



August 1, 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
SEMU 34
Incident Number NAPP2314257831
Lea County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Maverick Natural Resources, LLC (Maverick), has prepared this *Closure Request* to document assessment, excavation, and soil sampling activities performed at the SEMU 34 (Site). The purpose of the assessment, excavation, and soil sampling activities was to address impacts to soil resulting from a release of crude oil and produced water at the Site. Based on the 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 NAPP2314257831.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit J, Section 19, Township 20 South, Range 38 East, in Lea County, New Mexico (32.5571687° N, -103.1877344° W) and is associated with oil and gas exploration and production operations on Federal Land managed by Bureau of Land Management (BLM).

On May 3, 2023, internal corrosion of a surface steel flow line resulted in the release of approximately 1.89 barrels (bbls) of crude oil and 12.88 bbls of produced water onto the surrounding pasture. No released 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 May 17, 2023. The release was assigned Incident Number NAPP2314257831.

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 and 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well 323307103113601, located

approximately 0.49 miles southwest of the Site. The well has a reported depth to groundwater of 82.73 feet bgs. The next closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well L-15414 POD 1, located approximately 0.54 miles east of the Site. The groundwater well was drilled to a depth of 103 feet bgs during November 2022, and no groundwater was encountered. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well record is included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is an intermittent stream, located approximately 7,967 feet east of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a 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.

SITE ASSESSMENT ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

Between May 12, 2023, and July 28, 2023, site assessment and delineation activities were completed at the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. Four assessment soil samples (SS01 through SS04) were collected around the visible release extent at a depth of 0.5 feet bgs to confirm the lateral extent of the release. Five boreholes (BH01 through BH05) were advanced via hand auger within the release extent to assess the vertical extent of the release. Discrete delineation soil samples were collected from boreholes BH01 through BH05 at depths ranging from 1-foot to 4 feet bgs. 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 visits and a photographic log is included in Appendix B.

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 at or below 4 degrees Celsius (°C) under strict chain-of-custody procedures to Cardinal Laboratories for analysis 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 4500.

Laboratory analytical results for assessment soil samples SS01 through SS04, collected around the release extent, indicated that all COC concentrations were compliant with the most stringent Table I

Closure Criteria and provided lateral definition of the release. Laboratory analytical results for the delineation soil samples collected within the release extent from boreholes BH02 and BH04, indicated that chloride and/or BTEX and TPH concentrations exceeded the Site Closure Criteria and reclamation requirements at depths ranging from 1-foot to 4 feet bgs. Laboratory analytical results for the delineation soil samples collected from boreholes BH01, BH03, and BH05 indicated that all COC concentrations were compliant with the most stringent Table I Closure Criteria. Based on visible staining in the release area and laboratory analytical results for the delineation soil samples, excavation activities were warranted.

EXCAVATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

Between July 25, 2023 and July 27, 2023, Ensolum personnel were at the Site to oversee excavation of impacted soil as indicated by visible staining in the release area and laboratory analytical results for the delineation soil samples. To direct excavation activities, soil was field screened for volatile aromatic hydrocarbons (VOCs) utilizing a calibrated photoionization detector (PID) and chloride Hach® chloride QuanTab® test strips. Excavation activities were performed utilizing a track-mounted backhoe and transport vehicles. The excavation was completed to depths ranging from 0.5 feet to 6.5 feet bgs.

Following removal of impacted soil, 5-point composite soil samples were collected every 200 square feet from the floor and sidewalls of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS28 were collected from the floor of the excavation at depths ranging from 0.5 feet to 6.5 feet bgs. Composite soil samples SW01 through SW10 were collected from the sidewalls of the excavation at depths ranging from the ground surface to 6.5 feet bgs. The excavation soil samples were handled and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations were mapped utilizing a handheld GPS and are presented on Figure 3.

Laboratory analytical results for excavation floor samples FS01 through FS28 and excavation sidewall samples SW01 through SW10, collected from the final excavation extent, indicated all COC concentrations were compliant with the Site Closure Criteria and reclamation requirements for samples collected in the top four feet. Laboratory analytical results are summarized on Table 1 and the complete laboratory analytical reports are included as Appendix C.

The excavation measured approximately 5,335 square feet in areal extent. A total of approximately 260 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Disposal Facility located in Hobbs, New Mexico. After completion of confirmation sampling, the excavation was secured with fencing.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the May 3, 2023, 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, for samples collected from the top four feet. Based on the laboratory analytical results, no further remediation is required. Maverick will backfill the excavation with material purchased locally and recontour the Site to match pre-existing conditions.

Excavation of impacted soil has mitigated impacts at this Site. Depth to groundwater has been estimated to be between 51 and 100 feet bgs and no sensitive receptors were identified near the release extent. Maverick believes the remedial actions completed are protective of human health, the environment, and

Maverick Permian, LLC
Closure Request
SEMU 34

Page 4

groundwater and respectfully requests closure for Incident NAPP2314257831. NMOCD Notifications are included in Appendix D and the final Form C-141 is included in Appendix E.

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

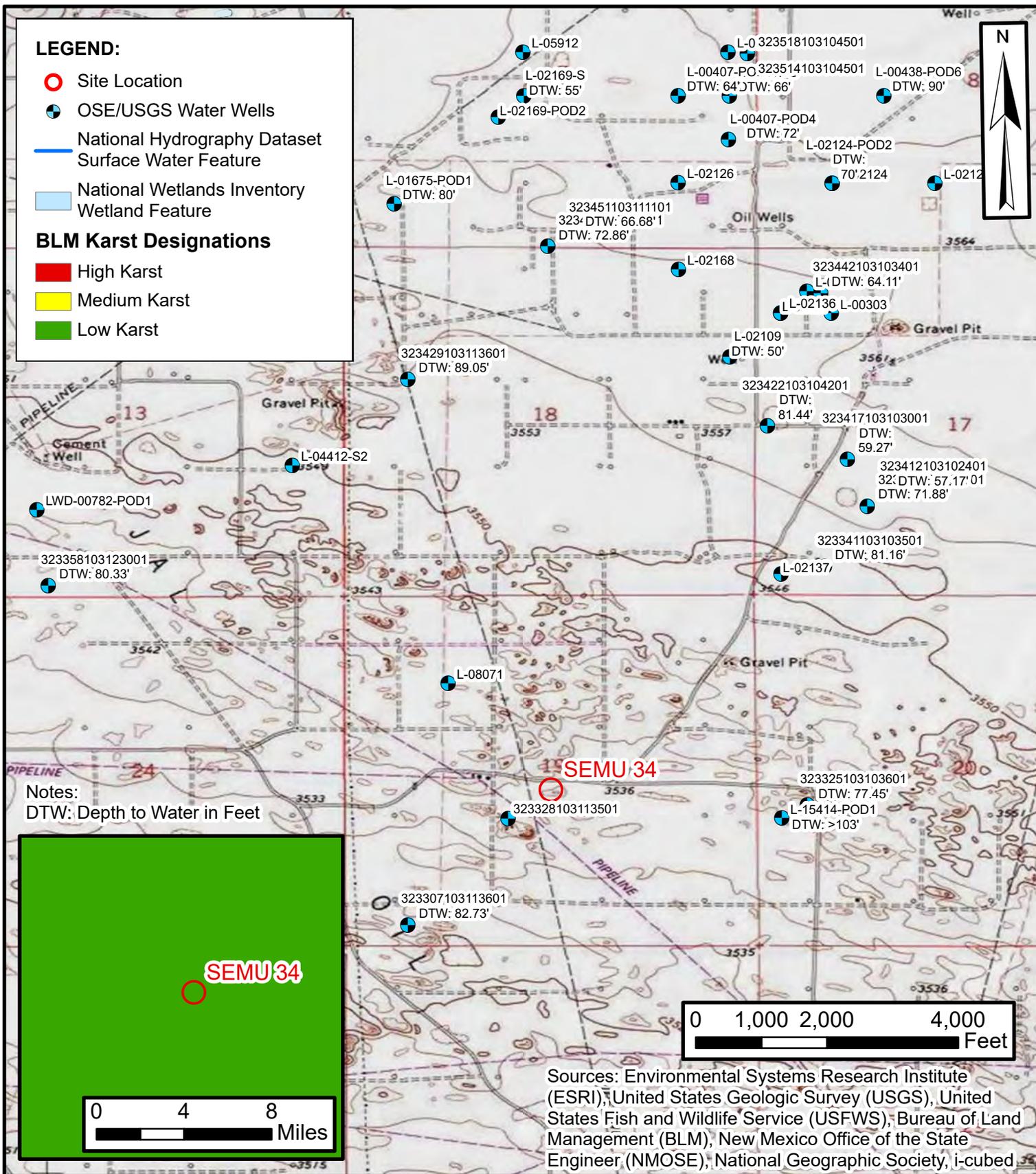
cc: Bryce Wagoner, Maverick Natural Resources
New Mexico State Land Office

Appendices:

- Figure 1 Site Receptor Map
- Figure 2 Assessment and Delineation Soil Sample Locations
- Figure 3 Excavation Soil Sample Locations
- Table 1 Soil Sample Analytical Results
- Appendix A Referenced Well Records
- Appendix B Photographic Log
- Appendix C Laboratory Analytical Reports & Chain of Custody Documentation
- Appendix D NMOCD Notifications
- Appendix E Final C-141



