, no odor, no staining,
								TD at 1.5 ft bgs

ENSOLUM

APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

CARDINAL Laboratories

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

June 12, 2023

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: ENCURRE M STATE #8

Enclosed are the results of analyses for samples received by the laboratory on 06/07/23 12:50.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	06/07/2023	Sampling Date:	06/07/2023
Reported:	06/12/2023	Sampling Type:	Soil
Project Name:	ENCURRE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: SS 01 @ .5' (H232895-01)

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	06/09/2023	ND	2.22	111	2.00	1.28	
Toluene*	<0.050	0.050	06/09/2023	ND	2.21	111	2.00	0.322	
Ethylbenzene*	<0.050	0.050	06/09/2023	ND	2.26	113	2.00	1.27	
Total Xylenes*	<0.150	0.150	06/09/2023	ND	6.68	111	6.00	1.15	
Total BTEX	<0.300	0.300	06/09/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/07/2023	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/08/2023	ND	205	103	200	19.8	
DRO >C10-C28*	<10.0	10.0	06/08/2023	ND	205	103	200	17.3	
EXT DRO >C28-C36	<10.0	10.0	06/08/2023	ND					

Surrogate: 1-Chlorooctane *81.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *88.4 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	06/07/2023	Sampling Date:	06/07/2023
Reported:	06/12/2023	Sampling Type:	Soil
Project Name:	ENCURRE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: SS 02 @ .5' (H232895-02)

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	06/09/2023	ND	2.22	111	2.00	1.28	
Toluene*	<0.050	0.050	06/09/2023	ND	2.21	111	2.00	0.322	
Ethylbenzene*	<0.050	0.050	06/09/2023	ND	2.26	113	2.00	1.27	
Total Xylenes*	<0.150	0.150	06/09/2023	ND	6.68	111	6.00	1.15	
Total BTEX	<0.300	0.300	06/09/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	06/07/2023	ND	432	108	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/08/2023	ND	205	103	200	19.8	
DRO >C10-C28*	<10.0	10.0	06/08/2023	ND	205	103	200	17.3	
EXT DRO >C28-C36	<10.0	10.0	06/08/2023	ND					

Surrogate: 1-Chlorooctane *98.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *107 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	06/07/2023	Sampling Date:	06/07/2023
Reported:	06/12/2023	Sampling Type:	Soil
Project Name:	ENCURRE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: SS 03 @ .5' (H232895-03)

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	06/09/2023	ND	2.22	111	2.00	1.28	
Toluene*	<0.050	0.050	06/09/2023	ND	2.21	111	2.00	0.322	
Ethylbenzene*	<0.050	0.050	06/09/2023	ND	2.26	113	2.00	1.27	
Total Xylenes*	<0.150	0.150	06/09/2023	ND	6.68	111	6.00	1.15	
Total BTEX	<0.300	0.300	06/09/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/07/2023	ND	432	108	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/08/2023	ND	205	103	200	19.8	
DRO >C10-C28*	<10.0	10.0	06/08/2023	ND	205	103	200	17.3	
EXT DRO >C28-C36	<10.0	10.0	06/08/2023	ND					

Surrogate: 1-Chlorooctane *95.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *103 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	06/07/2023	Sampling Date:	06/07/2023
Reported:	06/12/2023	Sampling Type:	Soil
Project Name:	ENCURRE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: SS 04 @ .5' (H232895-04)

BTEX 8021B mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/09/2023	ND	2.22	111	2.00	1.28	
Toluene*	<0.050	0.050	06/09/2023	ND	2.21	111	2.00	0.322	
Ethylbenzene*	<0.050	0.050	06/09/2023	ND	2.26	113	2.00	1.27	
Total Xylenes*	<0.150	0.150	06/09/2023	ND	6.68	111	6.00	1.15	
Total BTEX	<0.300	0.300	06/09/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/07/2023	ND	432	108	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/08/2023	ND	205	103	200	19.8	
DRO >C10-C28*	<10.0	10.0	06/08/2023	ND	205	103	200	17.3	
EXT DRO >C28-C36	<10.0	10.0	06/08/2023	ND					

Surrogate: 1-Chlorooctane *93.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *101 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

