



August 10, 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  
MCA 204  
Incident Number NAPP2311751602  
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 MCA 204 (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 NAPP2311751602.

**SITE DESCRIPTION AND RELEASE SUMMARY**

The Site is located in Unit O, Section 27, Township 17 South, Range 32 East, in Lea County, New Mexico (32.8001257° N, -103.7520913° W) and is associated with oil and gas exploration and production operations on Federal Land managed by Bureau of Land Management (BLM).

On April 20, 2023, a leak developed in the stuffing box and resulted in the release of approximately 5 barrels (bbls) of crude oil and 10 bbls of produced water onto the surface of the well pad and lease road. 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 1, 2023. The release was assigned Incident Number NAPP2311751602.

**SITE CHARACTERIZATION AND CLOSURE CRITERIA**

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

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well RA-12721 POD 5, located

approximately 3,850 feet west of the Site. The groundwater well has a reported depth to groundwater of 124 feet bgs. 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 is greater than 300 feet from 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: 20,000 mg/kg

A reclamation requirement of 600 mg/kg chloride and 100 mg/kg TPH was applied to the top 4 feet of the off-pad 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

On May 4, 2023, site assessment and delineation activities were conducted at the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. Six assessment soil samples (SW1 through SW6) were collected around the visible release extent at a depth of 0.5 feet bgs to confirm the lateral extent of the release. Four soil borings (S1 through S4) were advanced within the release extent to assess the vertical extent of the release. Discrete delineation soil samples were collected from soil borings S1 through S4 at depths ranging from 1-foot to 5 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 Envirotech Inc. Laboratory 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 300.0.

Laboratory analytical results for assessment soil samples SW1 through SW6, collected around the release extent, indicated that all COC concentrations were compliant with the most stringent Table I Closure Criteria and defined the lateral extent of the release. Laboratory analytical results for the delineation soil samples collected within the release extent from soil borings S1 through S4 indicated that TPH concentrations exceeded the most stringent Table I Closure Criteria at depths ranging from 1-foot to 4 feet bgs. All terminal depth delineation soil samples were compliant with the most stringent

Table I Closure Criteria and defined the vertical extent of the release. Laboratory analytical results are summarized on Table 1 and the complete laboratory analytical reports are included as Appendix C. 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 10, 2023 and July 21, 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 1.5 feet to 4.5 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 FS29, FS01A through FS03A, FS09A, FS14A, FS26A, FS27A, and FS29A were collected from the floor of the excavation at depths ranging from 1.5 feet to 4.5 feet bgs. Composite soil samples SW01 through SW13, SW01A, and SW12A were collected from the sidewalls of the excavation at depths ranging from the ground surface to 4 feet bgs. The excavation soil samples were submitted to Cardinal Laboratories 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 FS01A through FS03A, FS04 through FS08, FS09A, FS10 through FS13, FS14A, FS15 through FS25, FS26A, FS27A, FS28, and FS29A and excavation sidewall samples SW01A, SW02 through SW11, SW12A, and SW13 collected from the final excavation extent, indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria. Laboratory analytical results for excavation floor samples FS01 through FS03, FS09, FS14, FS26, FS27, and FS29 and excavation sidewall samples SW01 and SW12 initially exceeded the most stringent Table I Closure Criteria for TPH; additional soil was removed from these areas and subsequent excavation samples FS01A through FS03A, FS09A, FS14A, FS26A, FS27A, FS29A, SW01A and SW12A were compliant. Laboratory analytical results are summarized on Table 1 and the complete laboratory analytical reports are included as Appendix C.

The excavation measured approximately 4,500 square feet in areal extent. A total of approximately 410 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 April 20, 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 most stringent Table I Closure Criteria. Based on the laboratory analytical results, no further remediation is required. Maverick backfilled the excavation with material purchased locally and recontoured 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 greater than 100 feet bgs and no sensitive receptors were identified near the release extent.

Maverick Permian, LLC  
Closure Request  
MCA 204

Page 4

Maverick believes the remedial actions completed are protective of human health, the environment, and groundwater and respectfully requests closure for Incident NAPP2311751602. 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](mailto:acole@ensolum.com).

Sincerely,  
**Ensolum, LLC**



Julianna Falcomata  
Staff Geologist



Aimee Cole  
Senior Managing Scientist

cc: Bryce Wagoner, Maverick Natural Resources  
Bureau of Land Management

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

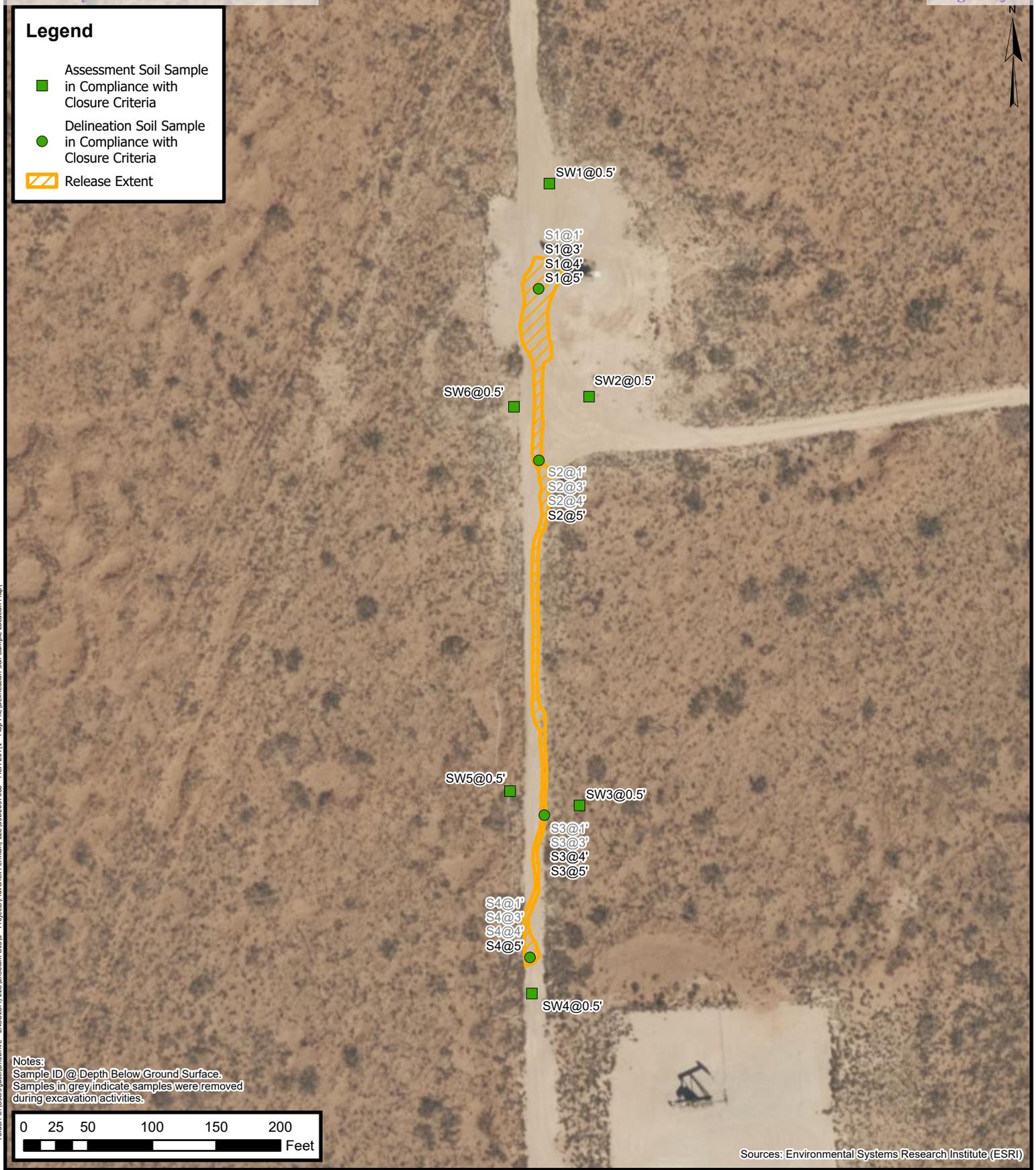


FIGURES



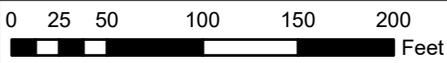
### Legend

- Assessment Soil Sample in Compliance with Closure Criteria
- Delineation Soil Sample in Compliance with Closure Criteria
- Release Extent



Folder: C:\Users\justin@ensolum.com\OneDrive - ENSOLUM, LLC\ENSOLUM GIS\0 - Projects\Maverick Permian, LLC\0302057088 - MCA 204\1 - Map File\Delineation Soil Sample Location Map

Notes:  
Sample ID @ Depth Below Ground Surface.  
Samples in grey indicate samples were removed during excavation activities.



Sources: Environmental Systems Research Institute (ESRI)



## Assessment and Delineation Soil Sample Locations

Maverick Permian, LLC  
MCA 204  
Incident Number: NAPP2311751602  
Unit O, Sec 27, T17S, R32E  
Lea County, New Mexico

# FIGURE 2

### Legend

- Excavation Floor Sample in Compliance with Closure Criteria
- Excavation Sidewall Sample in Compliance with Closure Criteria
- Excavation Extent



Notes:  
 Sample ID @ Depth Below Ground/Surface.  
 Samples in grey indicate samples were removed during excavation activities.



Sources: Environmental Systems Research Institute (ESRI)

## Excavation Soil Sample Locations

Maverick Permian, LLC  
 MCA 204  
 Incident Number: NAPP2311751602  
 Unit O, Sec 27, T17S, R32E  
 Lea County, New Mexico

### FIGURE

### 3





TABLES

<b>TABLE 1</b> <b>SOIL SAMPLE ANALYTICAL RESULTS</b> MCA 204 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)
<b>NMOCD Table 1 Closure Criteria (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>1,000</b>	<b>2,500</b>	<b>20,000</b>
<b>Assessment Soil Samples</b>										
SW1	5/4/2023	0.5	<0.0250	ND	ND	ND	ND	ND	ND	ND
SW2	5/4/2023	0.5	ND	ND	ND	ND	ND	ND	ND	ND
SW3	5/4/2023	0.5	ND	ND	ND	ND	ND	ND	ND	ND
SW4	5/4/2023	0.5	ND	ND	ND	ND	ND	ND	ND	ND
SW5	5/4/2023	0.5	ND	ND	ND	ND	ND	ND	ND	ND
SW6	5/4/2023	0.5	ND	ND	ND	ND	ND	ND	ND	ND
<b>Delineation Soil Samples</b>										
S1	5/4/2023	1	ND	0.99	ND	698	293	991	<b>991</b>	495
S1	5/4/2023	3	ND	ND	ND	ND	ND	ND	ND	272
S1	5/4/2023	4	ND	ND	ND	ND	ND	ND	ND	86.0
S1	5/4/2023	5	ND	2.15	ND	ND	ND	ND	ND	ND
S2	5/4/2023	1	ND	ND	36.9	950	370	1,320	<b>1,357</b>	ND
S2	5/4/2023	3	ND	ND	ND	ND	ND	ND	ND	ND
S2	5/4/2023	4	ND	ND	ND	110	51.4	161	<b>161</b>	24.8
S2	5/4/2023	5	ND	ND	ND	ND	ND	ND	ND	ND
S3	5/4/2023	1	ND	1.76	21.5	1,280	559	1,302	<b>1,861</b>	ND
S3	5/4/2023	3	ND	0.88	ND	1,220	ND	1,220	<b>1,220</b>	175
S3	5/4/2023	4	ND	ND	ND	ND	ND	ND	ND	73.7
S3	5/4/2023	5	ND	ND	ND	ND	ND	ND	ND	ND
S4	5/4/2023	1	ND	0.300	ND	53.7	98.9	53.7	<b>153</b>	ND
S4	5/4/2023	3	ND	ND	ND	ND	ND	ND	ND	ND
S4	5/4/2023	4	ND	ND	ND	111	51.5	111	<b>163</b>	ND
S4	5/4/2023	5	ND	ND	ND	ND	ND	ND	ND	ND