FIGURES

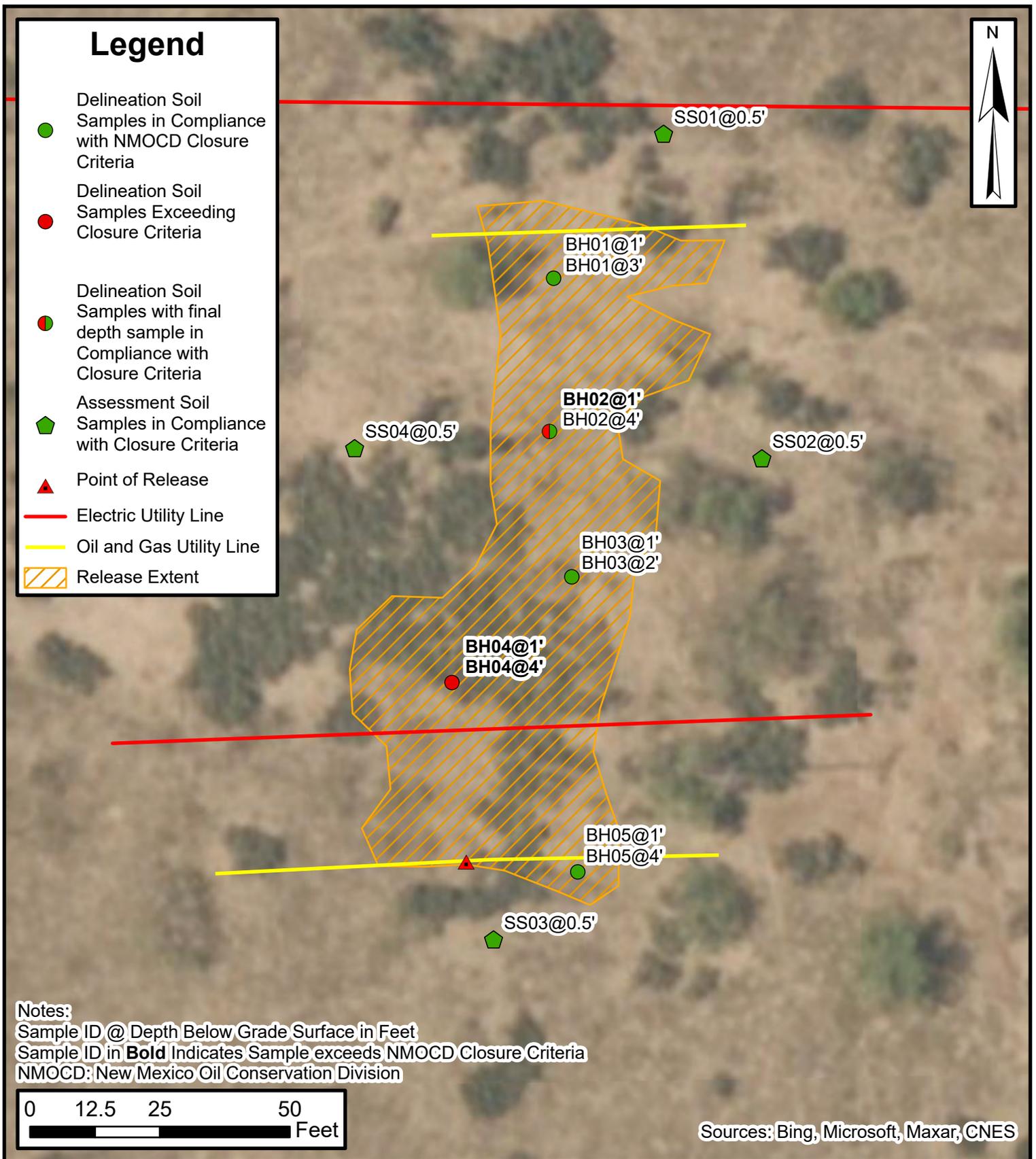


Sources: Environmental Systems Research Institute (ESRI), United States Geologic Survey (USGS), United States Fish and Wildlife Service (USFWS), Bureau of Land Management (BLM), New Mexico Office of the State Engineer (NMOSE), National Geographic Society, i-cubed



Site Receptor Map
 SEMU 34
 Maverick Permian, LLC
 Incident Number: NAPP2314257831
 Unit J, Sec 19, T20S, R38E
 Lea County, New Mexico

FIGURE
1



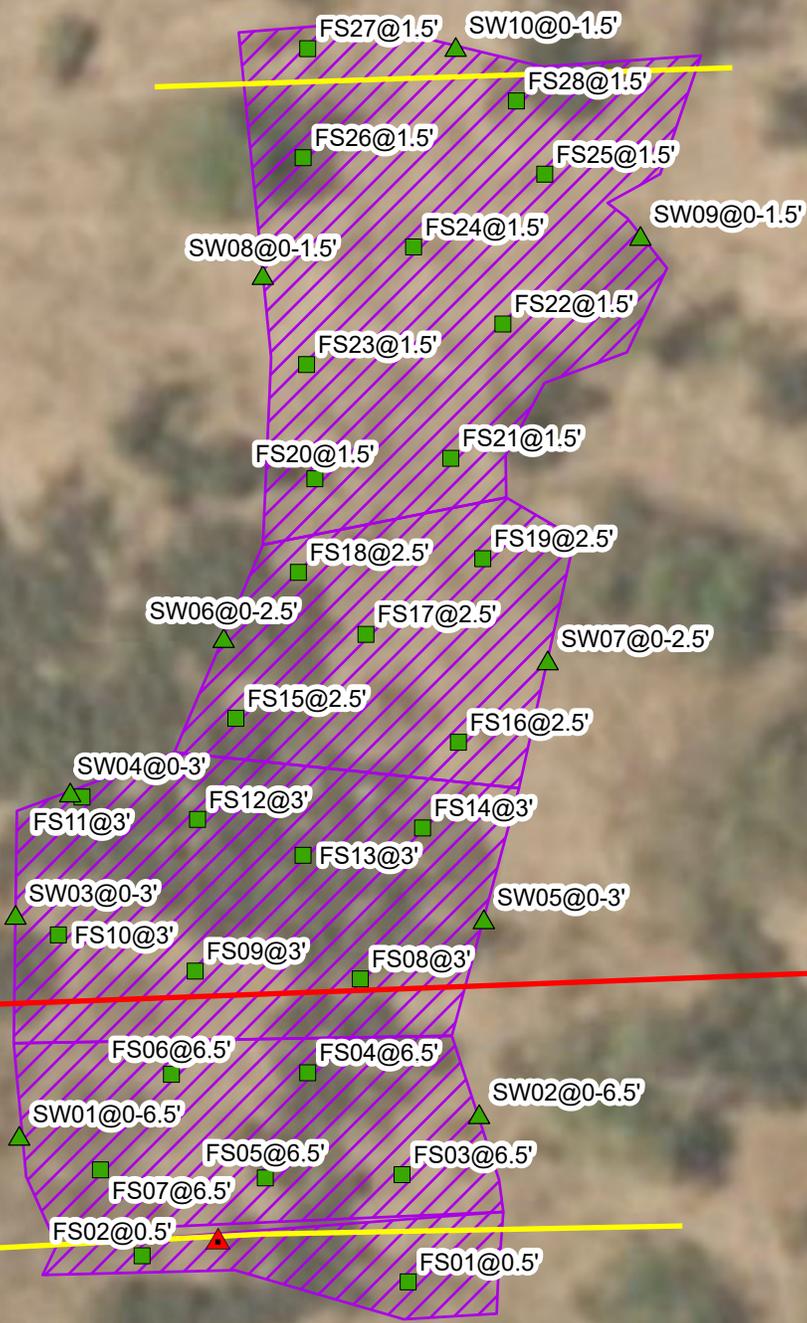
Assessment and Delineation Soil Sample Locations

SEMU 34
 Maverick Permian, LLC
 Incident Number: NAPP2314257831
 Unit J, Sec 19, T20S, R38E
 Lea County, New Mexico

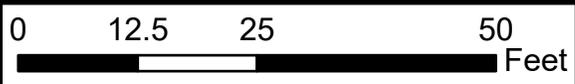
FIGURE
2

Legend

- Excavation Floor Samples in Compliance with NMOCD Closure Criteria
- ▲ Excavation Sidewall Samples in Compliance with NMOCD Closure Criteria
- ▲ Point of Release
- Electric Utility Line
- Oil and Gas Utility Line
- Excavation Extent



Notes:
 Sample ID @ Depth Below Grade Surface in Feet
 NMOCD: New Mexico Oil Conservation Division



Sources: Bing, Microsoft, Maxar, CNES

Excavation Soil Sample Locations

SEMU 34
 Maverick Permian, LLC
 Incident Number: NAPP2314257831
 Unit J, Sec 19, T20S, R38E
 Lea County, New Mexico

FIGURE
3





TABLES

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
SEMU 34
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 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
Assessment Soil Samples										
SS01	7/28/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SS02	7/28/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
SS03	7/28/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
SS04	7/28/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
Delineation Soil Samples										
*BH01	5/12/2023	1.0	<0.050	<0.300	<10.0	15.8	<10.0	15.8	15.8	<16.0
*BH01	5/12/2023	3.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
*BH02	5/12/2023	1.0	<0.050	<0.300	<10.0	145.0	30.9	175.9	175.9	96.0
BH02	5/12/2023	4.0	<0.050	<0.300	<10.0	43.9	<10.0	43.9	43.9	16.0
*BH03	5/12/2023	1.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
*BH03	5/12/2023	2.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
*BH04	5/12/2023	1.0	<2.0	80.1	2,660	13,200	2,340	15,860	18,200	2,160
BH04	5/12/2023	4.0	0.598	72.0	1,680	8,950	1,740	10,630	12,370	13,500
*BH05	5/12/2023	1.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
BH05	5/12/2023	4.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
Excavation Floor Soil Samples										
FS01*	7/25/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS02*	7/25/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS03	7/26/2023	6.5	<0.050	<0.300	<10.0	494	119	494	613	624
FS04	7/26/2023	6.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	576
FS05	7/26/2023	6.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,220
FS06	7/26/2023	6.5	<0.050	<0.300	<10.0	565.0	150	565	715	592
FS07	7/26/2023	6.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,150
FS08*	7/25/2023	3.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS09*	7/25/2023	3.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
FS10*	7/25/2023	3.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 SEMU 34
 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 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
FS11*	7/25/2023	3.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
FS12*	7/25/2023	3.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS13*	7/25/2023	3.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
FS14*	7/25/2023	3.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
FS15*	7/25/2023	2.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS16*	7/25/2023	2.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
FS17*	7/25/2023	2.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
FS18*	7/25/2023	2.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
FS19*	7/25/2023	2.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS20*	7/26/2023	1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS21*	7/26/2023	1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS22*	7/26/2023	1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
FS23*	7/26/2023	1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS24*	7/26/2023	1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS25*	7/26/2023	1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
FS26*	7/26/2023	1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS27*	7/26/2023	1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS28*	7/26/2023	1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
Excavation Sidewall Soil Samples										
SW01*	7/25/2023	0 - 6.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
SW02*	7/25/2023	0 - 6.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
SW03*	7/25/2023	0 - 3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
SW04*	7/25/2023	0 - 3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
SW05*	7/25/2023	0 - 3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
SW06*	7/25/2023	0 - 2.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
SW07*	7/25/2023	0 - 2.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
SW08*	7/26/2023	0 - 1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
SEMU 34
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 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
SW09*	7/26/2023	0 - 1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
SW10*	7/26/2023	0 - 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 1 Closure Criteria or reclamation standard where applicable.

Grey text represents samples that have been excavated

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



APPENDIX A

Referenced Well Records



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

OSE 011 DEC 21 2022 PM 3:14

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) L-15414-POD1		WELL TAG ID NO.		OSE FILE NO(S). L-15414	
	WELL OWNER NAME(S) MAVRICK NATURAL RESOURCES				PHONE (OPTIONAL) 928-241-1862	
	WELL OWNER MAILING ADDRESS 1410 NW COUNTY RD				CITY HOBBS	STATE NM
					ZIP 88240	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE	MINUTES 32	SECONDS 33	23.46	N
	LONGITUDE	-103	10	41.55	W	* DATUM REQUIRED: WGS 84
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SEMU BURGER B 108						

2. DRILLING & CASING INFORMATION	LICENSE NO. WD-1184	NAME OF LICENSED DRILLER RUSSELL SOUTHERLAND			NAME OF WELL DRILLING COMPANY WEST TEXAS WATER WELL SERVICE		
	DRILLING STARTED 11/10/2022	DRILLING ENDED 11/10/2022	DEPTH OF COMPLETED WELL (FT) 103	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:						
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:						
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)
	FROM	TO					
				NO CASING IN HOLE			

3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
	FROM	TO				
				N/A		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/19)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2



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)		(NAD83 UTM in meters)	
NA	L 15414 POD1	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
		3	1	3	20	20S	38E	671043	3603587

Driller License: 1184	Driller Company: WEST TEXAS WATER WELL SERVICE	
Driller Name: RUSSELL SOUTHERLAND		
Drill Start Date: 11/10/2022	Drill Finish Date: 11/10/2022	Plug Date:
Log File Date: 12/21/2022	PCW Rev Date:	Source:
Pump Type:	Pipe Discharge Size:	Estimated Yield:
Casing Size:	Depth Well: 103 feet	Depth Water:

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.