QR-04	The RPD for the BS/BSD was outside of historical limits.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Ensolum, LLC
Project Manager:	Halei Jennings
Address:	3122 Nat'l Parks Hwy
City:	Carlsbad State: NM Zip: 88220
Phone #:	817-683-2503 Fax #:
Project #:	03D2057045 Project Owner: Maverick
Project Name:	Encurre M State #8
Project Location:	32.37649878, -103.1988662
Sampler Name:	Julianna Falcomata

BILL TO

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

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING DATE	SAMPLING TIME	BTEX	TPH	Chlorides
H232895																	
1	SS01 @ .5'	C	1			X					X		6/7/23	1035	X	X	X
2	SS02 @ .5'													1040			
3	SS03 @ .5'													1045			
4	SS04 @ .5'													1050			

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

Relinquished By: Julianna Falcomata	Date: 6-7-23 Time: 1250	Received By: Tamara Oldaker	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address: hjennings@ensolum.com jfalcomata@ensolum.com
			REMARKS:

Delivered By: (Circle One)	Observed Temp. °C 3.9	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials) JD	Turnaround Time: Standard ☒ Rush ☐
Sampler - UPS - Bus - Other:	Corrected Temp. °C 3.3			Thermometer ID #113 Correction Factor -0.6°C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No; Intact ☐ Yes ☐ No; Observed Temp. °C; Corrected Temp. °C

FORM-006 R 3.3 07/18/22

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

CARDINAL Laboratories

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

July 21, 2023

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: ENCORE M STATE #8

Enclosed are the results of analyses for samples received by the laboratory on 07/17/23 13:17.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/17/2023	Sampling Date:	07/14/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	ENCORE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: BH 01 0.5' (H233673-01)

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	07/20/2023	ND	1.98	98.9	2.00	5.02	
Toluene*	<0.050	0.050	07/20/2023	ND	1.91	95.3	2.00	3.80	
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	07/20/2023	ND	6.09	101	6.00	5.63	
Total BTEX	<0.300	0.300	07/20/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**368**	16.0	07/18/2023	ND	400	100	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	07/19/2023	ND	202	101	200	6.25	
DRO >C10-C28*	<10.0	10.0	07/19/2023	ND	210	105	200	5.35	
EXT DRO >C28-C36	<10.0	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane *59.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *69.9 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/17/2023	Sampling Date:	07/14/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	ENCORE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: BH 01B 2' (H233673-02)

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	07/20/2023	ND	1.98	98.9	2.00	5.02	
Toluene*	<0.050	0.050	07/20/2023	ND	1.91	95.3	2.00	3.80	
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	07/20/2023	ND	6.09	101	6.00	5.63	
Total BTEX	<0.300	0.300	07/20/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	07/18/2023	ND	400	100	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	07/19/2023	ND	202	101	200	6.25	
DRO >C10-C28*	<10.0	10.0	07/19/2023	ND	210	105	200	5.35	
EXT DRO >C28-C36	<10.0	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane *59.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *67.5 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/17/2023	Sampling Date:	07/14/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	ENCORE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: BH 02 0.5' (H233673-03)

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	07/20/2023	ND	1.98	98.9	2.00	5.02	
Toluene*	<0.050	0.050	07/20/2023	ND	1.91	95.3	2.00	3.80	
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	07/20/2023	ND	6.09	101	6.00	5.63	
Total BTEX	<0.300	0.300	07/20/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2120**	16.0	07/18/2023	ND	400	100	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	07/19/2023	ND	202	101	200	6.25	
DRO >C10-C28*	**96.6**	10.0	07/19/2023	ND	210	105	200	5.35	
EXT DRO >C28-C36	**15.0**	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane *57.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *70.8 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/17/2023	Sampling Date:	07/14/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	ENCORE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: BH 02B 2' (H233673-04)

BTEX 8021B mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/20/2023	ND	1.98	98.9	2.00	5.02	
Toluene*	<0.050	0.050	07/20/2023	ND	1.91	95.3	2.00	3.80	
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	07/20/2023	ND	6.09	101	6.00	5.63	
Total BTEX	<0.300	0.300	07/20/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**848**	16.0	07/18/2023	ND	400	100	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	07/19/2023	ND	202	101	200	6.25	
DRO >C10-C28*	<10.0	10.0	07/19/2023	ND	210	105	200	5.35	
EXT DRO >C28-C36	<10.0	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane *53.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *65.1 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/17/2023	Sampling Date:	07/14/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	ENCORE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: BH 03 0.5' (H233673-05)