<b>TABLE 1</b> <b>SOIL SAMPLE ANALYTICAL RESULTS</b> MCA 204 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)
<b>NMOCD Table 1 Closure Criteria (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>1,000</b>	<b>2,500</b>	<b>20,000</b>
<b>Excavation Floor Soil Samples</b>										
FS01	7/10/2023	4	<0.050	<0.300	<10.0	62.1	62.4	62.1	125	256
FS01A	7/14/2023	4.5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	82.3
FS02	7/10/2023	3	<0.050	<0.300	<10.0	61.4	94.3	61.4	156	208
FS02A	7/14/2023	3.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	31.1
FS03	7/10/2023	1.5	<0.050	<0.300	<10.0	177	147	177	324	304
FS03A	7/14/2023	2	<0.00200	<0.00401	<50.2	<50.2	<50.2	<50.2	<50.2	43.6
FS04	7/12/2023	1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
FS05	7/11/2023	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
FS06	7/11/2023	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
FS07	7/11/2023	3	<0.050	<0.300	<10.0	16.6	<10.0	16.6	16.6	240
FS08	7/11/2023	3	<0.050	<0.300	<10.0	13.6	<10.0	13.6	13.6	256
FS09	7/11/2023	3	<0.050	<0.300	<10.0	75.9	29.3	75.9	105	192
FS09A	7/12/2023	3.25	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
FS10	7/11/2023	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
FS11	7/11/2023	3	<0.050	<0.300	<10.0	20.6	<10.0	20.6	20.6	192
FS12	7/11/2023	2	<0.050	<0.300	<10.0	15.4	<10.0	15.4	15.4	272
FS13	7/11/2023	2	<0.050	<0.300	<10.0	22.7	<10.0	22.7	22.7	256
FS14	7/11/2023	2	<0.050	<0.300	<10.0	86.4	25.6	86.4	112	208
FS14A	7/12/2023	3.25	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
FS15	7/11/2023	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
FS16	7/12/2023	2.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS17	7/12/2023	2.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS18	7/12/2023	2.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS19	7/14/2023	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
FS20	7/14/2023	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
FS21	7/14/2023	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
FS22	7/14/2023	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS23	7/17/2023	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	176

**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
MCA 204  
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)
<b>NMOCDC Table 1 Closure Criteria (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>1,000</b>	<b>2,500</b>	<b>20,000</b>
FS24	7/17/2023	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
FS25	7/17/2023	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
FS26	7/18/2023	3	<0.050	<0.300	<10.0	102	49.3	102	151	32.0
FS26A	7/19/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS27	7/18/2023	3	<0.050	<0.300	<10.0	89.7	65.7	89.7	155	16.0
FS27A	7/19/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
FS28	7/18/2023	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS29	7/18/2023	3	<0.050	<0.300	<10.0	136	77.1	136	213	16.0
FS29A	7/19/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
<b>Excavation Sidewall Soil Samples</b>										
SW01	7/10/2023	0-4	<0.050	<0.300	<10.0	177	216	177	393	208
SW01A	7/21/2023	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
SW02	7/11/2023	0-3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SW03	7/11/2023	0-3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SW04	7/11/2023	0-3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
SW05	7/11/2023	0-3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SW06	7/12/2023	0-2.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
SW07	7/14/2023	0-3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
SW08	7/14/2023	0-3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
SW09	7/17/2023	0-3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
SW10	7/17/2023	0-3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
SW11	7/17/2023	0-3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
SW12	7/18/2023	0-3	<0.050	<0.300	<10.0	78.6	67.7	78.6	146	<16.0
SW12A	7/19/2023	0-4	<0.050	<0.300	<10.0	136	77.1	136	<10.0	16.0
SW13	7/18/2023	0-3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0

**Notes:**

ND: non-detectable

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCDC: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

TPH: Total Petroleum Hydrocarbon

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

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

Grey text represents samples that have been excavated



## APPENDIX A

### Referenced Well Records

---



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) MW-10 <b>70DS</b>		WELL TAG ID NO.		OSE FILE NO(S). RA-12721	
	WELL OWNER NAME(S) ConocoPhillips Company				PHONE (OPTIONAL) 432-258-3451	
	WELL OWNER MAILING ADDRESS 901 W Wall St, Suite 100				CITY Midland	STATE TX
					ZIP 79701	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 48	SECONDS 5.56	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND
	LONGITUDE 103	45	53.23	W	* DATUM REQUIRED: WGS 84	
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE MCA 357						

2. DRILLING & CASING INFORMATION	LICENSE NO. WD-1456		NAME OF LICENSED DRILLER John W. White			NAME OF WELL DRILLING COMPANY White Drilling Company, Inc.		
	DRILLING STARTED 04/27/2020	DRILLING ENDED 04/28/2020	DEPTH OF COMPLETED WELL (FT) 130.0	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT) 124.25			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) 124.25		
	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)	SLOT SIZE (inches)
	FROM	TO						
	-2.7	90.0	6.0	Sch. 40 PVC	Threads	2.0	1/4"	
	90.0	130.0	6.0	Sch. 40 PVC	Threads	2.0	1/4"	.010

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				
	0.0	10.0	6.0	Type 2 Portland Cement w/5% Bentonite Grout	1.963	Pump Mix w/Tremie Pipe
	10.0	87.0	6.0	Bentonite Chips	22 Bags	Hand Mix
	87.0	130.0	6.0	20/40 Sand	16 Bags	Hand Mix

FOR OSE INTERNAL USE

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

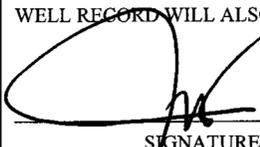
FILE NO. <b>RA-12721</b>	POD NO. <b>5</b>	TRN NO. <b>670406</b>
LOCATION <b>175.32E.28.442</b>	WELL TAG ID NO. _____	PAGE 1 OF 2

DEPTH (feet bgl)	THICKNESS (feet)		COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
	FROM	TO			
0.0	0.5	0.5	Caliche base	Y ✓ N	
0.5	2.0	1.5	Brown sand/sandstone	Y ✓ N	
2.0	3.0	1.0	Red/brown sand/sandstone	Y ✓ N	
3.0	17.0	14.0	Caliche	Y ✓ N	
17.0	28.0	11.0	Light brown sand/sandstone	Y ✓ N	
28.0	37.0	9.0	Red/brown sand/sandstone	Y ✓ N	
37.0	42.0	5.0	Light brown sand/sandstone	Y ✓ N	
42.0	49.0	7.0	Red/brown silty sandstone	Y ✓ N	
49.0	52.0	3.0	Gray sandstone	Y ✓ N	
52.0	60.0	8.0	Purple, gray and light brown layers of sandstone	Y ✓ N	
60.0	80.0	20.0	Purple/brown sandstone	Y ✓ N	
80.0	98.0	18.0	Brown and tan sandstone	Y ✓ N	
98.0	109.0	11.0	Light gray tan sandstone	Y ✓ N	
109.0	121.0	12.0	Green and brown mixes sandstone	✓ Y N	
121.0	125.0	4.0	Yellow, brown and gray silty sandstone	✓ Y N	
125.0	130.0	5.0	Green brown silty sandstone	✓ Y N	
				Y N	
				Y N	
				Y N	
				Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:				TOTAL ESTIMATED WELL YIELD (gpm): 0.00	

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION:	
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: William B. Atkins	

6. SIGNATURE	BY SIGNING BELOW, I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED WELL. I ALSO CERTIFY THAT THE WELL TAG, IF REQUIRED, HAS BEEN INSTALLED AND THAT THIS WELL RECORD WILL ALSO BE FILED WITH THE PERMIT HOLDER WITHIN 30 DAYS AFTER THE COMPLETION OF WELL DRILLING.	
	 _____ SIGNATURE OF DRILLER / PRINT SIGNEE NAME	05/11/2020 _____ DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/2019)

FILE NO. RA-12721	POD NO. 5	TRN NO. 670406
LOCATION	WELL TAG ID NO.	PAGE 2 OF 2



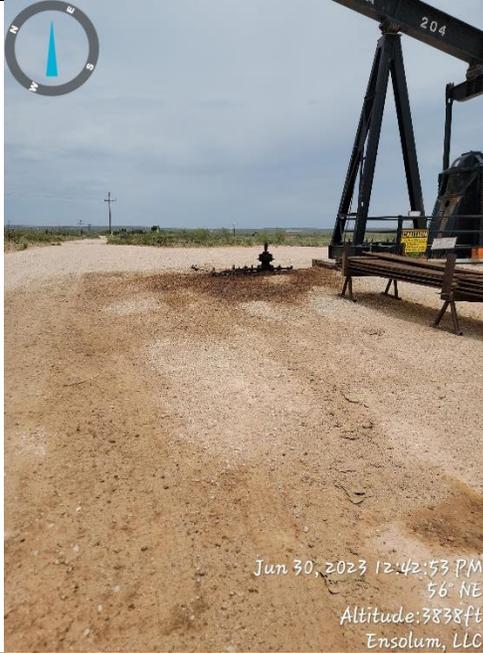
APPENDIX B

Photographic Log

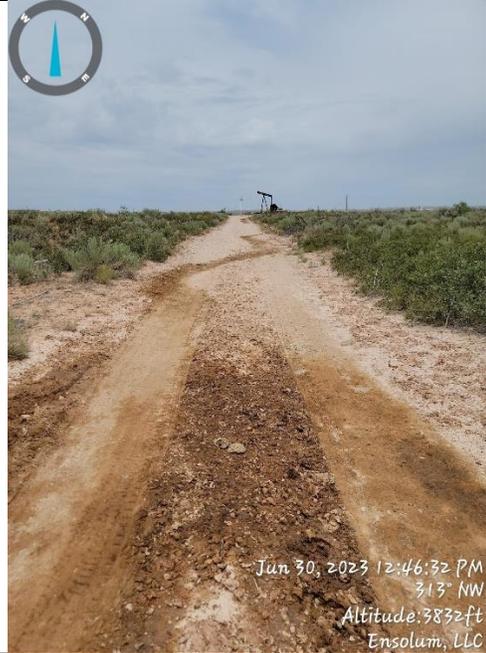
---



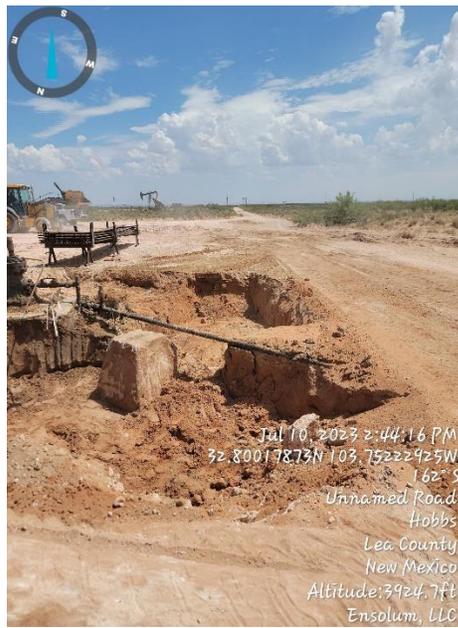
Photographic Log  
Maverick Permian, LLC  
MCA 204  
NAPP2311751602



Photograph 1 Date: 6/30/2023  
Description: Impacted soil from release  
View: Northwest



Photograph 2 Date: 6/30/2023  
Description: Impacted soil from release  
View: Northwest



Photograph 3 Date: 7/10/2023  
Description: Excavation activities  
View: Southeast