5/8/23 5:16 PM

POINT OF DIVERSION SUMMARY



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hide News 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

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

Search Results -- 1 sites found

Agency code = usgs

site_no list =
• 323307103113601

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 323307103113601 20S.38E.19.312141

Lea County, New Mexico

Latitude 32°33'07", Longitude 103°11'36" NAD27

Land-surface elevation 3,534 feet above NAVD88

The depth of the well is 115 feet below land surface.

This well is completed in the High Plains aquifer (N100HGHPLN) 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](#)



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hide News 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

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

Search Results -- 1 sites found

Agency code = usgs

site_no list =
• 323307103113601

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 323307103113601 20S.38E.19.312141

Lea County, New Mexico

Latitude 32°33'07", Longitude 103°11'36" NAD27

Land-surface elevation 3,534 feet above NAVD88

The depth of the well is 115 feet below land surface.

This well is completed in the High Plains aquifer (N100HGHPLN) national aquifer.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1954-04-02			D	62610	3454.12	NGVD29	1	Z			A
1954-04-02			D	62611	3455.23	NAVD88	1	Z			A
1954-04-02			D	72019	78.77		1	Z			A
1961-02-28			D	62610	3453.28	NGVD29	1	Z			A
1961-02-28			D	62611	3454.39	NAVD88	1	Z			A
1961-02-28			D	72019	79.61		1	Z			A
1966-03-08			D	62610	3446.84	NGVD29	1	Z			A
1966-03-08			D	62611	3447.95	NAVD88	1	Z			A
1966-03-08			D	72019	86.05		1	Z			A
1968-04-08			D	62610	3451.86	NGVD29	1	Z			A
1968-04-08			D	62611	3452.97	NAVD88	1	Z			A
1968-04-08			D	72019	81.03		1	Z			A
1971-01-28			D	62610	3451.34	NGVD29	1	Z			A
1971-01-28			D	62611	3452.45	NAVD88	1	Z			A
1971-01-28			D	72019	81.55		1	Z			A
1976-01-29			D	62610	3450.16	NGVD29	1	Z			A
1976-01-29			D	62611	3451.27	NAVD88	1	Z			A
1976-01-29			D	72019	82.73		1	Z			A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	Z	Other.

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

- [Questions or Comments](#)
- [Automated retrievals](#)
- [Help](#)
- [Data Tips](#)
- [Explanation of terms](#)
- [Subscribe for system changes](#)
- [News](#)

[Accessibility](#)
[FOIA](#)
[Privacy](#)
[Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

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: 2023-07-27 16:11:33 EDT

0.27 0.23 nadww01

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1954-04-02			D	62610	3454.12	NGVD29	1	Z			A
1954-04-02			D	62611	3455.23	NAVD88	1	Z			A
1954-04-02			D	72019	78.77		1	Z			A
1961-02-28			D	62610	3453.28	NGVD29	1	Z			A
1961-02-28			D	62611	3454.39	NAVD88	1	Z			A
1961-02-28			D	72019	79.61		1	Z			A
1966-03-08			D	62610	3446.84	NGVD29	1	Z			A
1966-03-08			D	62611	3447.95	NAVD88	1	Z			A
1966-03-08			D	72019	86.05		1	Z			A
1968-04-08			D	62610	3451.86	NGVD29	1	Z			A
1968-04-08			D	62611	3452.97	NAVD88	1	Z			A
1968-04-08			D	72019	81.03		1	Z			A
1971-01-28			D	62610	3451.34	NGVD29	1	Z			A
1971-01-28			D	62611	3452.45	NAVD88	1	Z			A
1971-01-28			D	72019	81.55		1	Z			A
1976-01-29			D	62610	3450.16	NGVD29	1	Z			A
1976-01-29			D	62611	3451.27	NAVD88	1	Z			A
1976-01-29			D	72019	82.73		1	Z			A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	Z	Other.

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

- [Questions or Comments](#)
- [Automated retrievals](#)
- [Help](#)
- [Data Tips](#)
- [Explanation of terms](#)
- [Subscribe for system changes](#)
- [News](#)

[Accessibility](#)
[FOIA](#)
[Privacy](#)
[Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

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: 2023-07-27 16:11:33 EDT

0.27 0.23 nadww01



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater Geographic Area: United States

Click to hide News 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 =

- 323325103103601

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 323325103103601 20S.38E.20.11431

Lea County, New Mexico

Latitude 32°33'25", Longitude 103°10'36" NAD27

Land-surface elevation 3,540 feet above NAVD88

This well is completed in the High Plains aquifer (N100HGHPN) 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
1961-02-24			D 62610		3464.67	NGVD29	1	Z		
1961-02-24			D 62611		3465.76	NAVD88	1	Z		
1961-02-24			D 72019	74.24			1	Z		
1966-03-08			D 62610		3461.46	NGVD29	1	Z		
1966-03-08			D 62611		3462.55	NAVD88	1	Z		
1966-03-08			D 72019	77.45			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
Status	1	Static



USGS Home
 Contact USGS
 Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:
 Geographic Area:

Click to hide News Bulletins

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

Water Quality Samples for the Nation

USGS 323328103113501 20S.38E.19.320

Available data for this site

Lea County, New Mexico

Latitude 32°33'23", Longitude 103°11'21" NAD27

Land-surface elevation 3,538 feet above NGVD29

Site Type: Well

The depth of the well is 115 feet below land surface.

This well is completed in the High Plains aquifer (N100HGHPLN) national aquifer.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Period of record

Begin Date	End Date	Samples
1954-04-02	1958-09-09	2

Choose Output Format

Retrieve Water-Quality Samples for Selected Sites

Choose one of the following options for displaying data for the sites meeting the criteria above

- [?](#)
Parameter Group Period of Record table
- [?](#)
Inventory of water-quality data
- [?](#)
Tab-separated inventory of water-quality data *



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater Geographic Area: United States

Click to hide News 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 =

- 323341103103501

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 323341103103501 20S.38E.17.33410

Lea County, New Mexico

Latitude 32°34'01.3", Longitude 103°10'35.2" NAD83

Land-surface elevation 3,548.80 feet above NGVD29

The depth of the well is 116 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
1954-03-22			D 62610		3476.84	NGVD29	1	Z		
1954-03-22			D 62611		3477.93	NAVD88	1	Z		
1954-03-22			D 72019	71.96			1	Z		
1961-02-24			D 62610		3477.44	NGVD29	1	Z		
1961-02-24			D 62611		3478.53	NAVD88	1	Z		
1961-02-24			D 72019	71.36			1	Z		
1966-03-08			D 62610		3469.97	NGVD29	1	Z		
1966-03-08			D 62611		3471.06	NAVD88	1	Z		
1966-03-08			D 72019	78.83			1	Z		
1971-01-25			D 62610		3470.70	NGVD29	P	Z		
1971-01-25			D 62611		3471.79	NAVD88	P	Z		
1971-01-25			D 72019	78.10			P	Z		
1976-01-28			D 62610		3469.48	NGVD29	1	Z		
1976-01-28			D 62611		3470.57	NAVD88	1	Z		
1976-01-28			D 72019	79.32			1	Z		
1981-02-06			D 62610		3467.64	NGVD29	P	Z		

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
1981-02-06		D	62611		3468.73	NAVD88	P	Z		
1981-02-06		D	72019	81.16			P	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
Status	1	Static
Status	P	Pumping
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.

[Questions about sites/data?](#)

[Feedback on this web site](#)

[Automated retrievals](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[News](#)

[Accessibility](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

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: 2023-05-08 19:00:27 EDT

0.32 0.29 nadww01

Section	Code	Description
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.

[Questions about sites/data?](#)

[Feedback on this web site](#)

[Automated retrievals](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[News](#)

[Accessibility](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

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: 2023-05-08 18:57:09 EDT

0.27 0.24 nadww01



APPENDIX B

Photographic Log



Photographic Log
Maverick Permian, LLC
SEMU 34
NAPP2314257831



Photograph 1 Date: 5/3/2023
Description: View of initial release.



Photograph 2 Date: 7/25/2023
Description: Excavation activities.



Photograph 3 Date: 7/25/2023
Description: Excavation activities



Photograph 4 Date: 7/26/2023
Description: Final Excavation extent
View:



APPENDIX C

Laboratory Analytical Reports & Chain of Custody Documentation



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

May 18, 2023

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: SEMU 34

Enclosed are the results of analyses for samples received by the laboratory on 05/15/23 14:25.

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 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:	05/15/2023	Sampling Date:	05/12/2023
Reported:	05/18/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - 32.5071687-103.1877344		

Sample ID: BH 01 1' (H232415-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/16/2023	ND	2.24	112	2.00	3.38	
Toluene*	<0.050	0.050	05/16/2023	ND	2.22	111	2.00	3.57	
Ethylbenzene*	<0.050	0.050	05/16/2023	ND	2.15	108	2.00	4.92	
Total Xylenes*	<0.150	0.150	05/16/2023	ND	6.55	109	6.00	4.04	
Total BTEX	<0.300	0.300	05/16/2023	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	<16.0	16.0	05/16/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	05/16/2023	ND	215	108	200	0.445		
DRO >C10-C28*	15.8	10.0	05/16/2023	ND	193	96.5	200	1.99		
EXT DRO >C28-C36	<10.0	10.0	05/16/2023	ND						

Surrogate: 1-Chlorooctane 134 % 48.2-134

Surrogate: 1-Chlorooctadecane 149 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	05/15/2023	Sampling Date:	05/12/2023
Reported:	05/18/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - 32.5071687-103.1877344		

Sample ID: BH 01 3' (H232415-02)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/16/2023	ND	2.24	112	2.00	3.38		
Toluene*	<0.050	0.050	05/16/2023	ND	2.22	111	2.00	3.57		
Ethylbenzene*	<0.050	0.050	05/16/2023	ND	2.15	108	2.00	4.92		
Total Xylenes*	<0.150	0.150	05/16/2023	ND	6.55	109	6.00	4.04		
Total BTEX	<0.300	0.300	05/16/2023	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	05/16/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS							S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
GRO C6-C10*	<10.0	10.0	05/16/2023	ND	215	108	200	0.445			
DRO >C10-C28*	<10.0	10.0	05/16/2023	ND	193	96.5	200	1.99			
EXT DRO >C28-C36	<10.0	10.0	05/16/2023	ND							

Surrogate: 1-Chlorooctane 138 % 48.2-134

Surrogate: 1-Chlorooctadecane 150 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	05/15/2023	Sampling Date:	05/12/2023
Reported:	05/18/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - 32.5071687-103.1877344		