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	07/20/2023	ND	1.98	98.9	2.00	5.02	
Toluene*	<0.050	0.050	07/20/2023	ND	1.91	95.3	2.00	3.80	
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	07/20/2023	ND	6.09	101	6.00	5.63	
Total BTEX	<0.300	0.300	07/20/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3600**	16.0	07/18/2023	ND	400	100	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	07/19/2023	ND	202	101	200	6.25	
DRO >C10-C28*	<10.0	10.0	07/19/2023	ND	210	105	200	5.35	
EXT DRO >C28-C36	<10.0	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane *55.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *66.1 %* *49.1-148*

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Analytical Results For:

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

Received:	07/17/2023	Sampling Date:	07/14/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	ENCORE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: BH 03C 3' (H233673-06)

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	07/20/2023	ND	1.98	98.9	2.00	5.02	
Toluene*	<0.050	0.050	07/20/2023	ND	1.91	95.3	2.00	3.80	
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	07/20/2023	ND	6.09	101	6.00	5.63	
Total BTEX	<0.300	0.300	07/20/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**176**	16.0	07/18/2023	ND	400	100	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	07/19/2023	ND	202	101	200	6.25	
DRO >C10-C28*	<10.0	10.0	07/19/2023	ND	210	105	200	5.35	
EXT DRO >C28-C36	<10.0	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane *54.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *63.9 %* *49.1-148*

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Analytical Results For:

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

Received:	07/17/2023	Sampling Date:	07/14/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	ENCORE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: BH 04 0.5' (H233673-07)

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	07/20/2023	ND	1.98	98.9	2.00	5.02	
Toluene*	<0.050	0.050	07/20/2023	ND	1.91	95.3	2.00	3.80	
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	07/20/2023	ND	6.09	101	6.00	5.63	
Total BTEX	<0.300	0.300	07/20/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6400**	16.0	07/18/2023	ND	400	100	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	07/20/2023	ND	202	101	200	6.25	
DRO >C10-C28*	<10.0	10.0	07/20/2023	ND	210	105	200	5.35	
EXT DRO >C28-C36	<10.0	10.0	07/20/2023	ND					

Surrogate: 1-Chlorooctane *55.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *65.1 %* *49.1-148*

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Analytical Results For:

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

Received:	07/17/2023	Sampling Date:	07/14/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	ENCORE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: BH 04D 3' (H233673-08)

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	07/20/2023	ND	1.98	98.9	2.00	5.02	
Toluene*	<0.050	0.050	07/20/2023	ND	1.91	95.3	2.00	3.80	
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	07/20/2023	ND	6.09	101	6.00	5.63	
Total BTEX	<0.300	0.300	07/20/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	07/18/2023	ND	400	100	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	07/20/2023	ND	202	101	200	6.25	
DRO >C10-C28*	<10.0	10.0	07/20/2023	ND	210	105	200	5.35	
EXT DRO >C28-C36	<10.0	10.0	07/20/2023	ND					

Surrogate: 1-Chlorooctane *56.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *65.0 %* *49.1-148*

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Analytical Results For:

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

Received:	07/17/2023	Sampling Date:	07/14/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	ENCORE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: BH 05 0.5' (H233673-09)

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	07/20/2023	ND	1.98	98.9	2.00	5.02	
Toluene*	<0.050	0.050	07/20/2023	ND	1.91	95.3	2.00	3.80	
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	07/20/2023	ND	6.09	101	6.00	5.63	
Total BTEX	<0.300	0.300	07/20/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**848**	16.0	07/18/2023	ND	400	100	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	07/20/2023	ND	202	101	200	6.25	
DRO >C10-C28*	<10.0	10.0	07/20/2023	ND	210	105	200	5.35	
EXT DRO >C28-C36	<10.0	10.0	07/20/2023	ND					

Surrogate: 1-Chlorooctane *55.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *64.7 %* *49.1-148*

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CARDINAL Laboratories

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Analytical Results For:

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

Received:	07/17/2023	Sampling Date:	07/14/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	ENCORE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: BH 05C 2' (H233673-10)