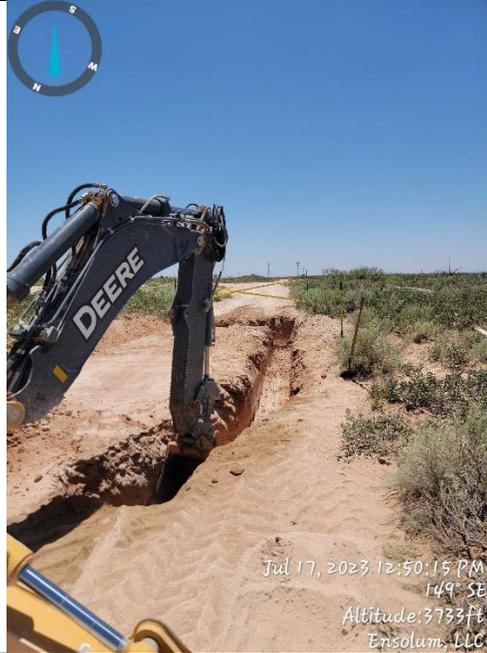
Photograph 4 Date: 7/14/2023  
Description: Excavation Activities  
View: South



Photographic Log  
Maverick Permian, LLC  
MCA 204  
NAPP2311751602



Jul 17, 2023 12:51:43 PM  
32.79858124N 103.75228913W  
350° N  
Unnamed Road  
Hobbs  
Lea County  
New Mexico  
Altitude: 3892.9ft  
Ensolum, LLC



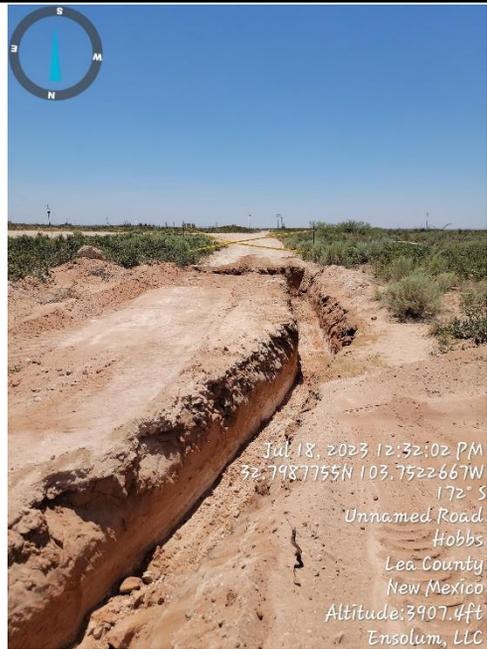
Jul 17, 2023 12:50:15 PM  
149° SE  
Altitude: 3733ft  
Ensolum, LLC

Photograph 1 Date: 7/17/2023  
Description: Excavation Activities  
View: Northwest

Photograph 2 Date: 7/17/2023  
Description: Excavation Activities  
View: Southeast



Jul 18, 2023 12:30:53 PM  
32.79927946N 103.7522614W  
164° S  
Unnamed Road  
Hobbs  
Lea County  
New Mexico  
Altitude: 3904.5ft  
Ensolum, LLC



Jul 18, 2023 12:32:02 PM  
32.7987755N 103.7522667W  
172° S  
Unnamed Road  
Hobbs  
Lea County  
New Mexico  
Altitude: 3907.4ft  
Ensolum, LLC

Photograph 3 Date: 7/18/2023  
Description: Completed excavation  
View: South

Photograph 4 Date: 7/18/2023  
Description: Completed excavation  
View: South



## APPENDIX C

### Laboratory Analytical Reports & Chain of Custody Documentation

---

Report to:  
Tom Bynum



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

### Pima Environmental Services-Carlsbad

Project Name: MCA 204

Work Order: E304214

Job Number: 21064-0001

Received: 4/28/2023

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
5/4/23

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.  
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.  
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.  
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.  
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 5/4/23



Tom Bynum  
PO Box 247  
Plains, TX 79355-0247

Project Name: MCA 204  
Workorder: E304214  
Date Received: 4/28/2023 8:45:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 4/28/2023 8:45:00AM, under the Project Name: MCA 204.

The analytical test results summarized in this report with the Project Name: MCA 204 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

**Walter Hinchman**  
Laboratory Director  
Office: 505-632-1881  
Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
Laboratory Administrator  
Office: 505-632-1881  
[rainaschwanz@envirotech-inc.com](mailto:rainaschwanz@envirotech-inc.com)

**Alexa Michaels**  
Sample Custody Officer  
Office: 505-632-1881  
[labadmin@envirotech-inc.com](mailto:labadmin@envirotech-inc.com)

Field Offices:

**Southern New Mexico Area**  
**Lynn Jarboe**  
Technical Representative/Client Services  
Office: 505-421-LABS(5227)  
Cell: 505-320-4759  
[ljjarboe@envirotech-inc.com](mailto:ljjarboe@envirotech-inc.com)

**West Texas Midland/Odessa Area**  
**Rayny Hagan**  
Technical Representative  
Office: 505-421-LABS(5227)

Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

# Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	5
Sample Data	6
S1 - 1'	6
S1 - 3'	7
S1 - 4'	8
S2 - 1'	9
S2 - 3'	10
S2 - 4'	11
S3 - 1'	12
S3 - 3'	13
S3 - 4'	14
S4 - 1'	15
S4 - 3'	16
S4 - 4'	17
SW1	18
SW2	19
SW3	20
SW4	21
SW5	22
SW6	23
S1 - 5'	24
S2 - 5'	25

## Table of Contents (continued)

S3 - 5'	26
S4 - 5'	27
QC Summary Data	28
QC - Volatile Organic Compounds by EPA 8260B	28
QC - Nonhalogenated Organics by EPA 8015D - GRO	30
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	32
QC - Anions by EPA 300.0/9056A	34
Definitions and Notes	36
Chain of Custody etc.	37

## Sample Summary

Pima Environmental Services-Carlsbad  
PO Box 247  
Plains TX, 79355-0247

Project Name: MCA 204  
Project Number: 21064-0001  
Project Manager: Tom Bynum

**Reported:**  
05/04/23 16:23

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
S1 - 1'	E304214-01A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.
S1 - 3'	E304214-02A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.
S1 - 4'	E304214-03A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.
S2 - 1'	E304214-04A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.
S2 - 3'	E304214-05A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.
S2 - 4'	E304214-06A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.
S3 - 1'	E304214-07A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.
S3 - 3'	E304214-08A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.
S3 - 4'	E304214-09A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.
S4 - 1'	E304214-10A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.
S4 - 3'	E304214-11A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.
S4 - 4'	E304214-12A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.
SW1	E304214-13A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.
SW2	E304214-14A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.
SW3	E304214-15A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.
SW4	E304214-16A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.
SW5	E304214-17A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.
SW6	E304214-18A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.
S1 - 5'	E304214-19A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.
S2 - 5'	E304214-20A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.
S3 - 5'	E304214-21A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.
S4 - 5'	E304214-22A	Soil	04/26/23	04/28/23	Glass Jar, 2 oz.



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

S1 - 1'

E304214-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Benzene	ND	0.0250	1	05/01/23	05/03/23	
Ethylbenzene	<b>0.164</b>	0.0250	1	05/01/23	05/03/23	
Toluene	ND	0.0250	1	05/01/23	05/03/23	
o-Xylene	<b>0.155</b>	0.0250	1	05/01/23	05/03/23	
p,m-Xylene	<b>0.258</b>	0.0500	1	05/01/23	05/03/23	
Total Xylenes	<b>0.413</b>	0.0250	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		108 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		110 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		98.7 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		108 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		110 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		98.7 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: KM		Batch: 2318001
Diesel Range Organics (C10-C28)	<b>698</b>	50.0	2	05/01/23	05/02/23	
Oil Range Organics (C28-C36)	<b>293</b>	100	2	05/01/23	05/02/23	
<i>Surrogate: n-Nonane</i>		83.7 %	50-200	05/01/23	05/02/23	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: BA		Batch: 2318020
Chloride	<b>495</b>	20.0	1	05/01/23	05/04/23	



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

S1 - 3'

E304214-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Benzene	ND	0.0250	1	05/01/23	05/03/23	
Ethylbenzene	ND	0.0250	1	05/01/23	05/03/23	
Toluene	ND	0.0250	1	05/01/23	05/03/23	
o-Xylene	ND	0.0250	1	05/01/23	05/03/23	
p,m-Xylene	ND	0.0500	1	05/01/23	05/03/23	
Total Xylenes	ND	0.0250	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		104 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		107 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		98.4 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		104 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		107 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		98.4 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2318001
Diesel Range Organics (C10-C28)	ND	25.0	1	05/01/23	05/02/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/01/23	05/02/23	
<i>Surrogate: n-Nonane</i>		80.6 %	50-200	05/01/23	05/02/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2318020
Chloride	272	20.0	1	05/01/23	05/03/23	



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

S1 - 4'

E304214-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Benzene	ND	0.0250	1	05/01/23	05/03/23	
Ethylbenzene	ND	0.0250	1	05/01/23	05/03/23	
Toluene	ND	0.0250	1	05/01/23	05/03/23	
o-Xylene	ND	0.0250	1	05/01/23	05/03/23	
p,m-Xylene	ND	0.0500	1	05/01/23	05/03/23	
Total Xylenes	ND	0.0250	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		106 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		108 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		98.5 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		106 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		108 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		98.5 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2318001
Diesel Range Organics (C10-C28)	ND	25.0	1	05/01/23	05/02/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/01/23	05/02/23	
<i>Surrogate: n-Nonane</i>		78.4 %	50-200	05/01/23	05/02/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2318020
Chloride	86.0	20.0	1	05/01/23	05/03/23	



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

S2 - 1'

E304214-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Benzene	ND	0.0250	1	05/01/23	05/03/23	
Ethylbenzene	<b>0.388</b>	0.0250	1	05/01/23	05/03/23	
Toluene	<b>0.0635</b>	0.0250	1	05/01/23	05/03/23	
o-Xylene	<b>0.329</b>	0.0250	1	05/01/23	05/03/23	
p,m-Xylene	<b>0.522</b>	0.0500	1	05/01/23	05/03/23	
Total Xylenes	<b>0.851</b>	0.0250	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>						
		111 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>						
		104 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>						
		101 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Gasoline Range Organics (C6-C10)	<b>36.9</b>	20.0	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>						
		111 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>						
		104 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>						
		101 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2318001
Diesel Range Organics (C10-C28)	<b>950</b>	50.0	2	05/01/23	05/04/23	
Oil Range Organics (C28-C36)	<b>370</b>	100	2	05/01/23	05/04/23	
<i>Surrogate: n-Nonane</i>						
		86.0 %	50-200	05/01/23	05/04/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2318020
Chloride	ND	20.0	1	05/01/23	05/03/23	



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

S2 - 3'

E304214-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Benzene	ND	0.0250	1	05/01/23	05/03/23	
Ethylbenzene	ND	0.0250	1	05/01/23	05/03/23	
Toluene	ND	0.0250	1	05/01/23	05/03/23	
o-Xylene	ND	0.0250	1	05/01/23	05/03/23	
p,m-Xylene	ND	0.0500	1	05/01/23	05/03/23	
Total Xylenes	ND	0.0250	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		112 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		108 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		101 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		112 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		108 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		101 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2318001
Diesel Range Organics (C10-C28)	ND	25.0	1	05/01/23	05/02/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/01/23	05/02/23	
<i>Surrogate: n-Nonane</i>		79.0 %	50-200	05/01/23	05/02/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2318020
Chloride	ND	20.0	1	05/01/23	05/04/23	

### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

S2 - 4'

E304214-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Benzene	ND	0.0250	1	05/01/23	05/03/23	
Ethylbenzene	ND	0.0250	1	05/01/23	05/03/23	
Toluene	ND	0.0250	1	05/01/23	05/03/23	
o-Xylene	ND	0.0250	1	05/01/23	05/03/23	
p,m-Xylene	ND	0.0500	1	05/01/23	05/03/23	
Total Xylenes	ND	0.0250	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		108 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		108 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		99.3 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		108 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		108 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		99.3 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2318001
Diesel Range Organics (C10-C28)	110	25.0	1	05/01/23	05/02/23	
Oil Range Organics (C28-C36)	51.4	50.0	1	05/01/23	05/02/23	
<i>Surrogate: n-Nonane</i>		83.6 %	50-200	05/01/23	05/02/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2318020
Chloride	24.8	20.0	1	05/01/23	05/03/23	