Sample ID: BH 02 1' (H232415-03)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/16/2023	ND	2.24	112	2.00	3.38	
Toluene*	<0.050	0.050	05/16/2023	ND	2.22	111	2.00	3.57	
Ethylbenzene*	<0.050	0.050	05/16/2023	ND	2.15	108	2.00	4.92	
Total Xylenes*	0.206	0.150	05/16/2023	ND	6.55	109	6.00	4.04	
Total BTEX	<0.300	0.300	05/16/2023	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	96.0	16.0	05/16/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/16/2023	ND	215	108	200	0.445	
DRO >C10-C28*	145	10.0	05/16/2023	ND	193	96.5	200	1.99	
EXT DRO >C28-C36	30.9	10.0	05/16/2023	ND					

Surrogate: 1-Chlorooctane 113 % 48.2-134

Surrogate: 1-Chlorooctadecane 125 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	05/15/2023	Sampling Date:	05/12/2023
Reported:	05/18/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - 32.5071687-103.1877344		

Sample ID: BH 02 4' (H232415-04)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/16/2023	ND	2.24	112	2.00	3.38		
Toluene*	<0.050	0.050	05/16/2023	ND	2.22	111	2.00	3.57		
Ethylbenzene*	<0.050	0.050	05/16/2023	ND	2.15	108	2.00	4.92		
Total Xylenes*	<0.150	0.150	05/16/2023	ND	6.55	109	6.00	4.04		
Total BTEX	<0.300	0.300	05/16/2023	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	05/16/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	05/16/2023	ND	215	108	200	0.445		
DRO >C10-C28*	43.9	10.0	05/16/2023	ND	193	96.5	200	1.99		
EXT DRO >C28-C36	<10.0	10.0	05/16/2023	ND						

Surrogate: 1-Chlorooctane 118 % 48.2-134

Surrogate: 1-Chlorooctadecane 131 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	05/15/2023	Sampling Date:	05/12/2023
Reported:	05/18/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - 32.5071687-103.1877344		

Sample ID: BH 03 1' (H232415-05)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/16/2023	ND	2.24	112	2.00	3.38	
Toluene*	<0.050	0.050	05/16/2023	ND	2.22	111	2.00	3.57	
Ethylbenzene*	<0.050	0.050	05/16/2023	ND	2.15	108	2.00	4.92	
Total Xylenes*	<0.150	0.150	05/16/2023	ND	6.55	109	6.00	4.04	
Total BTEX	<0.300	0.300	05/16/2023	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	05/16/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/16/2023	ND	215	108	200	0.445	
DRO >C10-C28*	<10.0	10.0	05/16/2023	ND	193	96.5	200	1.99	
EXT DRO >C28-C36	<10.0	10.0	05/16/2023	ND					

Surrogate: 1-Chlorooctane 129 % 48.2-134

Surrogate: 1-Chlorooctadecane 143 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	05/15/2023	Sampling Date:	05/12/2023
Reported:	05/18/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - 32.5071687-103.1877344		

Sample ID: BH 03 2' (H232415-06)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/16/2023	ND	2.24	112	2.00	3.38		
Toluene*	<0.050	0.050	05/16/2023	ND	2.22	111	2.00	3.57		
Ethylbenzene*	<0.050	0.050	05/16/2023	ND	2.15	108	2.00	4.92		
Total Xylenes*	<0.150	0.150	05/16/2023	ND	6.55	109	6.00	4.04		
Total BTEX	<0.300	0.300	05/16/2023	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	16.0	16.0	05/16/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS							S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
GRO C6-C10*	<10.0	10.0	05/16/2023	ND	215	108	200	0.445			
DRO >C10-C28*	<10.0	10.0	05/16/2023	ND	193	96.5	200	1.99			
EXT DRO >C28-C36	<10.0	10.0	05/16/2023	ND							

Surrogate: 1-Chlorooctane 135 % 48.2-134

Surrogate: 1-Chlorooctadecane 147 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	05/15/2023	Sampling Date:	05/12/2023
Reported:	05/18/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - 32.5071687-103.1877344		

Sample ID: BH 04 1' (H232415-08)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	05/16/2023	ND	2.24	112	2.00	3.38	
Toluene*	4.87	2.00	05/16/2023	ND	2.22	111	2.00	3.57	
Ethylbenzene*	9.39	2.00	05/16/2023	ND	2.15	108	2.00	4.92	
Total Xylenes*	65.8	6.00	05/16/2023	ND	6.55	109	6.00	4.04	
Total BTEX	80.1	12.0	05/16/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 122 % 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	2160	16.0	05/16/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	2660	100	05/16/2023	ND	215	108	200	0.445		
DRO >C10-C28*	13200	100	05/16/2023	ND	193	96.5	200	1.99		
EXT DRO >C28-C36	2340	100	05/16/2023	ND						

Surrogate: 1-Chlorooctane 378 % 48.2-134

Surrogate: 1-Chlorooctadecane 290 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	05/15/2023	Sampling Date:	05/12/2023
Reported:	05/18/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - 32.5071687-103.1877344		

Sample ID: BH 04 4' (H232415-09)

BTEX 8021B		mg/kg		Analyzed By: JH/				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	0.598	0.100	05/16/2023	ND	2.08	104	2.00	3.27	GC-NC1	
Toluene*	7.82	0.100	05/16/2023	ND	2.08	104	2.00	1.45	QM-07	
Ethylbenzene*	12.5	0.100	05/16/2023	ND	2.18	109	2.00	2.45	QM-07	
Total Xylenes*	51.1	0.300	05/16/2023	ND	6.50	108	6.00	3.16	QM-07	
Total BTEX	72.0	0.600	05/16/2023	ND					GC-NC1	

Surrogate: 4-Bromofluorobenzene (PID) 174 % 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	13500	16.0	05/16/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS				S-06		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	1680	100	05/16/2023	ND	215	108	200	0.445		
DRO >C10-C28*	8950	100	05/16/2023	ND	193	96.5	200	1.99		
EXT DRO >C28-C36	1740	100	05/16/2023	ND						

Surrogate: 1-Chlorooctane 243 % 48.2-134

Surrogate: 1-Chlorooctadecane 209 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	05/15/2023	Sampling Date:	05/12/2023
Reported:	05/18/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - 32.5071687-103.1877344		

Sample ID: BH 05 1' (H232415-10)

BTEX 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/16/2023	ND	2.08	104	2.00	3.27		
Toluene*	<0.050	0.050	05/16/2023	ND	2.08	104	2.00	1.45		
Ethylbenzene*	<0.050	0.050	05/16/2023	ND	2.18	109	2.00	2.45		
Total Xylenes*	<0.150	0.150	05/16/2023	ND	6.50	108	6.00	3.16		
Total BTEX	<0.300	0.300	05/16/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	05/16/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	05/16/2023	ND	215	108	200	0.445		
DRO >C10-C28*	<10.0	10.0	05/16/2023	ND	193	96.5	200	1.99		
EXT DRO >C28-C36	<10.0	10.0	05/16/2023	ND						

Surrogate: 1-Chlorooctane 120 % 48.2-134

Surrogate: 1-Chlorooctadecane 129 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	05/15/2023	Sampling Date:	05/12/2023
Reported:	05/18/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - 32.5071687-103.1877344		

Sample ID: BH 05 4' (H232415-11)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/16/2023	ND	2.08	104	2.00	3.27	
Toluene*	<0.050	0.050	05/16/2023	ND	2.08	104	2.00	1.45	
Ethylbenzene*	<0.050	0.050	05/16/2023	ND	2.18	109	2.00	2.45	
Total Xylenes*	<0.150	0.150	05/16/2023	ND	6.50	108	6.00	3.16	
Total BTEX	<0.300	0.300	05/16/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 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	32.0	16.0	05/16/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/16/2023	ND	215	108	200	0.445	
DRO >C10-C28*	<10.0	10.0	05/16/2023	ND	193	96.5	200	1.99	
EXT DRO >C28-C36	<10.0	10.0	05/16/2023	ND					

Surrogate: 1-Chlorooctane 130 % 48.2-134

Surrogate: 1-Chlorooctadecane 142 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
GC-NC1 8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
** Samples not received at proper temperature of 6°C or below.
*** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

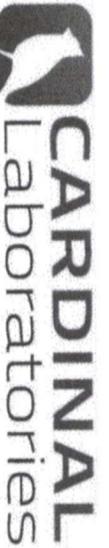
Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Ensolum, LLC

Project Manager: Kate Jennings

Address: 8122 Nat'l Parks Hwy

City: Lordsburg State: NM Zip: 88020

Phone #: 505-683-2508 Fax #: 505-683-2508

Project #: 88D9057078 Project Owner: Newrich

Project Name: SEMU 34

Project Location: 82.5071687 -108.1877344

Sampler Name: JUANITA PALOMATA

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	TPH	BTEX	Chlorides
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:					
H232415	6105	4	(G)	1			X					8/28	1750	X	X	X

PLEASE NOTE: Liability and Damages: Cardinal's liability and clients' exclusive remedy for any claim arising under this 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: [Signature]

Date: 8/1/23

Time: 14:35

Received By: [Signature]

Date: 8/1/23

Time: 17:50

REMARKS: Jennings@ensolum.com jalcomata@ensolum.com

Delivered By: (Circle One)

Observed Temp. °C: -0.1

Corrected Temp. °C: -0.7

Sample Condition: Cool Intact Yes No

Checked By: [Signature]

Turnaround Time: 3000

Standard Rush

Bacteria (only) Sample Condition: Cool Intact Yes No

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



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

July 26, 2023

AIMEE COLE

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: SEMU 34

Enclosed are the results of analyses for samples received by the laboratory on 07/25/23 15:18.