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	07/20/2023	ND	1.98	98.9	2.00	5.02	
Toluene*	<0.050	0.050	07/20/2023	ND	1.91	95.3	2.00	3.80	
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	07/20/2023	ND	6.09	101	6.00	5.63	
Total BTEX	<0.300	0.300	07/20/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**128**	16.0	07/18/2023	ND	400	100	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	07/20/2023	ND	202	101	200	6.25	
DRO >C10-C28*	<10.0	10.0	07/20/2023	ND	210	105	200	5.35	
EXT DRO >C28-C36	<10.0	10.0	07/20/2023	ND					

Surrogate: 1-Chlorooctane *58.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *68.9 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

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

Received:	07/17/2023	Sampling Date:	07/14/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	ENCORE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: BH 06 0.5' (H233673-11)

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	07/20/2023	ND	1.98	98.9	2.00	5.02	
Toluene*	<0.050	0.050	07/20/2023	ND	1.91	95.3	2.00	3.80	
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	07/20/2023	ND	6.09	101	6.00	5.63	
Total BTEX	<0.300	0.300	07/20/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3040**	16.0	07/18/2023	ND	400	100	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	07/19/2023	ND	158	79.2	200	29.5	
DRO >C10-C28*	**56.0**	10.0	07/19/2023	ND	233	117	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane *85.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *100 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

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

Received:	07/17/2023	Sampling Date:	07/14/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	ENCORE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: BH 06C 3' (H233673-12)

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	07/20/2023	ND	1.98	98.9	2.00	5.02	
Toluene*	<0.050	0.050	07/20/2023	ND	1.91	95.3	2.00	3.80	
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	07/20/2023	ND	6.09	101	6.00	5.63	
Total BTEX	<0.300	0.300	07/20/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	07/18/2023	ND	400	100	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	07/19/2023	ND	158	79.2	200	29.5	
DRO >C10-C28*	<10.0	10.0	07/19/2023	ND	233	117	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane *81.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *95.8 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

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

Received:	07/17/2023	Sampling Date:	07/14/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	ENCORE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: BH 07 0.5' (H233673-13)

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	07/20/2023	ND	1.98	98.9	2.00	5.02	
Toluene*	<0.050	0.050	07/20/2023	ND	1.91	95.3	2.00	3.80	
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	07/20/2023	ND	6.09	101	6.00	5.63	
Total BTEX	<0.300	0.300	07/20/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1070**	16.0	07/18/2023	ND	400	100	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	07/19/2023	ND	158	79.2	200	29.5	
DRO >C10-C28*	<10.0	10.0	07/19/2023	ND	233	117	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane *75.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *88.7 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/17/2023	Sampling Date:	07/14/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	ENCORE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: BH 07A 1' (H233673-14)

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	07/20/2023	ND	1.98	98.9	2.00	5.02	
Toluene*	<0.050	0.050	07/20/2023	ND	1.91	95.3	2.00	3.80	
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	07/20/2023	ND	6.09	101	6.00	5.63	
Total BTEX	<0.300	0.300	07/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.2 %* *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	**96.0**	16.0	07/18/2023	ND	432	108	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/19/2023	ND	158	79.2	200	29.5	
DRO >C10-C28*	<10.0	10.0	07/19/2023	ND	233	117	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane *80.5 %* *48.2-134*

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/17/2023	Sampling Date:	07/14/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	ENCORE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: BH 08 0.5' (H233673-15)

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	07/20/2023	ND	1.98	98.9	2.00	5.02	
Toluene*	<0.050	0.050	07/20/2023	ND	1.91	95.3	2.00	3.80	
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	07/20/2023	ND	6.09	101	6.00	5.63	
Total BTEX	<0.300	0.300	07/20/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	07/18/2023	ND	432	108	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/19/2023	ND	158	79.2	200	29.5	
DRO >C10-C28*	<10.0	10.0	07/19/2023	ND	233	117	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane *81.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *94.6 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/17/2023	Sampling Date:	07/14/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	ENCORE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: BH 08A 1' (H233673-16)