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

S3 - 1'

E304214-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Benzene	ND	0.0250	1	05/01/23	05/03/23	
Ethylbenzene	0.316	0.0250	1	05/01/23	05/03/23	
Toluene	0.0300	0.0250	1	05/01/23	05/03/23	
o-Xylene	0.253	0.0250	1	05/01/23	05/03/23	
p,m-Xylene	0.456	0.0500	1	05/01/23	05/03/23	
Total Xylenes	0.708	0.0250	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>						
		115 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>						
		105 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>						
		102 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Gasoline Range Organics (C6-C10)	21.5	20.0	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>						
		115 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>						
		105 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>						
		102 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2318001
Diesel Range Organics (C10-C28)	1280	250	10	05/01/23	05/02/23	
Oil Range Organics (C28-C36)	559	500	10	05/01/23	05/02/23	
<i>Surrogate: n-Nonane</i>						
		84.2 %	50-200	05/01/23	05/02/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2318020
Chloride	ND	20.0	1	05/01/23	05/03/23	



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

S3 - 3'

E304214-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Benzene	ND	0.0250	1	05/01/23	05/03/23	
Ethylbenzene	<b>0.116</b>	0.0250	1	05/01/23	05/03/23	
Toluene	ND	0.0250	1	05/01/23	05/03/23	
o-Xylene	<b>0.161</b>	0.0250	1	05/01/23	05/03/23	
p,m-Xylene	<b>0.221</b>	0.0500	1	05/01/23	05/03/23	
Total Xylenes	<b>0.382</b>	0.0250	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		108 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		107 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		98.9 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		108 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		107 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		98.9 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2318001
Diesel Range Organics (C10-C28)	<b>1220</b>	250	10	05/01/23	05/02/23	
Oil Range Organics (C28-C36)	ND	500	10	05/01/23	05/02/23	
<i>Surrogate: n-Nonane</i>		78.9 %	50-200	05/01/23	05/02/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2318020
Chloride	<b>175</b>	20.0	1	05/01/23	05/03/23	



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

S3 - 4'

E304214-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Benzene	ND	0.0250	1	05/01/23	05/03/23	
Ethylbenzene	ND	0.0250	1	05/01/23	05/03/23	
Toluene	ND	0.0250	1	05/01/23	05/03/23	
o-Xylene	ND	0.0250	1	05/01/23	05/03/23	
p,m-Xylene	ND	0.0500	1	05/01/23	05/03/23	
Total Xylenes	ND	0.0250	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		107 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		106 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		97.9 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		107 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		106 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		97.9 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2318001
Diesel Range Organics (C10-C28)	ND	25.0	1	05/01/23	05/03/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/01/23	05/03/23	
<i>Surrogate: n-Nonane</i>		86.0 %	50-200	05/01/23	05/03/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2318020
Chloride	73.7	20.0	1	05/01/23	05/04/23	



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

S4 - 1'

E304214-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Benzene	ND	0.0250	1	05/01/23	05/03/23	
Ethylbenzene	ND	0.0250	1	05/01/23	05/03/23	
Toluene	ND	0.0250	1	05/01/23	05/03/23	
o-Xylene	<b>0.0300</b>	0.0250	1	05/01/23	05/03/23	
p,m-Xylene	ND	0.0500	1	05/01/23	05/03/23	
Total Xylenes	<b>0.0300</b>	0.0250	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>						
		108 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>						
		107 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>						
		98.3 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>						
		108 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>						
		107 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>						
		98.3 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2318001
Diesel Range Organics (C10-C28)	<b>53.7</b>	25.0	1	05/01/23	05/03/23	
Oil Range Organics (C28-C36)	<b>98.9</b>	50.0	1	05/01/23	05/03/23	
<i>Surrogate: n-Nonane</i>						
		83.3 %	50-200	05/01/23	05/03/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2318020
Chloride	ND	20.0	1	05/01/23	05/03/23	



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

S4 - 3'

E304214-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Benzene	ND	0.0250	1	05/01/23	05/03/23	
Ethylbenzene	ND	0.0250	1	05/01/23	05/03/23	
Toluene	ND	0.0250	1	05/01/23	05/03/23	
o-Xylene	ND	0.0250	1	05/01/23	05/03/23	
p,m-Xylene	ND	0.0500	1	05/01/23	05/03/23	
Total Xylenes	ND	0.0250	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		104 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		112 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		97.3 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		104 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		112 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		97.3 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2318001
Diesel Range Organics (C10-C28)	ND	25.0	1	05/01/23	05/03/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/01/23	05/03/23	
<i>Surrogate: n-Nonane</i>		86.4 %	50-200	05/01/23	05/03/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2318020
Chloride	ND	20.0	1	05/01/23	05/03/23	



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

S4 - 4'

E304214-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Benzene	ND	0.0250	1	05/01/23	05/03/23	
Ethylbenzene	ND	0.0250	1	05/01/23	05/03/23	
Toluene	ND	0.0250	1	05/01/23	05/03/23	
o-Xylene	ND	0.0250	1	05/01/23	05/03/23	
p,m-Xylene	ND	0.0500	1	05/01/23	05/03/23	
Total Xylenes	ND	0.0250	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		106 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		109 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		98.0 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		106 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		109 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		98.0 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: KM		Batch: 2318001
Diesel Range Organics (C10-C28)	111	25.0	1	05/01/23	05/03/23	
Oil Range Organics (C28-C36)	51.5	50.0	1	05/01/23	05/03/23	
<i>Surrogate: n-Nonane</i>		86.8 %	50-200	05/01/23	05/03/23	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: BA		Batch: 2318020
Chloride	ND	20.0	1	05/01/23	05/04/23	



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

**SW1**

**E304214-13**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Benzene	ND	0.0250	1	05/01/23	05/03/23	
Ethylbenzene	ND	0.0250	1	05/01/23	05/03/23	
Toluene	ND	0.0250	1	05/01/23	05/03/23	
o-Xylene	ND	0.0250	1	05/01/23	05/03/23	
p,m-Xylene	ND	0.0500	1	05/01/23	05/03/23	
Total Xylenes	ND	0.0250	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		107 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		106 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		99.8 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		107 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		106 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		99.8 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2318001
Diesel Range Organics (C10-C28)	ND	25.0	1	05/01/23	05/03/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/01/23	05/03/23	
<i>Surrogate: n-Nonane</i>		85.9 %	50-200	05/01/23	05/03/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2318020
Chloride	ND	20.0	1	05/01/23	05/04/23	



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

**SW2**

**E304214-14**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Benzene	ND	0.0250	1	05/01/23	05/03/23	
Ethylbenzene	ND	0.0250	1	05/01/23	05/03/23	
Toluene	ND	0.0250	1	05/01/23	05/03/23	
o-Xylene	ND	0.0250	1	05/01/23	05/03/23	
p,m-Xylene	ND	0.0500	1	05/01/23	05/03/23	
Total Xylenes	ND	0.0250	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		104 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		107 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		98.0 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		104 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		107 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		98.0 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2318001
Diesel Range Organics (C10-C28)	ND	25.0	1	05/01/23	05/03/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/01/23	05/03/23	
<i>Surrogate: n-Nonane</i>		85.6 %	50-200	05/01/23	05/03/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2318020
Chloride	ND	20.0	1	05/01/23	05/04/23	



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

**SW3**

**E304214-15**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Benzene	ND	0.0250	1	05/01/23	05/03/23	
Ethylbenzene	ND	0.0250	1	05/01/23	05/03/23	
Toluene	ND	0.0250	1	05/01/23	05/03/23	
o-Xylene	ND	0.0250	1	05/01/23	05/03/23	
p,m-Xylene	ND	0.0500	1	05/01/23	05/03/23	
Total Xylenes	ND	0.0250	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		105 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		113 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		99.3 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		105 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		113 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		99.3 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2318001
Diesel Range Organics (C10-C28)	ND	25.0	1	05/01/23	05/03/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/01/23	05/03/23	
<i>Surrogate: n-Nonane</i>		82.6 %	50-200	05/01/23	05/03/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2318020
Chloride	ND	20.0	1	05/01/23	05/04/23	



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

**SW4**

**E304214-16**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Benzene	ND	0.0250	1	05/01/23	05/03/23	
Ethylbenzene	ND	0.0250	1	05/01/23	05/03/23	
Toluene	ND	0.0250	1	05/01/23	05/03/23	
o-Xylene	ND	0.0250	1	05/01/23	05/03/23	
p,m-Xylene	ND	0.0500	1	05/01/23	05/03/23	
Total Xylenes	ND	0.0250	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		106 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		112 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		99.5 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		106 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		112 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		99.5 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2318001
Diesel Range Organics (C10-C28)	ND	25.0	1	05/01/23	05/03/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/01/23	05/03/23	
<i>Surrogate: n-Nonane</i>		90.0 %	50-200	05/01/23	05/03/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2318020
Chloride	ND	20.0	1	05/01/23	05/04/23	



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

**SW5**

**E304214-17**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Benzene	ND	0.0250	1	05/01/23	05/03/23	
Ethylbenzene	ND	0.0250	1	05/01/23	05/03/23	
Toluene	ND	0.0250	1	05/01/23	05/03/23	
o-Xylene	ND	0.0250	1	05/01/23	05/03/23	
p,m-Xylene	ND	0.0500	1	05/01/23	05/03/23	
Total Xylenes	ND	0.0250	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		105 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		110 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		98.6 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		105 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		110 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		98.6 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2318001
Diesel Range Organics (C10-C28)	ND	25.0	1	05/01/23	05/03/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/01/23	05/03/23	
<i>Surrogate: n-Nonane</i>		85.7 %	50-200	05/01/23	05/03/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2318020
Chloride	ND	20.0	1	05/01/23	05/04/23	



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

**SW6**

**E304214-18**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Benzene	ND	0.0250	1	05/01/23	05/03/23	
Ethylbenzene	ND	0.0250	1	05/01/23	05/03/23	
Toluene	ND	0.0250	1	05/01/23	05/03/23	
o-Xylene	ND	0.0250	1	05/01/23	05/03/23	
p,m-Xylene	ND	0.0500	1	05/01/23	05/03/23	
Total Xylenes	ND	0.0250	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		105 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		110 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		99.8 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		105 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		110 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		99.8 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: KM		Batch: 2318001
Diesel Range Organics (C10-C28)	ND	25.0	1	05/01/23	05/03/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/01/23	05/03/23	
<i>Surrogate: n-Nonane</i>		87.5 %	50-200	05/01/23	05/03/23	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: BA		Batch: 2318020
Chloride	ND	20.0	1	05/01/23	05/04/23	



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

S1 - 5'

E304214-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Benzene	ND	0.0250	1	05/01/23	05/03/23	
Ethylbenzene	ND	0.0250	1	05/01/23	05/03/23	
Toluene	ND	0.0250	1	05/01/23	05/03/23	
o-Xylene	ND	0.0250	1	05/01/23	05/03/23	
p,m-Xylene	ND	0.0500	1	05/01/23	05/03/23	
Total Xylenes	ND	0.0250	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		107 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		110 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		99.5 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		107 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		110 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		99.5 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2318001
Diesel Range Organics (C10-C28)	ND	25.0	1	05/01/23	05/03/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/01/23	05/03/23	
<i>Surrogate: n-Nonane</i>		87.4 %	50-200	05/01/23	05/03/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2318020
Chloride	ND	20.0	1	05/01/23	05/04/23	



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

S2 - 5'