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 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
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/25/2023	Sampling Date:	07/25/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 16 @ 2.5' (H233880-01)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/26/2023	ND	2.03	102	2.00	0.753	
Toluene*	<0.050	0.050	07/26/2023	ND	1.92	95.8	2.00	0.0636	
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	2.02	101	2.00	0.0108	
Total Xylenes*	<0.150	0.150	07/26/2023	ND	6.02	100	6.00	0.420	
Total BTEX	<0.300	0.300	07/26/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	07/26/2023	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/26/2023	ND	174	86.8	200	10.2	
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	187	93.7	200	4.37	
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 114 % 48.2-134

Surrogate: 1-Chlorooctadecane 127 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/25/2023	Sampling Date:	07/25/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 17 @ 2.5' (H233880-02)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/26/2023	ND	2.03	102	2.00	0.753	
Toluene*	<0.050	0.050	07/26/2023	ND	1.92	95.8	2.00	0.0636	
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	2.02	101	2.00	0.0108	
Total Xylenes*	<0.150	0.150	07/26/2023	ND	6.02	100	6.00	0.420	
Total BTEX	<0.300	0.300	07/26/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/26/2023	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/26/2023	ND	174	86.8	200	10.2	
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	187	93.7	200	4.37	
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 116 % 48.2-134

Surrogate: 1-Chlorooctadecane 129 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/25/2023	Sampling Date:	07/25/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 18 @ 2.5' (H233880-03)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/26/2023	ND	2.03	102	2.00	0.753	
Toluene*	<0.050	0.050	07/26/2023	ND	1.92	95.8	2.00	0.0636	
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	2.02	101	2.00	0.0108	
Total Xylenes*	<0.150	0.150	07/26/2023	ND	6.02	100	6.00	0.420	
Total BTEX	<0.300	0.300	07/26/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	07/26/2023	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/26/2023	ND	174	86.8	200	10.2	
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	187	93.7	200	4.37	
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 117 % 48.2-134

Surrogate: 1-Chlorooctadecane 127 % 49.1-148

Cardinal Laboratories

* = Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/25/2023	Sampling Date:	07/25/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 19 @ 2.5' (H233880-04)

BTEX 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/26/2023	ND	2.03	102	2.00	0.753		
Toluene*	<0.050	0.050	07/26/2023	ND	1.92	95.8	2.00	0.0636		
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	2.02	101	2.00	0.0108		
Total Xylenes*	<0.150	0.150	07/26/2023	ND	6.02	100	6.00	0.420		
Total BTEX	<0.300	0.300	07/26/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/26/2023	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/26/2023	ND	174	86.8	200	10.2		
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	187	93.7	200	4.37		
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND						

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

Cardinal Laboratories

* = Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/25/2023	Sampling Date:	07/25/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: SW 01 @ 0-6.5' (H233880-05)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/26/2023	ND	2.03	102	2.00	0.753	
Toluene*	<0.050	0.050	07/26/2023	ND	1.92	95.8	2.00	0.0636	
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	2.02	101	2.00	0.0108	
Total Xylenes*	<0.150	0.150	07/26/2023	ND	6.02	100	6.00	0.420	
Total BTEX	<0.300	0.300	07/26/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/26/2023	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/26/2023	ND	174	86.8	200	10.2	
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	187	93.7	200	4.37	
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 109 % 48.2-134

Surrogate: 1-Chlorooctadecane 120 % 49.1-148

Cardinal Laboratories

* = Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/25/2023	Sampling Date:	07/25/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: SW 02 @ 0-6.5' (H233880-06)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/26/2023	ND	2.03	102	2.00	0.753	
Toluene*	<0.050	0.050	07/26/2023	ND	1.92	95.8	2.00	0.0636	
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	2.02	101	2.00	0.0108	
Total Xylenes*	<0.150	0.150	07/26/2023	ND	6.02	100	6.00	0.420	
Total BTEX	<0.300	0.300	07/26/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	07/26/2023	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/26/2023	ND	174	86.8	200	10.2	
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	187	93.7	200	4.37	
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 111 % 48.2-134

Surrogate: 1-Chlorooctadecane 121 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/25/2023	Sampling Date:	07/25/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: SW 03 @ 0-3' (H233880-07)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/26/2023	ND	2.03	102	2.00	0.753	
Toluene*	<0.050	0.050	07/26/2023	ND	1.92	95.8	2.00	0.0636	
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	2.02	101	2.00	0.0108	
Total Xylenes*	<0.150	0.150	07/26/2023	ND	6.02	100	6.00	0.420	
Total BTEX	<0.300	0.300	07/26/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	07/26/2023	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/26/2023	ND	174	86.8	200	10.2	
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	187	93.7	200	4.37	
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 126 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/25/2023	Sampling Date:	07/25/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: SW 04 @ 0-3' (H233880-08)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/26/2023	ND	2.03	102	2.00	0.753	
Toluene*	<0.050	0.050	07/26/2023	ND	1.92	95.8	2.00	0.0636	
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	2.02	101	2.00	0.0108	
Total Xylenes*	<0.150	0.150	07/26/2023	ND	6.02	100	6.00	0.420	
Total BTEX	<0.300	0.300	07/26/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/26/2023	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/26/2023	ND	174	86.8	200	10.2	
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	187	93.7	200	4.37	
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 119 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/25/2023	Sampling Date:	07/25/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: SW 05 @ 0-3' (H233880-09)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/26/2023	ND	2.03	102	2.00	0.753	
Toluene*	<0.050	0.050	07/26/2023	ND	1.92	95.8	2.00	0.0636	
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	2.02	101	2.00	0.0108	
Total Xylenes*	<0.150	0.150	07/26/2023	ND	6.02	100	6.00	0.420	
Total BTEX	<0.300	0.300	07/26/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 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	07/26/2023	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/26/2023	ND	174	86.8	200	10.2	
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	187	93.7	200	4.37	
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 109 % 48.2-134

Surrogate: 1-Chlorooctadecane 119 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/25/2023	Sampling Date:	07/25/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: SW 06 @ 0-2.5' (H233880-10)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/26/2023	ND	2.03	102	2.00	0.753	
Toluene*	<0.050	0.050	07/26/2023	ND	1.92	95.8	2.00	0.0636	
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	2.02	101	2.00	0.0108	
Total Xylenes*	<0.150	0.150	07/26/2023	ND	6.02	100	6.00	0.420	
Total BTEX	<0.300	0.300	07/26/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 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	07/26/2023	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	07/26/2023	ND	197	98.5	200	0.542	
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	209	104	200	2.26	
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/25/2023	Sampling Date:	07/25/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 01 @ .5' (H233880-11)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/26/2023	ND	2.03	102	2.00	0.753	
Toluene*	<0.050	0.050	07/26/2023	ND	1.92	95.8	2.00	0.0636	
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	2.02	101	2.00	0.0108	
Total Xylenes*	<0.150	0.150	07/26/2023	ND	6.02	100	6.00	0.420	
Total BTEX	<0.300	0.300	07/26/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 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	07/26/2023	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	07/26/2023	ND	197	98.5	200	0.542	
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	209	104	200	2.26	
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/25/2023	Sampling Date:	07/25/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 02 @ .5' (H233880-12)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/26/2023	ND	2.03	102	2.00	0.753	
Toluene*	<0.050	0.050	07/26/2023	ND	1.92	95.8	2.00	0.0636	
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	2.02	101	2.00	0.0108	
Total Xylenes*	<0.150	0.150	07/26/2023	ND	6.02	100	6.00	0.420	
Total BTEX	<0.300	0.300	07/26/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 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	07/26/2023	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	07/26/2023	ND	197	98.5	200	0.542	
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	209	104	200	2.26	
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/25/2023	Sampling Date:	07/25/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 08 @ 3' (H233880-13)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/26/2023	ND	2.03	102	2.00	0.753	
Toluene*	<0.050	0.050	07/26/2023	ND	1.92	95.8	2.00	0.0636	
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	2.02	101	2.00	0.0108	
Total Xylenes*	<0.150	0.150	07/26/2023	ND	6.02	100	6.00	0.420	
Total BTEX	<0.300	0.300	07/26/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/26/2023	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	07/26/2023	ND	197	98.5	200	0.542	
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	209	104	200	2.26	
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/25/2023	Sampling Date:	07/25/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 09 @ 3' (H233880-14)

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	07/25/2023	ND	2.16	108	2.00	1.17	
Toluene*	<0.050	0.050	07/25/2023	ND	2.12	106	2.00	1.49	
Ethylbenzene*	<0.050	0.050	07/25/2023	ND	2.06	103	2.00	1.19	
Total Xylenes*	<0.150	0.150	07/25/2023	ND	6.23	104	6.00	2.24	
Total BTEX	<0.300	0.300	07/25/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 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	64.0	16.0	07/26/2023	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	07/26/2023	ND	197	98.5	200	0.542	
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	209	104	200	2.26	
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/25/2023	Sampling Date:	07/25/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 10 @ 3' (H233880-15)

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	07/25/2023	ND	2.16	108	2.00	1.17		
Toluene*	<0.050	0.050	07/25/2023	ND	2.12	106	2.00	1.49		
Ethylbenzene*	<0.050	0.050	07/25/2023	ND	2.06	103	2.00	1.19		
Total Xylenes*	<0.150	0.150	07/25/2023	ND	6.23	104	6.00	2.24		
Total BTEX	<0.300	0.300	07/25/2023	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	16.0	16.0	07/26/2023	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	07/26/2023	ND	197	98.5	200	0.542		
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	209	104	200	2.26		
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND						

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 119 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/25/2023	Sampling Date:	07/25/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 11 @ 3' (H233880-16)

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	07/25/2023	ND	2.16	108	2.00	1.17	
Toluene*	<0.050	0.050	07/25/2023	ND	2.12	106	2.00	1.49	
Ethylbenzene*	<0.050	0.050	07/25/2023	ND	2.06	103	2.00	1.19	
Total Xylenes*	<0.150	0.150	07/25/2023	ND	6.23	104	6.00	2.24	
Total BTEX	<0.300	0.300	07/25/2023	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	128	16.0	07/26/2023	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	07/26/2023	ND	197	98.5	200	0.542	
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	209	104	200	2.26	
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/25/2023	Sampling Date:	07/25/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 12 @ 3' (H233880-17)

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	07/25/2023	ND	2.16	108	2.00	1.17	
Toluene*	<0.050	0.050	07/25/2023	ND	2.12	106	2.00	1.49	
Ethylbenzene*	<0.050	0.050	07/25/2023	ND	2.06	103	2.00	1.19	
Total Xylenes*	<0.150	0.150	07/25/2023	ND	6.23	104	6.00	2.24	
Total BTEX	<0.300	0.300	07/25/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/26/2023	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	07/26/2023	ND	197	98.5	200	0.542	
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	209	104	200	2.26	
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/25/2023	Sampling Date:	07/25/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 13 @ 3' (H233880-18)

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	07/25/2023	ND	2.16	108	2.00	1.17	
Toluene*	<0.050	0.050	07/25/2023	ND	2.12	106	2.00	1.49	
Ethylbenzene*	<0.050	0.050	07/25/2023	ND	2.06	103	2.00	1.19	
Total Xylenes*	<0.150	0.150	07/25/2023	ND	6.23	104	6.00	2.24	
Total BTEX	<0.300	0.300	07/25/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 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	07/26/2023	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	07/26/2023	ND	197	98.5	200	0.542	
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	209	104	200	2.26	
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/25/2023	Sampling Date:	07/25/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 14 @ 3' (H233880-19)

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	07/25/2023	ND	2.16	108	2.00	1.17	
Toluene*	<0.050	0.050	07/25/2023	ND	2.12	106	2.00	1.49	
Ethylbenzene*	<0.050	0.050	07/25/2023	ND	2.06	103	2.00	1.19	
Total Xylenes*	<0.150	0.150	07/25/2023	ND	6.23	104	6.00	2.24	
Total BTEX	<0.300	0.300	07/25/2023	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	112	16.0	07/26/2023	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	07/26/2023	ND	197	98.5	200	0.542	
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	209	104	200	2.26	
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 131 % 48.2-134

Surrogate: 1-Chlorooctadecane 144 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/25/2023	Sampling Date:	07/25/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 15 @ 2.5' (H233880-20)

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	07/25/2023	ND	2.16	108	2.00	1.17	
Toluene*	<0.050	0.050	07/25/2023	ND	2.12	106	2.00	1.49	
Ethylbenzene*	<0.050	0.050	07/25/2023	ND	2.06	103	2.00	1.19	
Total Xylenes*	<0.150	0.150	07/25/2023	ND	6.23	104	6.00	2.24	
Total BTEX	<0.300	0.300	07/25/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/26/2023	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	07/26/2023	ND	195	97.4	200	0.190	
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	213	107	200	1.66	
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 129 % 48.2-134