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	07/20/2023	ND	1.98	98.9	2.00	5.02	
Toluene*	<0.050	0.050	07/20/2023	ND	1.91	95.3	2.00	3.80	
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	07/20/2023	ND	6.09	101	6.00	5.63	
Total BTEX	<0.300	0.300	07/20/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/18/2023	ND	432	108	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/19/2023	ND	158	79.2	200	29.5	
DRO >C10-C28*	<10.0	10.0	07/19/2023	ND	233	117	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane *79.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *93.3 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/17/2023	Sampling Date:	07/14/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	ENCORE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: BH 09 0.5' (H233673-17)

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	07/20/2023	ND	1.98	98.9	2.00	5.02	
Toluene*	<0.050	0.050	07/20/2023	ND	1.91	95.3	2.00	3.80	
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	07/20/2023	ND	6.09	101	6.00	5.63	
Total BTEX	<0.300	0.300	07/20/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/18/2023	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/19/2023	ND	158	79.2	200	29.5	
DRO >C10-C28*	<10.0	10.0	07/19/2023	ND	233	117	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane *79.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *92.5 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/17/2023	Sampling Date:	07/14/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	ENCORE M STATE #8	Sampling Condition:	Cool & Intact
Project Number:	03D2057085	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK (32.3764878 - 103.1988662)		

Sample ID: BH 09A 1.5' (H233673-18)

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	07/20/2023	ND	1.98	98.9	2.00	5.02	
Toluene*	<0.050	0.050	07/20/2023	ND	1.91	95.3	2.00	3.80	
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	07/20/2023	ND	6.09	101	6.00	5.63	
Total BTEX	<0.300	0.300	07/20/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	07/18/2023	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/19/2023	ND	158	79.2	200	29.5	
DRO >C10-C28*	<10.0	10.0	07/19/2023	ND	233	117	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane *99.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *115 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

QR-04	The RPD for the BS/BSD was outside of historical limits.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: Kalei Jennings	P.O. #:
Address: 3122 National Parks Hwy	Company: Ensolum LLC
City: Carlsbad State: NM Zip: 88220	Attn: Kalei Jennings
Phone #: 817-683-2503 Fax #:	Address:
Project #: 03D2057085 Project Owner:	City:
Project Name: Encore M State #8	State: Texas Zip:
Project Location: 32.3764878, -103.1988662	Phone #:
Sampler Name: Ronni Hayes	Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX	TPH	Cl-
H233673																		
1	BH01	0.5'	G				X					X		7/14/23	1403	X	X	X
2	BH01B	2'													1416			
3	BH02	0.5'													1428			
4	BH02B	2'													1443			
5	BH03	0.5'													1448			
6	BH03C	3'													1512			
7	BH04	0.5'													1243			
8	BH04D	3'													1354			
9	BH05	0.5'													1237			
10	BH05C	2'													1319			

Relinquished By:	Date: 7-17-23	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 1317		All Results are emailed. Please provide Email address: Kjennings@ensolum.com
Relinquished By:	Date:	Received By:	REMARKS:
	Time:		

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

Observed Temp. °C 2.1
Corrected Temp. °C

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

CHECKED BY: (Initials) SC

Turnaround Time: Standard ☑ Rush ☐ Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C

Thermometer ID #113 # 140 To: 7/17/23
Correction Factor -0.5°C Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: Kalei Jennings	P.O. #:
Address: 3122 National Parks Hwy	Company: Ensolum LLC
City: Carlsbad State: NM Zip: 88220	Attn: Kalei Jennings
Phone #: 817-683-2503 Fax #:	Address:
Project #: 03D2057085 Project Owner:	City:
Project Name: Encore M State #8	State: Texas Zip:
Project Location: 32.3764878, -103.1988662	Phone #:
Sampler Name: Ronni Hayes	Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX	TPH	Cl-
H233673																		
11	BH06	0.5'	G				X					X		7/14/23	1231	X	X	X
12	BH06C	3'													1329			
13	BH07	0.5'													1222			
14	BH07A	1'													1234			
15	BH08	0.5'													1215			
16	BH08A	1'													1217			
17	BH09	0.5'													1208			
18	BH09A	1.5'													1218			

Relinquished By:	Date: 7-17-23	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 1317		All Results are emailed. Please provide Email address: Kjennings@ensolum.com
Relinquished By:	Date:	Received By:	REMARKS:
	Time:		

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 21	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)	Turnaround Time: ☑ Standard ☐ Rush Thermometer ID #113 H140 Correction Factor -0.5°C 7/17/23
	Corrected Temp. °C			Bacteria (only) Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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

ENSOLUM

APPENDIX E

NMOCD Notifications

From: Enviro, OCD, EMNRD
To: Kalei Jennings
Cc: Bratcher, Michael, EMNRD; Velez, Nelson, EMNRD
Subject: RE: [EXTERNAL] Maverick- Sampling Notification (Week of 7/10/2023)
Date: Monday, July 10, 2023 8:31:06 AM
Attachments: image005.jpg
image006.png
image007.png
image008.png
image009.png

[**EXTERNAL EMAIL**]

Kalei,

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 ensure inclusion in the project file.