E304214-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Benzene	ND	0.0250	1	05/01/23	05/03/23	
Ethylbenzene	ND	0.0250	1	05/01/23	05/03/23	
Toluene	ND	0.0250	1	05/01/23	05/03/23	
o-Xylene	ND	0.0250	1	05/01/23	05/03/23	
p,m-Xylene	ND	0.0500	1	05/01/23	05/03/23	
Total Xylenes	ND	0.0250	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		104 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		111 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		99.0 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318027
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/23	05/03/23	
<i>Surrogate: Bromofluorobenzene</i>		104 %	70-130	05/01/23	05/03/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		111 %	70-130	05/01/23	05/03/23	
<i>Surrogate: Toluene-d8</i>		99.0 %	70-130	05/01/23	05/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2318001
Diesel Range Organics (C10-C28)	ND	25.0	1	05/01/23	05/03/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/01/23	05/03/23	
<i>Surrogate: n-Nonane</i>		88.2 %	50-200	05/01/23	05/03/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2318020
Chloride	ND	20.0	1	05/01/23	05/04/23	



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

S3 - 5'

E304214-21

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318007
Benzene	ND	0.0250	1	05/01/23	05/01/23	
Ethylbenzene	ND	0.0250	1	05/01/23	05/01/23	
Toluene	ND	0.0250	1	05/01/23	05/01/23	
o-Xylene	ND	0.0250	1	05/01/23	05/01/23	
p,m-Xylene	ND	0.0500	1	05/01/23	05/01/23	
Total Xylenes	ND	0.0250	1	05/01/23	05/01/23	
<i>Surrogate: Bromofluorobenzene</i>		96.1 %	70-130	05/01/23	05/01/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		103 %	70-130	05/01/23	05/01/23	
<i>Surrogate: Toluene-d8</i>		99.1 %	70-130	05/01/23	05/01/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318007
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/23	05/01/23	
<i>Surrogate: Bromofluorobenzene</i>		96.1 %	70-130	05/01/23	05/01/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		103 %	70-130	05/01/23	05/01/23	
<i>Surrogate: Toluene-d8</i>		99.1 %	70-130	05/01/23	05/01/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2318006
Diesel Range Organics (C10-C28)	ND	25.0	1	05/01/23	05/03/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/01/23	05/03/23	
<i>Surrogate: n-Nonane</i>		92.0 %	50-200	05/01/23	05/03/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2318010
Chloride	ND	20.0	1	05/01/23	05/02/23	



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

S4 - 5'

E304214-22

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318007
Benzene	ND	0.0250	1	05/01/23	05/01/23	
Ethylbenzene	ND	0.0250	1	05/01/23	05/01/23	
Toluene	ND	0.0250	1	05/01/23	05/01/23	
o-Xylene	ND	0.0250	1	05/01/23	05/01/23	
p,m-Xylene	ND	0.0500	1	05/01/23	05/01/23	
Total Xylenes	ND	0.0250	1	05/01/23	05/01/23	
<i>Surrogate: Bromofluorobenzene</i>		97.3 %	70-130	05/01/23	05/01/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.2 %	70-130	05/01/23	05/01/23	
<i>Surrogate: Toluene-d8</i>		101 %	70-130	05/01/23	05/01/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2318007
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/23	05/01/23	
<i>Surrogate: Bromofluorobenzene</i>		97.3 %	70-130	05/01/23	05/01/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.2 %	70-130	05/01/23	05/01/23	
<i>Surrogate: Toluene-d8</i>		101 %	70-130	05/01/23	05/01/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2318006
Diesel Range Organics (C10-C28)	ND	25.0	1	05/01/23	05/03/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/01/23	05/03/23	
<i>Surrogate: n-Nonane</i>		92.6 %	50-200	05/01/23	05/03/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2318010
Chloride	ND	20.0	1	05/01/23	05/02/23	



### QC Summary Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

#### Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec % %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	---------------	--------------------	----------	-------------------	-------

#### Blank (2318007-BLK1)

Prepared: 05/01/23 Analyzed: 05/01/23

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.494		0.500		98.7		70-130		
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.5		70-130		
Surrogate: Toluene-d8	0.512		0.500		102		70-130		

#### LCS (2318007-BS1)

Prepared: 05/01/23 Analyzed: 05/01/23

Benzene	2.41	0.0250	2.50		96.5		70-130		
Ethylbenzene	2.37	0.0250	2.50		94.9		70-130		
Toluene	2.35	0.0250	2.50		93.8		70-130		
o-Xylene	2.40	0.0250	2.50		96.1		70-130		
p,m-Xylene	4.72	0.0500	5.00		94.4		70-130		
Total Xylenes	7.12	0.0250	7.50		95.0		70-130		
Surrogate: Bromofluorobenzene	0.493		0.500		98.5		70-130		
Surrogate: 1,2-Dichloroethane-d4	0.507		0.500		101		70-130		
Surrogate: Toluene-d8	0.502		0.500		100		70-130		

#### Matrix Spike (2318007-MS1)

Source: E304208-02

Prepared: 05/01/23 Analyzed: 05/01/23

Benzene	2.32	0.0250	2.50	ND	92.7		48-131		
Ethylbenzene	2.26	0.0250	2.50	ND	90.3		45-135		
Toluene	2.24	0.0250	2.50	ND	89.6		48-130		
o-Xylene	2.29	0.0250	2.50	ND	91.7		43-135		
p,m-Xylene	4.49	0.0500	5.00	ND	89.8		43-135		
Total Xylenes	6.78	0.0250	7.50	ND	90.4		43-135		
Surrogate: Bromofluorobenzene	0.494		0.500		98.8		70-130		
Surrogate: 1,2-Dichloroethane-d4	0.499		0.500		99.7		70-130		
Surrogate: Toluene-d8	0.498		0.500		99.6		70-130		

#### Matrix Spike Dup (2318007-MSD1)

Source: E304208-02

Prepared: 05/01/23 Analyzed: 05/01/23

Benzene	2.31	0.0250	2.50	ND	92.6		48-131	0.108	23
Ethylbenzene	2.30	0.0250	2.50	ND	92.1		45-135	1.97	27
Toluene	2.30	0.0250	2.50	ND	92.0		48-130	2.64	24
o-Xylene	2.40	0.0250	2.50	ND	96.0		43-135	4.58	27
p,m-Xylene	4.72	0.0500	5.00	ND	94.4		43-135	5.04	27
Total Xylenes	7.12	0.0250	7.50	ND	95.0		43-135	4.88	27
Surrogate: Bromofluorobenzene	0.503		0.500		101		70-130		
Surrogate: 1,2-Dichloroethane-d4	0.496		0.500		99.1		70-130		
Surrogate: Toluene-d8	0.506		0.500		101		70-130		



### QC Summary Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

#### Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

**Blank (2318027-BLK1)**

Prepared: 05/01/23 Analyzed: 05/02/23

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.523		0.500		105		70-130		
Surrogate: 1,2-Dichloroethane-d4	0.550		0.500		110		70-130		
Surrogate: Toluene-d8	0.496		0.500		99.2		70-130		

**LCS (2318027-BS1)**

Prepared: 05/01/23 Analyzed: 05/02/23

Benzene	2.51	0.0250	2.50		100		70-130		
Ethylbenzene	2.46	0.0250	2.50		98.5		70-130		
Toluene	2.50	0.0250	2.50		100		70-130		
o-Xylene	2.43	0.0250	2.50		97.2		70-130		
p,m-Xylene	4.83	0.0500	5.00		96.5		70-130		
Total Xylenes	7.26	0.0250	7.50		96.7		70-130		
Surrogate: Bromofluorobenzene	0.549		0.500		110		70-130		
Surrogate: 1,2-Dichloroethane-d4	0.578		0.500		116		70-130		
Surrogate: Toluene-d8	0.505		0.500		101		70-130		

**Matrix Spike (2318027-MS1)**

Source: E304214-02

Prepared: 05/01/23 Analyzed: 05/03/23

Benzene	2.45	0.0250	2.50	ND	98.2		48-131		
Ethylbenzene	2.36	0.0250	2.50	ND	94.6		45-135		
Toluene	2.37	0.0250	2.50	ND	95.0		48-130		
o-Xylene	2.35	0.0250	2.50	ND	93.9		43-135		
p,m-Xylene	4.63	0.0500	5.00	ND	92.6		43-135		
Total Xylenes	6.98	0.0250	7.50	ND	93.1		43-135		
Surrogate: Bromofluorobenzene	0.542		0.500		108		70-130		
Surrogate: 1,2-Dichloroethane-d4	0.538		0.500		108		70-130		
Surrogate: Toluene-d8	0.499		0.500		99.8		70-130		

**Matrix Spike Dup (2318027-MSD1)**

Source: E304214-02

Prepared: 05/01/23 Analyzed: 05/03/23

Benzene	2.54	0.0250	2.50	ND	101		48-131	3.25	23
Ethylbenzene	2.47	0.0250	2.50	ND	98.7		45-135	4.24	27
Toluene	2.49	0.0250	2.50	ND	99.4		48-130	4.61	24
o-Xylene	2.44	0.0250	2.50	ND	97.4		43-135	3.62	27
p,m-Xylene	4.82	0.0500	5.00	ND	96.3		43-135	3.89	27
Total Xylenes	7.25	0.0250	7.50	ND	96.7		43-135	3.79	27
Surrogate: Bromofluorobenzene	0.543		0.500		109		70-130		
Surrogate: 1,2-Dichloroethane-d4	0.539		0.500		108		70-130		
Surrogate: Toluene-d8	0.495		0.500		99.0		70-130		



### QC Summary Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

#### Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec % %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	---------------	--------------------	----------	-------------------	-------

**Blank (2318007-BLK1)**

Prepared: 05/01/23 Analyzed: 05/01/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.494		0.500		98.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.5	70-130			
Surrogate: Toluene-d8	0.512		0.500		102	70-130			

**LCS (2318007-BS2)**

Prepared: 05/01/23 Analyzed: 05/01/23

Gasoline Range Organics (C6-C10)	45.1	20.0	50.0		90.1	70-130			
Surrogate: Bromofluorobenzene	0.497		0.500		99.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.486		0.500		97.1	70-130			
Surrogate: Toluene-d8	0.509		0.500		102	70-130			

**Matrix Spike (2318007-MS2)**

Source: E304208-02

Prepared: 05/01/23 Analyzed: 05/01/23

Gasoline Range Organics (C6-C10)	43.5	20.0	50.0	ND	87.1	70-130			
Surrogate: Bromofluorobenzene	0.488		0.500		97.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.518		0.500		104	70-130			
Surrogate: Toluene-d8	0.507		0.500		101	70-130			

**Matrix Spike Dup (2318007-MSD2)**

Source: E304208-02

Prepared: 05/01/23 Analyzed: 05/01/23

Gasoline Range Organics (C6-C10)	42.2	20.0	50.0	ND	84.3	70-130	3.23	20	
Surrogate: Bromofluorobenzene	0.487		0.500		97.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.510		0.500		102	70-130			
Surrogate: Toluene-d8	0.506		0.500		101	70-130			



### QC Summary Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

#### Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec % %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	---------------	--------------------	----------	-------------------	-------

**Blank (2318027-BLK1)**

Prepared: 05/01/23 Analyzed: 05/02/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.523		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.550		0.500		110	70-130			
Surrogate: Toluene-d8	0.496		0.500		99.2	70-130			

**LCS (2318027-BS2)**

Prepared: 05/01/23 Analyzed: 05/02/23

Gasoline Range Organics (C6-C10)	44.3	20.0	50.0		88.5	70-130			
Surrogate: Bromofluorobenzene	0.544		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.558		0.500		112	70-130			
Surrogate: Toluene-d8	0.510		0.500		102	70-130			

**Matrix Spike (2318027-MS2)**

Source: E304214-02

Prepared: 05/01/23 Analyzed: 05/03/23

Gasoline Range Organics (C6-C10)	47.9	20.0	50.0	ND	95.7	70-130			
Surrogate: Bromofluorobenzene	0.539		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.525		0.500		105	70-130			
Surrogate: Toluene-d8	0.511		0.500		102	70-130			