Surrogate: 1-Chlorooctadecane 144 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/25/2023	Sampling Date:	07/25/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: SW 07 @ 0-2.5' (H233880-21)

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	07/25/2023	ND	2.16	108	2.00	1.17	
Toluene*	<0.050	0.050	07/25/2023	ND	2.12	106	2.00	1.49	
Ethylbenzene*	<0.050	0.050	07/25/2023	ND	2.06	103	2.00	1.19	
Total Xylenes*	<0.150	0.150	07/25/2023	ND	6.23	104	6.00	2.24	
Total BTEX	<0.300	0.300	07/25/2023	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	16.0	16.0	07/26/2023	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	07/26/2023	ND	195	97.4	200	0.190	
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	213	107	200	1.66	
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 127 % 48.2-134

Surrogate: 1-Chlorooctadecane 141 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Cardinal, LLC
 Project Manager: Aimee Jole
 Address: 8122 Nat'l Parks Hwy
 City: Portland State: OR zip: 97220
 Phone #: 720-384-7265 Fax #: _____
 Project #: 0802057078 Project Owner: Mauerich
 Project Name: SEMU 24
 Project Location: 32, 5571687, -1034871844
 Sampler Name: Julianne Falconero
 P.O. #: _____ Company: A.A.
 Attn: _____ Address: _____
 City: _____ State: _____ Zip: _____
 Phone #: _____ Fax #: _____

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	ANALYSIS							
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :										
<u>H233880</u>	<u>FS17 FS16 @ 2.5'</u>	<u>0</u>	<u>1</u>			<u>X</u>				<u>7/25/23</u>	<u>1320</u>	<u>BTEX</u>	<u>X</u>						
	<u>FS18 @ 2.5'</u>										<u>1330</u>	<u>TPH</u>	<u>X</u>						
	<u>FS19 @ 2.5'</u>										<u>1335</u>	<u>Chlorides</u>	<u>X</u>						
	<u>SU001 @ 0-6.5'</u>										<u>1340</u>								
	<u>SU002 @ 0-6.5'</u>										<u>1345</u>								
	<u>SU003 @ 0-8'</u>										<u>1350</u>								
	<u>SU004 @ 0-8'</u>										<u>1355</u>								
	<u>SU005 @ 0-8'</u>										<u>1400</u>								
	<u>SU006 @ 0-8'</u>										<u>1405</u>								

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 analysis. 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 on any of the above stated reasons or otherwise.

Relinquished By: [Signature] Date: 7-25-23
 Time: 1518
 Received By: [Signature]
 Date: _____ Time: _____

Delivered By: (Circle One) UPS Observed Temp. °C 4.5 Sample Condition Cool Intact
 Corrected Temp. °C _____
 Checked By: [Signature]
 Turnaround Time: NAPP2319257881
 Thermometer ID: 4443 Rush 24hr
 Correction Factor: 0.6°C
 Bacteria (only) Sample Condition Cool Intact
 Observed Temp. °C _____ Corrected Temp. °C _____

Verbal Result: Yes No Add'l Phone #: _____
 All Results are emailed. Please provide Email address: mol@cardinal.com
 REMARKS: falconerata@cardinal.com

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



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Medlum LLC		P.O. #:		BILL TO		ANALYSIS REQUEST			
Project Manager: Aimee Cole		Address: 6122 Nat'l Parks Hwy		Company: A.C.					
City: Lordsburg		State: NM Zip: 88220		Attn:					
Phone #: 720-384-7805		Fax #:		Address:					
Project #: D8D2057078		Project Owner: Maverick		City:					
Project Name: SEMD 34		State:		Zip:					
Project Location: 82.5571687, -108.1877844		Phone #:		Fax #:					
Sampler Name: Julianne Faldornata		FOR LAB USE ONLY							
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV.	SAMPLING	DATE	TIME	ANALYSIS
H2335884	F501 @ .5'	Q	1	SOIL	X	X	7/5/23	1235	BTEX
	F502 @ .5'	Q	1	SOIL	X	X		1240	TPH
	F508 @ 3'	Q	1	SOIL	X	X		1245	Chlorides
	F509 @ 3'	Q	1	SOIL	X	X		1256	
	F510 @ 3'	Q	1	SOIL	X	X		1255	
	F511 @ 3'	Q	1	SOIL	X	X		1300	
	F512 @ 3'	Q	1	SOIL	X	X		1305	
	F513 @ 3'	Q	1	SOIL	X	X		1310	
	F514 @ 2.5'	Q	1	SOIL	X	X		1315	

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 in connection with the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the a. v. stated reasons or otherwise.

Relinquished By: *[Signature]* Date: **7-25-23** Received By: *[Signature]* Date: **7-25-23**

Delivered By: (Circle One) UPS - Bus - Other: Observed Temp. °C **41.5** Corrected Temp. °C **41.5**

Sample Condition: Cool Intact Yes No

Checked By: *[Signature]* (Initials) **AE**

Turnaround Time: **NAPP2314257831** Standard Bacteria (only) Sample Condition Cool Intact Yes No

Thermometer ID # **41991** Correction Factor **0.0**

Remarks: **NOTE @ medlum.com . faldornata@ensolum.com**

Verbal Result: Yes No Add'l Phone #:

All Results are emailed. Please provide Email address:



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

July 27, 2023

AIMEE COLE

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: SEMU 34

Enclosed are the results of analyses for samples received by the laboratory on 07/26/23 14:00.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/26/2023	Sampling Date:	07/26/2023
Reported:	07/27/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 03 @ 6.5' (H233909-01)

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	07/27/2023	ND	1.95	97.7	2.00	4.75	
Toluene*	<0.050	0.050	07/27/2023	ND	1.88	93.9	2.00	5.79	
Ethylbenzene*	<0.050	0.050	07/27/2023	ND	1.96	98.2	2.00	4.83	
Total Xylenes*	<0.150	0.150	07/27/2023	ND	5.88	98.0	6.00	5.18	
Total BTEX	<0.300	0.300	07/27/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 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	624	16.0	07/26/2023	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/26/2023	ND	197	98.5	200	0.542	
DRO >C10-C28*	494	10.0	07/26/2023	ND	209	104	200	2.26	
EXT DRO >C28-C36	119	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 130 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/26/2023	Sampling Date:	07/26/2023
Reported:	07/27/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 04 @ 6.5' (H233909-02)

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	07/26/2023	ND	1.95	97.7	2.00	4.75	
Toluene*	<0.050	0.050	07/26/2023	ND	1.88	93.9	2.00	5.79	
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	1.96	98.2	2.00	4.83	
Total Xylenes*	<0.150	0.150	07/26/2023	ND	5.88	98.0	6.00	5.18	
Total BTEX	<0.300	0.300	07/26/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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	576	16.0	07/26/2023	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/26/2023	ND	197	98.5	200	0.542	
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	209	104	200	2.26	
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 91.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/26/2023	Sampling Date:	07/26/2023
Reported:	07/27/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 05 @ 6.5' (H233909-03)

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	07/26/2023	ND	1.95	97.7	2.00	4.75	
Toluene*	<0.050	0.050	07/26/2023	ND	1.88	93.9	2.00	5.79	
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	1.96	98.2	2.00	4.83	
Total Xylenes*	<0.150	0.150	07/26/2023	ND	5.88	98.0	6.00	5.18	
Total BTEX	<0.300	0.300	07/26/2023	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	1220	16.0	07/26/2023	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/26/2023	ND	195	97.4	200	0.190	
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	213	107	200	1.66	
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 97.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/26/2023	Sampling Date:	07/26/2023
Reported:	07/27/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 06 @ 6.5' (H233909-04)

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	07/26/2023	ND	1.95	97.7	2.00	4.75	
Toluene*	<0.050	0.050	07/26/2023	ND	1.88	93.9	2.00	5.79	
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	1.96	98.2	2.00	4.83	
Total Xylenes*	<0.150	0.150	07/26/2023	ND	5.88	98.0	6.00	5.18	
Total BTEX	<0.300	0.300	07/26/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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	592	16.0	07/26/2023	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/26/2023	ND	195	97.4	200	0.190	
DRO >C10-C28*	565	10.0	07/26/2023	ND	213	107	200	1.66	
EXT DRO >C28-C36	150	10.0	07/26/2023	ND					

Surrogate: 1-Chlorooctane 98.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/26/2023	Sampling Date:	07/26/2023
Reported:	07/27/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 07 @ 6.5' (H233909-05)

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	07/26/2023	ND	1.95	97.7	2.00	4.75		
Toluene*	<0.050	0.050	07/26/2023	ND	1.88	93.9	2.00	5.79		
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	1.96	98.2	2.00	4.83		
Total Xylenes*	<0.150	0.150	07/26/2023	ND	5.88	98.0	6.00	5.18		
Total BTEX	<0.300	0.300	07/26/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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	1150	16.0	07/26/2023	ND	400	100	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/26/2023	ND	195	97.4	200	0.190		
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	213	107	200	1.66		
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND						

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/26/2023	Sampling Date:	07/26/2023
Reported:	07/27/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 20 @ 1.5' (H233909-06)

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	07/26/2023	ND	2.08	104	2.00	2.15		
Toluene*	<0.050	0.050	07/26/2023	ND	2.03	101	2.00	3.18		
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	1.97	98.4	2.00	2.92		
Total Xylenes*	<0.150	0.150	07/26/2023	ND	5.92	98.6	6.00	3.08		
Total BTEX	<0.300	0.300	07/26/2023	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	07/26/2023	ND	400	100	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/26/2023	ND	195	97.4	200	0.190		
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	213	107	200	1.66		
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND						

Surrogate: 1-Chlorooctane 99.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

Cardinal Laboratories

* = Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/26/2023	Sampling Date:	07/26/2023
Reported:	07/27/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 21 @ 1.5' (H233909-07)

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	07/26/2023	ND	2.08	104	2.00	2.15		
Toluene*	<0.050	0.050	07/26/2023	ND	2.03	101	2.00	3.18		
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	1.97	98.4	2.00	2.92		
Total Xylenes*	<0.150	0.150	07/26/2023	ND	5.92	98.6	6.00	3.08		
Total BTEX	<0.300	0.300	07/26/2023	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/26/2023	ND	400	100	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/26/2023	ND	195	97.4	200	0.190		
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	213	107	200	1.66		
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND						

Surrogate: 1-Chlorooctane 97.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

Cardinal Laboratories

* = Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/26/2023	Sampling Date:	07/26/2023
Reported:	07/27/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 22 @ 1.5' (H233909-08)

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	07/26/2023	ND	2.08	104	2.00	2.15		
Toluene*	<0.050	0.050	07/26/2023	ND	2.03	101	2.00	3.18		
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	1.97	98.4	2.00	2.92		
Total Xylenes*	<0.150	0.150	07/26/2023	ND	5.92	98.6	6.00	3.08		
Total BTEX	<0.300	0.300	07/26/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	07/26/2023	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	07/26/2023	ND	195	97.4	200	0.190		
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	213	107	200	1.66		
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND						