JH

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

From: Kalei Jennings <kjennings@ensolum.com>
Sent: Friday, July 7, 2023 4:14 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Aimee Cole <acole@ensolum.com>
Subject: [EXTERNAL] Maverick- Sampling Notification (Week of 7/10/2023)

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

All,

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

- MCA 204 / NAPP2311751602
  - Sampling Date: 7/10/2023 through 07/13/2023

- State F TG #001 / NAPP2233947938
  - Sampling Date: 7/12/2023 & 7/13/2023
- MCA 409 Flowline / NAPP2318846991
  - Sampling Date: 7/13/2023
- Encore M State #8 / NAPP2316640406
  - Sampling Date: 7/14/2023
- SEMU 37 / NAPP2316638385
  - Sampling Date: 7/14/2023

Thank you,

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

ENSOLUM

APPENDIX F
Form 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	NAPP2316640406
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

Latitude 32.3764878 Longitude -103.1988662

(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Encore M State #8	Site Type
Date Release Discovered: 05/31/2023	API# *(if applicable): 30-025-40721*

Unit Letter	Section	Township	Range	County
J	19	22S	37E	Lea

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls): 0.5 bbl	Volume Recovered (bbls): 0
☒ Produced Water	Volume Released (bbls): 11 bbls	Volume Recovered (bbls): 5 bbls
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☒ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release:
The release was caused by a mechanical failure, resulting in fluids being released from the wellhead. The release occurred on pad. The source of the release has been stopped, and the impacted area has been secured.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2316640406
District RP	
Facility ID	
Application ID	

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

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

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

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

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

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

Printed Name: _Bryce Wagoner_____ Title: ____Permian HSE Specialist II_____

Signature: _____ Date: _06/14/2023____

email: _ Bryce.Wagoner@mavresources.com _____ Telephone: _928-241-1862_____

OCD Only

Received by: ___ _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2316640406
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

NAPP2316640406

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

Subsurface Fluids										
	Length (ft.)	Width (ft.)	Depth (in.)	Saturation (%) *10% in consolidated sediments after rain to 50% in sand with no precipitation*	Oil-Water Ratio (%)	Area (ft^2)	Volume (bbl.)	Estimated Volume in Subsurface (bbl.)	Volume of Water in Subsurface (bbl.)	Volume of Oil in Subsurface (bbl.)
Rectangle A	60.0	48.0	2.0	0.1	1.00	2880.0	85.4	6.8	6.84	0.0
Rectangle B	42.0	21.0	3.5	0.1	1.00	882.0	45.8	4.6	4.58	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):	**11.41**	**11.41**	**0.00**

TOTAL RELEASE VOLUME (bbls):	**11.4**

Form C-141
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State of New Mexico
Oil Conservation Division

Incident ID	NAPP2316640406
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: __08/07/2023_____

email: __Bryce.Wagoner@mavresources.com_____ Telephone: ___928-241-1862_____

OCD Only

Received by: Shelly Wells Date: 8/11/2023

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2316640406
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: 08/07/2023

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

OCD Only

Received by: Shelly Wells Date: 8/11/2023

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: 11/28/2023

Printed Name: Nelson Velez Title: Environmental Specialist - Adv

Remediation has met 19.15.29 NMAC requirements. Soil impacts exceeding the reclamation standards have been left in place and are required to meet 19.15.29.13D (1) NMAC once the site is no longer reasonably needed for production or subsequent drilling operations.

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

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

CONDITIONS

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 250703
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Remediation has met 19.15.29 NMAC requirements. Soil impacts exceeding the reclamation standards have been left in place and are required to meet 19.15.29.13D (1) NMAC once the site is no longer reasonably needed for production or subsequent drilling operations.	11/28/2023