**Matrix Spike Dup (2318027-MSD2)**

Source: E304214-02

Prepared: 05/01/23 Analyzed: 05/03/23

Gasoline Range Organics (C6-C10)	47.9	20.0	50.0	ND	95.8	70-130	0.122	20	
Surrogate: Bromofluorobenzene	0.542		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.537		0.500		107	70-130			
Surrogate: Toluene-d8	0.507		0.500		101	70-130			



### QC Summary Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

#### Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec % %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	---------------	--------------------	----------	-------------------	-------

**Blank (2318001-BLK1)**

Prepared: 05/01/23 Analyzed: 05/02/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	41.8		50.0		83.5	50-200			

**LCS (2318001-BS1)**

Prepared: 05/01/23 Analyzed: 05/02/23

Diesel Range Organics (C10-C28)	264	25.0	250		105	38-132			
Surrogate: n-Nonane	44.5		50.0		89.1	50-200			

**Matrix Spike (2318001-MS1)**

Source: E304214-04

Prepared: 05/01/23 Analyzed: 05/04/23

Diesel Range Organics (C10-C28)	1210	50.0	250	950	104	38-132			
Surrogate: n-Nonane	43.7		50.0		87.4	50-200			

**Matrix Spike Dup (2318001-MSD1)**

Source: E304214-04

Prepared: 05/01/23 Analyzed: 05/04/23

Diesel Range Organics (C10-C28)	1330	50.0	250	950	153	38-132	9.60	20	M2
Surrogate: n-Nonane	41.8		50.0		83.6	50-200			



### QC Summary Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

#### Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: RAS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

**Blank (2318006-BLK1)**

Prepared: 05/01/23 Analyzed: 05/02/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	50.0		50.0		99.9	50-200			

**LCS (2318006-BS1)**

Prepared: 05/01/23 Analyzed: 05/02/23

Diesel Range Organics (C10-C28)	264	25.0	250		106	38-132			
Surrogate: n-Nonane	45.5		50.0		91.0	50-200			

**Matrix Spike (2318006-MS1)**

Source: E304208-10

Prepared: 05/01/23 Analyzed: 05/02/23

Diesel Range Organics (C10-C28)	259	25.0	250	ND	103	38-132			
Surrogate: n-Nonane	43.5		50.0		87.0	50-200			

**Matrix Spike Dup (2318006-MSD1)**

Source: E304208-10

Prepared: 05/01/23 Analyzed: 05/02/23

Diesel Range Organics (C10-C28)	267	25.0	250	ND	107	38-132	3.24	20	
Surrogate: n-Nonane	45.6		50.0		91.1	50-200			



### QC Summary Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

#### Anions by EPA 300.0/9056A

Analyst: RAS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

**Blank (2318010-BLK1)**

Prepared: 05/01/23 Analyzed: 05/02/23

Chloride ND 20.0

**LCS (2318010-BS1)**

Prepared: 05/01/23 Analyzed: 05/02/23

Chloride 251 20.0 250 100 90-110

**Matrix Spike (2318010-MS1)**

Source: E304193-21

Prepared: 05/01/23 Analyzed: 05/02/23

Chloride 251 20.0 250 ND 100 80-120

**Matrix Spike Dup (2318010-MSD1)**

Source: E304193-21

Prepared: 05/01/23 Analyzed: 05/02/23

Chloride 251 20.0 250 ND 100 80-120 0.0112 20



### QC Summary Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: MCA 204 Project Number: 21064-0001 Project Manager: Tom Bynum	<b>Reported:</b> 5/4/2023 4:23:19PM
---	---	--

#### Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

**Blank (2318020-BLK1)**

Prepared: 05/01/23 Analyzed: 05/03/23

Chloride ND 20.0

**LCS (2318020-BS1)**

Prepared: 05/01/23 Analyzed: 05/03/23

Chloride 247 20.0 250 98.7 90-110

**Matrix Spike (2318020-MS1)**

Source: E304214-01

Prepared: 05/01/23 Analyzed: 05/03/23

Chloride 776 20.0 250 495 112 80-120

**Matrix Spike Dup (2318020-MSD1)**

Source: E304214-01

Prepared: 05/01/23 Analyzed: 05/03/23

Chloride 776 20.0 250 495 112 80-120 0.0318 20

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



### Definitions and Notes

Pima Environmental Services-Carlsbad	Project Name:	MCA 204	
PO Box 247	Project Number:	21064-0001	<b>Reported:</b>
Plains TX, 79355-0247	Project Manager:	Tom Bynum	05/04/23 16:23

M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Client: Pima Environmental Services		Bill To		Lab Use Only		TAT		EPA Program							
Project: MCA 204		Attention: Pima		Lab WO# E304214		1D 2D 3D		CWA SDWA							
Project Manager: Tom Bynum		Address:		Job Number 21064-0001		Standard X		RCRA							
Address: 5614 N. Lovington Hwy.		City, State, Zip		Analysis and Method						State					
City, State, Zip Hobbs, NM, 88240		Phone:		DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	NM	CO	UT	AZ	TX	
Phone: 580-748-1613		Email:								X					
Email: tom@pimaoil.com		Pima Project # 24-17													
Report due by:															

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks
	4/26/23	Soil	1	S1-1'	1							X		
				S1-3'	2									
				S1-4'	3									
				S2-1'	4									
				S2-3'	5									
				S2-4'	6									
				S3-1'	7									
				S3-3'	8									
				S3-4'	9									
				S4-1'	10									

**Additional Instructions:**

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by: \_\_\_\_\_

Relinquished by: (Signature) <i>[Signature]</i>	Date 4-27-23	Time 200	Received by: (Signature) <i>[Signature]</i>	Date 4-27-23	Time 1400	Lab Use Only Received on ice: <input checked="" type="checkbox"/> / N T1 _____ T2 _____ T3 _____ AVG Temp °C 4
Relinquished by: (Signature) <i>[Signature]</i>	Date 4-27-23	Time 1745	Received by: (Signature) <i>[Signature]</i>	Date 4-27-23	Time 1900	
Relinquished by: (Signature) <i>[Signature]</i>	Date 4-27-23	Time 2330	Received by: (Signature) <i>[Signature]</i>	Date 4/28/23	Time 845	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other \_\_\_\_\_

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



Client: Pima Environmental Services Project: <u>MCA 204</u> Project Manager: <u>Tom Bynum</u> Address: <u>5614 N. Lovington Hwy.</u> City, State, Zip: <u>Hobbs, NM, 88240</u> Phone: <u>580-748-1613</u> Email: <u>tom@pimaoil.com</u> Report due by:		Bill To Attention: <u>Pima</u> Address: City, State, Zip Phone: Email: Pima Project # <u>24-7</u>		Lab Use Only Lab WO# <u>E 304214</u> Job Number <u>21064-0001</u>		TAT 1D 2D 3D Standard <u>X</u>		EPA Program CWA SDWA RCRA	
				Analysis and Method DRO/ORO by 8015 GRO/DRO by 8015 BTEX by 8021 VOC by 8260 Metals 6010 Chloride 300.0 BGDOC NM BGDOC TX		State NM CO UT AZ TX <u>X</u>		Remarks	

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks
	<u>4/26/23</u>	<u>Soil</u>	<u>1</u>	<u>S4-3'</u>	<u>11</u>							<u>X</u>		
				<u>S4-4'</u>	<u>12</u>									
				<u>SW1</u>	<u>13</u>									
				<u>SW2</u>	<u>14</u>									
				<u>SW3</u>	<u>15</u>									
				<u>SW4</u>	<u>16</u>									
				<u>SW5</u>	<u>17</u>									
				<u>SW6</u>	<u>18</u>									
				<u>S1-5'</u>	<u>19</u>									
				<u>S2-5'</u>	<u>20</u>									

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6°C on subsequent days.

Relinquished by: (Signature) <u>[Signature]</u> Date <u>4-27-23</u> Time <u>2:00</u>				Received by: (Signature) <u>[Signature]</u> Date <u>4-27-23</u> Time <u>1400</u>		Lab Use Only Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N	
Relinquished by: (Signature) <u>[Signature]</u> Date <u>4-27-23</u> Time <u>1745</u>				Received by: (Signature) <u>[Signature]</u> Date <u>4-27-23</u> Time <u>1800</u>		T1 _____ T2 _____ T3 _____	
Relinquished by: (Signature) <u>[Signature]</u> Date <u>4-27-23</u> Time <u>2330</u>				Received by: (Signature) <u>[Signature]</u> Date <u>4/28/23</u> Time <u>8:45</u>		AVG Temp °C <u>4</u>	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other \_\_\_\_\_

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



Client: Pima Environmental Services		Bill To		Lab Use Only				TAT			EPA Program				
Project: MCA 2014		Attention: Pima		Lab WO# E 304214		Job Number 21064-0001		1D	2D	3D	Standard	CWA	SDWA		
Project Manager: Tom Bynum		Address:		Analysis and Method							X				
Address: 5614 N. Lovington Hwy.		City, State, Zip		DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	RCRA			
City, State, Zip Hobbs, NM, 88240		Phone:		State											
Phone: 580-748-1613		Email:		NM								CO	UT	AZ	TX
Email: tom@pimaoil.com		Pima Project # 24-7		X											
Report due by:		Remarks													

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks
	4/26/23	S <sub>o1</sub>	11	53-5'	21							X		
	1	1	1	54-5'	22							X		

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6°C on subsequent days.

Relinquished by: (Signature) <i>[Signature]</i>				Date	Time	Received by: (Signature) <i>[Signature]</i>		Date	Time	Lab Use Only		
Relinquished by: (Signature) <i>[Signature]</i>				4-27-23	2:00	Received by: (Signature) <i>[Signature]</i>		4-27-23	1:00	Received on ice: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N		
Relinquished by: (Signature) <i>[Signature]</i>				4-27-23	1745	Received by: (Signature) <i>[Signature]</i>		4-27-23	1800	T1 _____ T2 _____ T3 _____		
Relinquished by: (Signature) <i>[Signature]</i>				4-27-23	2330	Received by: (Signature) <i>[Signature]</i>		4/28/23	8:45	AVG Temp °C <u>4</u>		
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other												Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



Envirotech Analytical Laboratory

Printed: 4/28/2023 2:54:20PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client: Pima Environmental Services-Carlsbad Date Received: 04/28/23 08:45 Work Order ID: E304214
Phone: (575) 631-6977 Date Logged In: 04/27/23 17:01 Logged In By: Caitlin Christian
Email: tom@pimaoil.com Due Date: 05/04/23 17:00 (4 day TAT)

Chain of Custody (COC)

- 1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

Carrier: Courier

Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this discussion.

Comments/Resolution

Time sampled not provided on the COC by client

Sample Turn Around Time (TAT)

- 6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

- 7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

- 13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

- 14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

- 20. Were field sample labels filled out with the minimum information:
Sample ID? Yes
Date/Time Collected? Yes
Collectors name? Yes

Sample Preservation

- 21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

- 26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

- 28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Empty box for client instruction.

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.