Surrogate: 1-Chlorooctane 98.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/26/2023	Sampling Date:	07/26/2023
Reported:	07/27/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 23 @ 1.5' (H233909-09)

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	07/26/2023	ND	2.08	104	2.00	2.15		
Toluene*	<0.050	0.050	07/26/2023	ND	2.03	101	2.00	3.18		
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	1.97	98.4	2.00	2.92		
Total Xylenes*	<0.150	0.150	07/26/2023	ND	5.92	98.6	6.00	3.08		
Total BTEX	<0.300	0.300	07/26/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/26/2023	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	07/26/2023	ND	195	97.4	200	0.190		
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	213	107	200	1.66		
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND						

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 119 % 49.1-148

Cardinal Laboratories

* = Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/26/2023	Sampling Date:	07/26/2023
Reported:	07/27/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 24 @ 1.5' (H233909-10)

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	07/26/2023	ND	2.08	104	2.00	2.15		
Toluene*	<0.050	0.050	07/26/2023	ND	2.03	101	2.00	3.18		
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	1.97	98.4	2.00	2.92		
Total Xylenes*	<0.150	0.150	07/26/2023	ND	5.92	98.6	6.00	3.08		
Total BTEX	<0.300	0.300	07/26/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/26/2023	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	07/26/2023	ND	195	97.4	200	0.190		
DRO >C10-C28*	<10.0	10.0	07/26/2023	ND	213	107	200	1.66		
EXT DRO >C28-C36	<10.0	10.0	07/26/2023	ND						

Surrogate: 1-Chlorooctane 92.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.9 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/26/2023	Sampling Date:	07/26/2023
Reported:	07/27/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 25 @ 1.5' (H233909-11)

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	07/26/2023	ND	2.08	104	2.00	2.15	
Toluene*	<0.050	0.050	07/26/2023	ND	2.03	101	2.00	3.18	
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	1.97	98.4	2.00	2.92	
Total Xylenes*	<0.150	0.150	07/26/2023	ND	5.92	98.6	6.00	3.08	
Total BTEX	<0.300	0.300	07/26/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/26/2023	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	07/27/2023	ND	183	91.6	200	1.14	
DRO >C10-C28*	<10.0	10.0	07/27/2023	ND	180	90.1	200	3.41	
EXT DRO >C28-C36	<10.0	10.0	07/27/2023	ND					

Surrogate: 1-Chlorooctane 93.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/26/2023	Sampling Date:	07/26/2023
Reported:	07/27/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 26 @ 1.5' (H233909-12)

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	07/26/2023	ND	2.08	104	2.00	2.15		
Toluene*	<0.050	0.050	07/26/2023	ND	2.03	101	2.00	3.18		
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	1.97	98.4	2.00	2.92		
Total Xylenes*	<0.150	0.150	07/26/2023	ND	5.92	98.6	6.00	3.08		
Total BTEX	<0.300	0.300	07/26/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/26/2023	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	07/27/2023	ND	183	91.6	200	1.14		
DRO >C10-C28*	<10.0	10.0	07/27/2023	ND	180	90.1	200	3.41		
EXT DRO >C28-C36	<10.0	10.0	07/27/2023	ND						

Surrogate: 1-Chlorooctane 95.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/26/2023	Sampling Date:	07/26/2023
Reported:	07/27/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 27 @ 1.5' (H233909-13)

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	07/26/2023	ND	2.08	104	2.00	2.15	
Toluene*	<0.050	0.050	07/26/2023	ND	2.03	101	2.00	3.18	
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	1.97	98.4	2.00	2.92	
Total Xylenes*	<0.150	0.150	07/26/2023	ND	5.92	98.6	6.00	3.08	
Total BTEX	<0.300	0.300	07/26/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/26/2023	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	07/27/2023	ND	183	91.6	200	1.14	
DRO >C10-C28*	<10.0	10.0	07/27/2023	ND	180	90.1	200	3.41	
EXT DRO >C28-C36	<10.0	10.0	07/27/2023	ND					

Surrogate: 1-Chlorooctane 94.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/26/2023	Sampling Date:	07/26/2023
Reported:	07/27/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: FS 28 @ 1.5' (H233909-14)

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	07/26/2023	ND	2.08	104	2.00	2.15		
Toluene*	<0.050	0.050	07/26/2023	ND	2.03	101	2.00	3.18		
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	1.97	98.4	2.00	2.92		
Total Xylenes*	<0.150	0.150	07/26/2023	ND	5.92	98.6	6.00	3.08		
Total BTEX	<0.300	0.300	07/26/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/26/2023	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	07/27/2023	ND	183	91.6	200	1.14		
DRO >C10-C28*	<10.0	10.0	07/27/2023	ND	180	90.1	200	3.41		
EXT DRO >C28-C36	<10.0	10.0	07/27/2023	ND						

Surrogate: 1-Chlorooctane 94.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/26/2023	Sampling Date:	07/26/2023
Reported:	07/27/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: SW 08 @ 0-1.5' (H233909-15)

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	07/26/2023	ND	2.08	104	2.00	2.15	
Toluene*	<0.050	0.050	07/26/2023	ND	2.03	101	2.00	3.18	
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	1.97	98.4	2.00	2.92	
Total Xylenes*	<0.150	0.150	07/26/2023	ND	5.92	98.6	6.00	3.08	
Total BTEX	<0.300	0.300	07/26/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/26/2023	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	07/27/2023	ND	183	91.6	200	1.14	
DRO >C10-C28*	<10.0	10.0	07/27/2023	ND	180	90.1	200	3.41	
EXT DRO >C28-C36	<10.0	10.0	07/27/2023	ND					

Surrogate: 1-Chlorooctane 96.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/26/2023	Sampling Date:	07/26/2023
Reported:	07/27/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: SW 09 @ 0-1.5' (H233909-16)

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	07/26/2023	ND	2.08	104	2.00	2.15	
Toluene*	<0.050	0.050	07/26/2023	ND	2.03	101	2.00	3.18	
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	1.97	98.4	2.00	2.92	
Total Xylenes*	<0.150	0.150	07/26/2023	ND	5.92	98.6	6.00	3.08	
Total BTEX	<0.300	0.300	07/26/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/26/2023	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	07/27/2023	ND	183	91.6	200	1.14	
DRO >C10-C28*	<10.0	10.0	07/27/2023	ND	180	90.1	200	3.41	
EXT DRO >C28-C36	<10.0	10.0	07/27/2023	ND					

Surrogate: 1-Chlorooctane 95.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

Cardinal Laboratories

* = Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/26/2023	Sampling Date:	07/26/2023
Reported:	07/27/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: SW 10 @ 0-1.5' (H233909-17)

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	07/26/2023	ND	2.08	104	2.00	2.15	
Toluene*	<0.050	0.050	07/26/2023	ND	2.03	101	2.00	3.18	
Ethylbenzene*	<0.050	0.050	07/26/2023	ND	1.97	98.4	2.00	2.92	
Total Xylenes*	<0.150	0.150	07/26/2023	ND	5.92	98.6	6.00	3.08	
Total BTEX	<0.300	0.300	07/26/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/26/2023	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	07/27/2023	ND	183	91.6	200	1.14	
DRO >C10-C28*	<10.0	10.0	07/27/2023	ND	180	90.1	200	3.41	
EXT DRO >C28-C36	<10.0	10.0	07/27/2023	ND					

Surrogate: 1-Chlorooctane 90.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.0 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- 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

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

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS'S REQUEST

Company Name: **CRISOLUM, LLC**
(575) 393-2326 FAX (575) 393-2476

Project Manager: **Aimee Cole**
Address: **612 Nat'l Parks Hwy**
City: **Carlsbad** State: **NM** Zip: **88220**

Phone #: **505-884-7805** Fax #: **505-884-7805**

Project #: **D82557D79** Project Owner: **Maverick**

Project Name: **SEMID84**

Project Location: **82.571057-102.877344**

Sampler Name: **MARINA SOLORZANO**

FOR LAB USE ONLY

Lab I.D. **H233909**

Sample I.D.

USE NOTE: Liability and Damages, Cardinal's facility 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 services. 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.

Acquired By: **[Signature]**

Date: **7-26-23**

Time: **1400**

Received By: **[Signature]**

Date: **7-26-23**

Time: **1400**

BILL TO

P.O. #: **P.A**

Company: **P.A**

Attn: **[Blank]**

Address: **[Blank]**

City: **[Blank]**

State: **[Blank]**

Zip: **[Blank]**

Phone #: **[Blank]**

Fax #: **[Blank]**

Matrix: **GROUNDWATER**

Matrix: **WASTEWATER**

Matrix: **SOIL**

Matrix: **OIL**

Matrix: **SLUDGE**

Matrix: **OTHER:**

ANALYSIS REQUEST

DATE: **7/26/23**

TIME: **1030**

Verbal Result: Yes No

Add'l Phone #:

Remarks: **WAPR314257831**

Turnaround Time: **4hr**

Thermometer ID #44

Correction Factor 44

Standard **Rush**

Bacteria (only)

Cool Intact

Sample Condition

Observed Temp. °C **44**

Corrected Temp. °C **44**

Sample Condition

Observed Temp. °C **44**

Corrected Temp. °C **44**

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



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Carsochem, LLC
 Project Manager: Time
 Address: 5129 Nat'l Parks Hwy
 City: Carlsbad State: NM Zip: 88220
 Phone #: 720-364-7805 Fax #:
 Project #: BDD057078 Project Owner: Mauerick
 Project Name: SEMUD 84
 Project Location: 2.5511087 - 108.1871844
 Sampler Name: Julianne Palomata

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

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	ANALYSIS
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :			
<u>H233909</u>	<u>FS26</u>	<input checked="" type="checkbox"/>	<u>1</u>			<input checked="" type="checkbox"/>				<u>7/20/23</u>	<u>1120</u>	<u>BTEX</u>
	<u>FS27</u>	<input checked="" type="checkbox"/>	<u>1</u>			<input checked="" type="checkbox"/>				<u>7/20/23</u>	<u>1125</u>	<u>TPH</u>
	<u>FS28</u>	<input checked="" type="checkbox"/>	<u>1</u>			<input checked="" type="checkbox"/>				<u>7/20/23</u>	<u>1130</u>	<u>Phlorides</u>
	<u>SUD08</u>	<input checked="" type="checkbox"/>	<u>1</u>			<input checked="" type="checkbox"/>				<u>7/20/23</u>	<u>1135</u>	
	<u>SUD09</u>	<input checked="" type="checkbox"/>	<u>1</u>			<input checked="" type="checkbox"/>				<u>7/20/23</u>	<u>1140</u>	
	<u>SUD10</u>	<input checked="" type="checkbox"/>	<u>1</u>			<input checked="" type="checkbox"/>				<u>7/20/23</u>	<u>1145</u>	
	<u>SUD11</u>	<input checked="" type="checkbox"/>	<u>1</u>			<input checked="" type="checkbox"/>				<u>7/20/23</u>	<u>1150</u>	

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: [Signature]
 Date: 7-26-23
 Time: 1400

Received By: [Signature]
 Date: 7-26-23
 Time: 1400

Remarks: Palomata@carsochem.com
WAPP314257831
 Turnaround Time: Standard
 Thermometer ID # 1428
 Correction Factor 0.5°C

Delivered By: (Circle One) UPS
 Observed Temp. °C 11.4
 Corrected Temp. °C
 Sample Condition: Cool Intact
 Checked By: [Signature]
 Bacteria (only)
 Cool Intact
 Sample Condition
 Observed Temp. °C
 Corrected Temp. °C



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

July 31, 2023

AIMEE COLE

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: SEMU 34

Enclosed are the results of analyses for samples received by the laboratory on 07/28/23 12:00.