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

---

July 11, 2023

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: MCA 204

Enclosed are the results of analyses for samples received by the laboratory on 07/10/23 15:46.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	07/10/2023	Sampling Date:	07/10/2023
Reported:	07/11/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.79857,-103.752337		

**Sample ID: FS 01 @ 4' (H233489-01)**

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	07/10/2023	ND	2.24	112	2.00	3.65	
Toluene*	<0.050	0.050	07/10/2023	ND	2.21	110	2.00	1.30	
Ethylbenzene*	<0.050	0.050	07/10/2023	ND	2.11	105	2.00	3.43	
Total Xylenes*	<0.150	0.150	07/10/2023	ND	6.52	109	6.00	3.02	
Total BTEX	<0.300	0.300	07/10/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 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
<b>Chloride</b>	<b>256</b>	16.0	07/11/2023	ND	416	104	400	3.92	

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	07/11/2023	ND	175	87.5	200	0.0926		
<b>DRO &gt;C10-C28*</b>	<b>62.1</b>	10.0	07/11/2023	ND	173	86.4	200	4.34		
<b>EXT DRO &gt;C28-C36</b>	<b>62.4</b>	10.0	07/11/2023	ND						

Surrogate: 1-Chlorooctane 133 % 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:	07/10/2023	Sampling Date:	07/10/2023
Reported:	07/11/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.79857,-103.752337		

**Sample ID: FS 02 @ 3' (H233489-02)**

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	07/10/2023	ND	2.24	112	2.00	3.65	
Toluene*	<0.050	0.050	07/10/2023	ND	2.21	110	2.00	1.30	
Ethylbenzene*	<0.050	0.050	07/10/2023	ND	2.11	105	2.00	3.43	
Total Xylenes*	<0.150	0.150	07/10/2023	ND	6.52	109	6.00	3.02	
Total BTEX	<0.300	0.300	07/10/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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
<b>Chloride</b>	<b>208</b>	16.0	07/11/2023	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2023	ND	175	87.5	200	0.0926	
<b>DRO &gt;C10-C28*</b>	<b>61.4</b>	10.0	07/11/2023	ND	173	86.4	200	4.34	
<b>EXT DRO &gt;C28-C36</b>	<b>94.3</b>	10.0	07/11/2023	ND					

Surrogate: 1-Chlorooctane 106 % 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  
 KALEI JENNINGS  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received:	07/10/2023	Sampling Date:	07/10/2023
Reported:	07/11/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.79857,-103.752337		

**Sample ID: FS 03 @ 1.5' (H233489-03)**

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	07/10/2023	ND	2.24	112	2.00	3.65	
Toluene*	<0.050	0.050	07/10/2023	ND	2.21	110	2.00	1.30	
Ethylbenzene*	<0.050	0.050	07/10/2023	ND	2.11	105	2.00	3.43	
Total Xylenes*	<0.150	0.150	07/10/2023	ND	6.52	109	6.00	3.02	
Total BTEX	<0.300	0.300	07/10/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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
<b>Chloride</b>	<b>304</b>	16.0	07/11/2023	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2023	ND	175	87.5	200	0.0926	
<b>DRO &gt;C10-C28*</b>	<b>177</b>	10.0	07/11/2023	ND	173	86.4	200	4.34	
<b>EXT DRO &gt;C28-C36</b>	<b>147</b>	10.0	07/11/2023	ND					

Surrogate: 1-Chlorooctane 105 % 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:	07/10/2023	Sampling Date:	07/10/2023
Reported:	07/11/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.79857,-103.752337		

**Sample ID: SW 01 @ 0-4' (H233489-04)**

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	07/10/2023	ND	2.24	112	2.00	3.65	
Toluene*	<0.050	0.050	07/10/2023	ND	2.21	110	2.00	1.30	
Ethylbenzene*	<0.050	0.050	07/10/2023	ND	2.11	105	2.00	3.43	
Total Xylenes*	<0.150	0.150	07/10/2023	ND	6.52	109	6.00	3.02	
Total BTEX	<0.300	0.300	07/10/2023	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
<b>Chloride</b>	<b>208</b>	16.0	07/11/2023	ND	432	108	400	7.69	

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	07/11/2023	ND	175	87.5	200	0.0926		
<b>DRO &gt;C10-C28*</b>	<b>177</b>	10.0	07/11/2023	ND	173	86.4	200	4.34		
<b>EXT DRO &gt;C28-C36</b>	<b>216</b>	10.0	07/11/2023	ND						

Surrogate: 1-Chlorooctane 141 % 48.2-134

Surrogate: 1-Chlorooctadecane 172 % 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



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

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

**Company Name:** ENSOLM LLC  
**Project Manager:** Peter Jennings  
**Address:** 8122 Nat'l Parks Hwy  
**City:** Lordsburg State: NM Zip: 88020  
**Phone #:** 575-1688-2508 Fax #:  
**Project #:** 0822051088 Project Owner: Mauricek  
**Project Name:** MPA 204 State: Zip:  
**Project Location:** 32.79857, -108.752357  
**Sampler Name:** Juliana Faldomata Phone #: Fax #:  
**FOR LAB USE ONLY**

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	ANALYSIS REQUEST
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :			
H233489	F501 @ 4'	1	1			X				7/10/23	1345	BTEX
	F502 @ 3'	2	1			X					1345	TPH
	F508 @ 1.5'	3	1			X					1350	chlorides
	SU07 @ 0-4'	4	1			X					1355	

**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: 7-10-23  
**Received By:** [Signature] Date: 7-10-23  
**Time:** 1546  
**Observed Temp. °C:** 3.9  
**Corrected Temp. °C:** [Blank]  
**Sample Condition:** Cool Intact [X] Yes [ ] No [ ]  
**Checked By:** [Signature] (Initials) [Blank]  
**Turnaround Time:** Standard [ ] Rush [X]  
**Thermometer ID #413** [Signature]  
**Correction Factor -0.05C** [Signature]  
**Remarks:** All Results are emailed. Please provide Email address: keene@ensolm.com  
**Verbal Result:** [ ] Yes [X] No  
**Add'l Phone #:** [Blank]  
**Bacteria (only) Sample Condition:** Cool Intact [ ] Yes [ ] No [ ]  
**Corrected Temp. °C:** [Blank]

Delivered By: (Circle One)  UPS  Bus  Other: [Blank]  
 FORM 006 REV 07/10/22  
 † Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



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

---

July 12, 2023

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: MCA 204

Enclosed are the results of analyses for samples received by the laboratory on 07/11/23 15:39.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". 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  
 KALEI JENNINGS  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received:	07/11/2023	Sampling Date:	07/11/2023
Reported:	07/12/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 05 @ 3' (H233531-01)**

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	07/12/2023	ND	1.86	93.0	2.00	1.06	
Toluene*	<0.050	0.050	07/12/2023	ND	1.84	91.9	2.00	0.771	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	1.83	91.5	2.00	0.496	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	5.61	93.5	6.00	0.395	
Total BTEX	<0.300	0.300	07/12/2023	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	80.0	16.0	07/12/2023	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	07/12/2023	ND	190	95.2	200	7.73	
DRO >C10-C28*	<10.0	10.0	07/12/2023	ND	204	102	200	15.8	
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 132 % 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:	07/11/2023	Sampling Date:	07/11/2023
Reported:	07/12/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 06 @ 3' (H233531-02)**

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	07/12/2023	ND	1.86	93.0	2.00	1.06	
Toluene*	<0.050	0.050	07/12/2023	ND	1.84	91.9	2.00	0.771	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	1.83	91.5	2.00	0.496	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	5.61	93.5	6.00	0.395	
Total BTEX	<0.300	0.300	07/12/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 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	07/12/2023	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	07/12/2023	ND	190	95.2	200	7.73	
DRO >C10-C28*	<10.0	10.0	07/12/2023	ND	204	102	200	15.8	
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 138 % 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:	07/11/2023	Sampling Date:	07/11/2023
Reported:	07/12/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 07 @ 3' (H233531-03)**

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	07/12/2023	ND	1.86	93.0	2.00	1.06	
Toluene*	<0.050	0.050	07/12/2023	ND	1.84	91.9	2.00	0.771	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	1.83	91.5	2.00	0.496	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	5.61	93.5	6.00	0.395	
Total BTEX	<0.300	0.300	07/12/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 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
<b>Chloride</b>	<b>240</b>	16.0	07/12/2023	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	07/12/2023	ND	190	95.2	200	7.73	
<b>DRO &gt;C10-C28*</b>	<b>16.6</b>	10.0	07/12/2023	ND	204	102	200	15.8	
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane 105 % 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  
 KALEI JENNINGS  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received:	07/11/2023	Sampling Date:	07/11/2023
Reported:	07/12/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 08 @ 3' (H233531-04)**

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	07/12/2023	ND	1.86	93.0	2.00	1.06	
Toluene*	<0.050	0.050	07/12/2023	ND	1.84	91.9	2.00	0.771	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	1.83	91.5	2.00	0.496	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	5.61	93.5	6.00	0.395	
Total BTEX	<0.300	0.300	07/12/2023	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	<b>256</b>	16.0	07/12/2023	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	07/12/2023	ND	190	95.2	200	7.73	
<b>DRO &gt;C10-C28*</b>	<b>13.6</b>	10.0	07/12/2023	ND	204	102	200	15.8	
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane 103 % 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:	07/11/2023	Sampling Date:	07/11/2023
Reported:	07/12/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 09 @ 3' (H233531-05)**

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	07/12/2023	ND	1.86	93.0	2.00	1.06	
Toluene*	<0.050	0.050	07/12/2023	ND	1.84	91.9	2.00	0.771	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	1.83	91.5	2.00	0.496	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	5.61	93.5	6.00	0.395	
Total BTEX	<0.300	0.300	07/12/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 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
<b>Chloride</b>	<b>192</b>	16.0	07/12/2023	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	07/12/2023	ND	190	95.2	200	7.73	
<b>DRO &gt;C10-C28*</b>	<b>75.9</b>	10.0	07/12/2023	ND	204	102	200	15.8	
<b>EXT DRO &gt;C28-C36</b>	<b>29.3</b>	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane 109 % 48.2-134

Surrogate: 1-Chlorooctadecane 135 % 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:	07/11/2023	Sampling Date:	07/11/2023
Reported:	07/12/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 10 @ 3' (H233531-06)**

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	07/12/2023	ND	1.86	93.0	2.00	1.06	
Toluene*	<0.050	0.050	07/12/2023	ND	1.84	91.9	2.00	0.771	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	1.83	91.5	2.00	0.496	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	5.61	93.5	6.00	0.395	
Total BTEX	<0.300	0.300	07/12/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 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	07/12/2023	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	07/12/2023	ND	190	95.2	200	7.73	
DRO >C10-C28*	<10.0	10.0	07/12/2023	ND	204	102	200	15.8	
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane 107 % 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:	07/11/2023	Sampling Date:	07/11/2023
Reported:	07/12/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 11 @ 2' (H233531-07)**

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	07/12/2023	ND	1.86	93.0	2.00	1.06	
Toluene*	<0.050	0.050	07/12/2023	ND	1.84	91.9	2.00	0.771	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	1.83	91.5	2.00	0.496	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	5.61	93.5	6.00	0.395	
Total BTEX	<0.300	0.300	07/12/2023	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
<b>Chloride</b>	<b>192</b>	16.0	07/12/2023	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	07/12/2023	ND	190	95.2	200	7.73	
<b>DRO &gt;C10-C28*</b>	<b>20.6</b>	10.0	07/12/2023	ND	204	102	200	15.8	
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane 105 % 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  
 KALEI JENNINGS  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received:	07/11/2023	Sampling Date:	07/11/2023
Reported:	07/12/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 12 @ 2' (H233531-08)**

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	07/12/2023	ND	1.86	93.0	2.00	1.06	
Toluene*	<0.050	0.050	07/12/2023	ND	1.84	91.9	2.00	0.771	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	1.83	91.5	2.00	0.496	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	5.61	93.5	6.00	0.395	
Total BTEX	<0.300	0.300	07/12/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 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	<b>272</b>	16.0	07/12/2023	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	07/12/2023	ND	200	100	200	7.77	
<b>DRO &gt;C10-C28*</b>	<b>15.4</b>	10.0	07/12/2023	ND	200	100	200	7.51	
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 136 % 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:	07/11/2023	Sampling Date:	07/11/2023
Reported:	07/12/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 13 @ 2' (H233531-09)**

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	07/12/2023	ND	1.86	93.0	2.00	1.06	
Toluene*	<0.050	0.050	07/12/2023	ND	1.84	91.9	2.00	0.771	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	1.83	91.5	2.00	0.496	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	5.61	93.5	6.00	0.395	
Total BTEX	<0.300	0.300	07/12/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 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
<b>Chloride</b>	<b>256</b>	16.0	07/12/2023	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	07/12/2023	ND	200	100	200	7.77	
<b>DRO &gt;C10-C28*</b>	<b>22.7</b>	10.0	07/12/2023	ND	200	100	200	7.51	
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 133 % 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:	07/11/2023	Sampling Date:	07/11/2023
Reported:	07/12/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 14 @ 2' (H233531-10)**