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 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
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/28/2023	Sampling Date:	07/28/2023
Reported:	07/31/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Shari Cisneros
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: SS 01 @ .5' (H233979-01)

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	07/28/2023	ND	2.10	105	2.00	1.13	
Toluene*	<0.050	0.050	07/28/2023	ND	2.03	101	2.00	3.02	
Ethylbenzene*	<0.050	0.050	07/28/2023	ND	1.97	98.5	2.00	1.83	
Total Xylenes*	<0.150	0.150	07/28/2023	ND	5.91	98.5	6.00	3.16	
Total BTEX	<0.300	0.300	07/28/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.1 % 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	07/28/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/29/2023	ND	184	92.2	200	3.25	
DRO >C10-C28*	<10.0	10.0	07/29/2023	ND	188	94.2	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	07/29/2023	ND					

Surrogate: 1-Chlorooctane 90.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.6 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/28/2023	Sampling Date:	07/28/2023
Reported:	07/31/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Shari Cisneros
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: SS 02 @ .5' (H233979-02)

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	07/28/2023	ND	2.10	105	2.00	1.13	
Toluene*	<0.050	0.050	07/28/2023	ND	2.03	101	2.00	3.02	
Ethylbenzene*	<0.050	0.050	07/28/2023	ND	1.97	98.5	2.00	1.83	
Total Xylenes*	<0.150	0.150	07/28/2023	ND	5.91	98.5	6.00	3.16	
Total BTEX	<0.300	0.300	07/28/2023	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	16.0	16.0	07/28/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/29/2023	ND	184	92.2	200	3.25	
DRO >C10-C28*	<10.0	10.0	07/29/2023	ND	188	94.2	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	07/29/2023	ND					

Surrogate: 1-Chlorooctane 91.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.6 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/28/2023	Sampling Date:	07/28/2023
Reported:	07/31/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Shari Cisneros
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: SS 03 @ .5' (H233979-03)

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	07/28/2023	ND	2.10	105	2.00	1.13	
Toluene*	<0.050	0.050	07/28/2023	ND	2.03	101	2.00	3.02	
Ethylbenzene*	<0.050	0.050	07/28/2023	ND	1.97	98.5	2.00	1.83	
Total Xylenes*	<0.150	0.150	07/28/2023	ND	5.91	98.5	6.00	3.16	
Total BTEX	<0.300	0.300	07/28/2023	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	16.0	16.0	07/28/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/29/2023	ND	184	92.2	200	3.25	
DRO >C10-C28*	<10.0	10.0	07/29/2023	ND	188	94.2	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	07/29/2023	ND					

Surrogate: 1-Chlorooctane 86.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.9 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	07/28/2023	Sampling Date:	07/28/2023
Reported:	07/31/2023	Sampling Type:	Soil
Project Name:	SEMU 34	Sampling Condition:	Cool & Intact
Project Number:	03D2057078	Sample Received By:	Shari Cisneros
Project Location:	MAVERICK (32.5071687-103.1877344)		

Sample ID: SS 04 @ .5' (H233979-04)

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	07/28/2023	ND	2.10	105	2.00	1.13	
Toluene*	<0.050	0.050	07/28/2023	ND	2.03	101	2.00	3.02	
Ethylbenzene*	<0.050	0.050	07/28/2023	ND	1.97	98.5	2.00	1.83	
Total Xylenes*	<0.150	0.150	07/28/2023	ND	5.91	98.5	6.00	3.16	
Total BTEX	<0.300	0.300	07/28/2023	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	<16.0	16.0	07/28/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/29/2023	ND	184	92.2	200	3.25	
DRO >C10-C28*	<10.0	10.0	07/29/2023	ND	188	94.2	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	07/29/2023	ND					

Surrogate: 1-Chlorooctane 91.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.8 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: PROSOMM LLC Project Manager: Jim Hill		P.O. #: Company: AA				
Address: 2022 Nati Parks Hwy City: Artespool State: NM Zip: 88020		Attn: Address: City: State: Zip:				
Phone #: 505-210-5407 Fax #: 505-210-5407		Project Owner: Mueserlek				
Project Name: SPMD 21		Project Location: 192-55716-105, KTTB(4)				
Sampler Name: Palomata		Project Location: Palomata				
FOR LAB USE ONLY						
Lab I.D. H233979 Sample I.D.	5501 @ .5'	(G)RAB OR (C)OMP.	DATE TIME	ANALYSIS REQUEST		
	5502 @ .5'	# CONTAINERS			MATRIX GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER :	
	5506 @ .5'	SOIL				PRESERV ACID/BASE: ICE / COOL OTHER :
	5504 @ .5'	OIL				
RECEIVED BY: Shou Lianes Date: 7/28/23 Time: 12:00		CHECKED BY: RE (Initials)				
Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #:		All Results are emailed. Please provide Email address:				
REMARKS: 505-210-5407, palomata@prosomml.com		Turaround Time: 4 hrs Standard <input type="checkbox"/> Rush <input checked="" type="checkbox"/>		Bacteria (only) Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Corrected Temp. °C		



APPENDIX D

NMOCD Notifications

From: [Aimee Cole](#)
To: ocd.enviro@state.nm.us
Cc: [Kalei Jennings](#)
Subject: Maverick - Sampling Notification (Week of 7/24/2023)
Date: Wednesday, July 19, 2023 1:45:00 PM
Attachments: [image005.png](#)
[image006.png](#)
[image007.png](#)
[image008.png](#)

All,

Maverick Permian, LLC plans to complete sampling activities at the following sites the week of July 24, 2023.

- SEMU 34 / NAPP2314257831
 - Sampling Dates: 7/24/2023 - 7/26/2023

- Cone Jalmat South Satellite Header / NAPP2301881992
 - Sampling Dates: 7/25/2023 - 7/27/2023

- SC Federal Battery / NAPP2303272686
 - Sampling Date: 7/26/2023

Thank you,



Aimee Cole
Senior Managing Scientist
720-384-7365
Ensolum, LLC
in f 

From: [Enviro, OCD, EMNRD](#)
To: [Kalei Jennings](#)
Cc: [Bratcher, Michael, EMNRD](#); [Velez, Nelson, EMNRD](#)
Subject: RE: [EXTERNAL] Maverick- Sampling Notification (Week of 7/17/2023)
Date: Friday, July 14, 2023 7:42:46 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: Thursday, July 13, 2023 2:05 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Aimee Cole <acole@ensolum.com>
Subject: [EXTERNAL] Maverick- Sampling Notification (Week of 7/17/2023)

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 17, 2023.

- MCA 204 / NAPP2311751602
 - Sampling Date: 7/17/2023 through 07/19/2023

- State F TG #001 / NAPP2233947938
 - Sampling Date: 7/17/2023 & 7/18/2023
- MCA 409 Flowline / NAPP2318846991
 - Sampling Date: 7/17/2023
- SEMU 34 / NAPP2314257831
 - Sampling Date: 7/19/2023 & 7/20/2023

Thank you,



Kalei Jennings

Senior Scientist

817-683-2503

Ensolum, LLC





APPENDIX E

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	NAPP2314257831
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) NAPP2314257831
Contact mailing address: 1410 NW County Road Hobbs, NM 88240	

Location of Release Source

Latitude 32.5571687 Longitude -103.1877344
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: SEMU 34	Site Type: Flow line - Pasture
Date Release Discovered: 05/03/23	API# (if applicable): 30-025-07820

Unit Letter	Section	Township	Range	County
J	19	20S	38E	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) 1.89 bbls	Volume Recovered (bbls) 0 bbls
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 12.88 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 internal corrosion on a surface steel line. The release occurred off pad. The source of the release has been stopped and the impacted area has been secured. Initial response and removal of saturated soil from the release area has been completed.

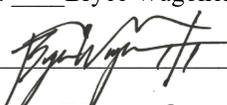
State of New Mexico
Oil Conservation Division

Incident ID	NAPP2314257831
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> 05/17/2023 </u> email: <u> Bryce.Wagoner@mavresources.com </u> Telephone: <u> 928-241-1862 </u>
<u>OCD Only</u> Received by: _____ Date: _____

NAPP2314257831

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 (ft ²)	Estimated Average Depth (ft.)	Pooled Volume (bbl.)	Volume of Oil in Subsurface (bbl.)	Volume of Water in Subsurface (bbl.)
Rectangle A						0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle B						0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle C						0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle D						0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle E						0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Total Volume (bbls):								0.00	0.00	0.00

Subsurface Fluids										
	Length (ft.)	Width (ft.)	Depth (in.)	Saturation (%) <i>*10% in consolidated sediments after rain to 50% in sand with no precipitation</i>	Oil-Water Ratio (%)	Area (ft ²)	Volume (bbl.)	Estimated Volume in Subsurface (bbl.)	Volume of Oil in Subsurface (bbl.)	Volume of Water in Subsurface (bbl.)
Rectangle A	135.0	35.0	2.0	0.1	0.01	4725.0	140.2	11.2	0.11	11.1
Rectangle B	60.0	25.0	2.0	0.1	0.50	1500.0	44.5	3.6	1.78	1.8
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):								14.77	1.89	12.88

TOTAL RELEASE VOLUME (bbls):	14.8
-------------------------------------	-------------

Incident ID	NAPP2314257831
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	51-100 (ft bgs)
Did this release impact groundwater or surface water?	<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 not 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: <i>Each of the following items must be included in the report.</i>
<input checked="" type="checkbox"/> Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
<input checked="" type="checkbox"/> Field data
<input checked="" type="checkbox"/> Data table of soil contaminant concentration data
<input checked="" type="checkbox"/> Depth to water determination
<input checked="" type="checkbox"/> Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release
<input checked="" type="checkbox"/> Boring or excavation logs
<input checked="" type="checkbox"/> Photographs including date and GIS information
<input checked="" type="checkbox"/> Topographic/Aerial maps
<input checked="" type="checkbox"/> Laboratory data including chain of custody

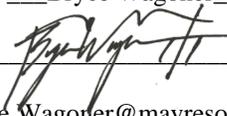
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, 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	NAPP2314257831
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: 8/1/2023

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

OCD Only

Received by: Shelly Wells Date: 8/2/2023

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2314257831
District RP	
Facility ID	
Application ID	

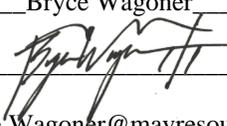
Closure

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: 8/1/2023
 email: Bryce.Wagoner@mavresources.com Telephone: 928-241-1862

OCD Only

Received by: Shelly Wells Date: 8/2/2023

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: _____ Date: _____

Printed Name: _____ Title: _____

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 246799

CONDITIONS

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 246799
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvez	None	10/30/2023