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	07/12/2023	ND	1.86	93.0	2.00	1.06	
Toluene*	<0.050	0.050	07/12/2023	ND	1.84	91.9	2.00	0.771	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	1.83	91.5	2.00	0.496	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	5.61	93.5	6.00	0.395	
Total BTEX	<0.300	0.300	07/12/2023	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	208	16.0	07/12/2023	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	07/12/2023	ND	200	100	200	7.77	
DRO >C10-C28*	86.4	10.0	07/12/2023	ND	200	100	200	7.51	
EXT DRO >C28-C36	25.6	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 124 % 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:	07/11/2023	Sampling Date:	07/11/2023
Reported:	07/12/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 15 @ 2' (H233531-11)**

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	07/12/2023	ND	2.10	105	2.00	11.8	
Toluene*	<0.050	0.050	07/12/2023	ND	2.09	104	2.00	12.1	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	2.01	100	2.00	13.1	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	6.21	104	6.00	12.3	
Total BTEX	<0.300	0.300	07/12/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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	07/12/2023	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	07/12/2023	ND	200	100	200	7.77	
DRO >C10-C28*	<10.0	10.0	07/12/2023	ND	200	100	200	7.51	
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 134 % 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:	07/11/2023	Sampling Date:	07/11/2023
Reported:	07/12/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: SW 02 @ 0-3' (H233531-12)**

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	07/12/2023	ND	2.10	105	2.00	11.8	
Toluene*	<0.050	0.050	07/12/2023	ND	2.09	104	2.00	12.1	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	2.01	100	2.00	13.1	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	6.21	104	6.00	12.3	
Total BTEX	<0.300	0.300	07/12/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 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	07/12/2023	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	07/12/2023	ND	200	100	200	7.77	
DRO >C10-C28*	<10.0	10.0	07/12/2023	ND	200	100	200	7.51	
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane 114 % 48.2-134

Surrogate: 1-Chlorooctadecane 140 % 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:	07/11/2023	Sampling Date:	07/11/2023
Reported:	07/12/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: SW 03 @ 0-3' (H233531-13)**

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	07/12/2023	ND	2.10	105	2.00	11.8	
Toluene*	<0.050	0.050	07/12/2023	ND	2.09	104	2.00	12.1	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	2.01	100	2.00	13.1	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	6.21	104	6.00	12.3	
Total BTEX	<0.300	0.300	07/12/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/12/2023	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	07/12/2023	ND	200	100	200	7.77	
DRO >C10-C28*	<10.0	10.0	07/12/2023	ND	200	100	200	7.51	
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane 114 % 48.2-134

Surrogate: 1-Chlorooctadecane 138 % 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:	07/11/2023	Sampling Date:	07/11/2023
Reported:	07/12/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: SW 04 @ 0-3' (H233531-14)**

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	07/12/2023	ND	2.10	105	2.00	11.8	
Toluene*	<0.050	0.050	07/12/2023	ND	2.09	104	2.00	12.1	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	2.01	100	2.00	13.1	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	6.21	104	6.00	12.3	
Total BTEX	<0.300	0.300	07/12/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 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	07/12/2023	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	07/12/2023	ND	200	100	200	7.77	
DRO >C10-C28*	<10.0	10.0	07/12/2023	ND	200	100	200	7.51	
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 122 % 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:	07/11/2023	Sampling Date:	07/11/2023
Reported:	07/12/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: SW 05 @ 0-3' (H233531-15)**

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	07/12/2023	ND	2.10	105	2.00	11.8	
Toluene*	<0.050	0.050	07/12/2023	ND	2.09	104	2.00	12.1	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	2.01	100	2.00	13.1	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	6.21	104	6.00	12.3	
Total BTEX	<0.300	0.300	07/12/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/12/2023	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	07/12/2023	ND	200	100	200	7.77	
DRO >C10-C28*	<10.0	10.0	07/12/2023	ND	200	100	200	7.51	
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane 114 % 48.2-134

Surrogate: 1-Chlorooctadecane 138 % 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: Orsolum, LLC  
 Project Manager: Haley Spivey  
 Address: 8122 Nat'l Park Highway  
 City: Carlsbad State: NM Zip: 88220  
 Phone #: 817-683-2503 Fax #: \_\_\_\_\_  
 Project #: BD2051084 Project Owner: Maverick  
 Project Name: NEA 904  
 Project Location: (32, 148451 - 103, 752337)  
 Sampler Name: Juanita Palomares

P.O. #: \_\_\_\_\_  
 Company: APA  
 Attn: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_  
 State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone #: \_\_\_\_\_  
 Fax #: \_\_\_\_\_

FOR LAB USE ONLY	Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV		DATE	TIME	ANALYSIS
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL			
	<u>H233531</u>	<u>F505 @ 8'</u>	<input checked="" type="checkbox"/>	<u>1</u>			<input checked="" type="checkbox"/>					<u>7/11/23</u>	<u>1400</u>	<u>BTEX</u>	
		<u>F506 @ 3'</u>											<u>1405</u>	<u>IPH</u>	
		<u>F507 @ 3'</u>											<u>1410</u>	<u>Chlorides</u>	
		<u>F508 @ 3'</u>											<u>1415</u>		
		<u>F509 @ 3'</u>											<u>1420</u>		
		<u>F510 @ 3'</u>											<u>1425</u>		
		<u>F511 @ 2'</u>											<u>1430</u>		
		<u>F512 @ 2'</u>											<u>1435</u>		
		<u>F513 @ 2'</u>											<u>1440</u>		
		<u>F514 @ 2'</u>											<u>1445</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 upon any of the above stated reasons, or otherwise.

Relinquished By: \_\_\_\_\_  
 Date: 7-11-23  
 Time: 15:39  
 Received By: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Time: \_\_\_\_\_

Delivered By: (Circle One) UPS Observed Temp. °C 4.3  
 Corrected Temp. °C \_\_\_\_\_  
 Sample Condition:  Cool  Intact  
 Yes  No

Turnaround Time: Standard  Rush   
 Thermometer ID: #113 Bacteria (only)   
 Correction Factor: 0.00 Cool Intact   Yes  No  
 Add'l Phone #: \_\_\_\_\_  
 All Results are emailed. Please provide Email address: \_\_\_\_\_  
 REMARKS: Keenings@orsolum.com falcornate@orsolum.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: **ERBOLVIN LTD**  
 Project Manager: **HOPE SPAINOS**  
 Address: **5122 NATI PARKWAY HWY**  
 City: **ARKSPOOL** State: **NM** Zip: **88700**  
 Phone #: **505-683-2508** Fax #: **-**  
 Project #: **6522051788** Project Owner: **MARQUEK**  
 Project Name: **MCA 204**  
 Project Location: **(82.798457 - 108.75237)**  
 Sampler Name: **JULIANA PALOMATA**  
 P.O. #: **AA**  
 Company: **AA**  
 Attn: **AA**  
 Address: **AA**  
 City: **AA**  
 State: **AA** Zip: **AA**  
 Phone #: **AA**  
 Fax #: **AA**

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	ANALYSIS
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :			
AB33331	ESR @ 2'		1			X				7/11/23	1450	BTEX
	SUD02 @ 0-3'		1			X				7/11/23	1455	TPH
	SUD03 @ 0-3'		1			X				7/11/23	1500	Chlorides
	SUD04 @ 0-3'		1			X				7/11/23	1505	
	SUD05 @ 0-3'		1			X				7/11/23	1505	

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: **7-11-23** Received By: *[Signature]* Date: **7-15-23**  
 Relinquished By: *[Signature]* Date: **7-15-23** Received By: *[Signature]* Date: **7-15-23**

Delivered By: (Circle One) **UPS** Observed Temp. °C **43** Sample Condition **Intact** CHECKED BY: *[Signature]*  
 Sampler - UPS - Bus - Other: **UPS** Corrected Temp. °C **43** Cool  Intact  No  No  No  No

Turnaround Time: **44hr** Standard  Bacteria (only)  Sample Condition   
 Thermometer ID: **444** Rush  Cool Intact  Observed Temp. °C **43**  
 Correction Factor: **-0.00** No  Yes  No  No  No  Corrected Temp. °C **43**



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

---

July 13, 2023

KALEI JENNINGS  
ENSOLUM, LLC  
705 W WADLEY AVE.  
MIDLAND, TX 79705

RE: MCA 204

Enclosed are the results of analyses for samples received by the laboratory on 07/12/23 15:45.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". 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, LLC  
 KALEI JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	07/12/2023	Sampling Date:	07/12/2023
Reported:	07/13/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	32.8001,-103.7521		

**Sample ID: FS 04 1.5' (H233573-01)**

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	07/13/2023	ND	2.04	102	2.00	1.94	
Toluene*	<0.050	0.050	07/13/2023	ND	2.01	101	2.00	1.22	
Ethylbenzene*	<0.050	0.050	07/13/2023	ND	2.00	100	2.00	0.806	
Total Xylenes*	<0.150	0.150	07/13/2023	ND	6.07	101	6.00	0.114	
Total BTEX	<0.300	0.300	07/13/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/13/2023	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/13/2023	ND	201	101	200	9.76	
DRO >C10-C28*	<10.0	10.0	07/13/2023	ND	214	107	200	9.63	
EXT DRO >C28-C36	<10.0	10.0	07/13/2023	ND					

Surrogate: 1-Chlorooctane 92.5 % 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, LLC  
 KALEI JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	07/12/2023	Sampling Date:	07/12/2023
Reported:	07/13/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	32.8001,-103.7521		

**Sample ID: FS 09 3.25' (H233573-02)**

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	07/13/2023	ND	2.04	102	2.00	1.94	
Toluene*	<0.050	0.050	07/13/2023	ND	2.01	101	2.00	1.22	
Ethylbenzene*	<0.050	0.050	07/13/2023	ND	2.00	100	2.00	0.806	
Total Xylenes*	<0.150	0.150	07/13/2023	ND	6.07	101	6.00	0.114	
Total BTEX	<0.300	0.300	07/13/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 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	07/13/2023	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/13/2023	ND	201	101	200	9.76	
DRO >C10-C28*	<10.0	10.0	07/13/2023	ND	214	107	200	9.63	
EXT DRO >C28-C36	<10.0	10.0	07/13/2023	ND					

Surrogate: 1-Chlorooctane 93.6 % 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, LLC  
 KALEI JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	07/12/2023	Sampling Date:	07/12/2023
Reported:	07/13/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	32.8001,-103.7521		

**Sample ID: FS 14 3.25' (H233573-03)**

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	07/13/2023	ND	2.04	102	2.00	1.94	
Toluene*	<0.050	0.050	07/13/2023	ND	2.01	101	2.00	1.22	
Ethylbenzene*	<0.050	0.050	07/13/2023	ND	2.00	100	2.00	0.806	
Total Xylenes*	<0.150	0.150	07/13/2023	ND	6.07	101	6.00	0.114	
Total BTEX	<0.300	0.300	07/13/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/13/2023	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/13/2023	ND	201	101	200	9.76	
DRO >C10-C28*	<10.0	10.0	07/13/2023	ND	214	107	200	9.63	
EXT DRO >C28-C36	<10.0	10.0	07/13/2023	ND					

Surrogate: 1-Chlorooctane 93.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 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, LLC  
 KALEI JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	07/12/2023	Sampling Date:	07/12/2023
Reported:	07/13/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	32.8001,-103.7521		

**Sample ID: FS 16 2.5' (H233573-04)**

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	07/13/2023	ND	2.04	102	2.00	1.94	
Toluene*	<0.050	0.050	07/13/2023	ND	2.01	101	2.00	1.22	
Ethylbenzene*	<0.050	0.050	07/13/2023	ND	2.00	100	2.00	0.806	
Total Xylenes*	<0.150	0.150	07/13/2023	ND	6.07	101	6.00	0.114	
Total BTEX	<0.300	0.300	07/13/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/13/2023	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/13/2023	ND	201	101	200	9.76	
DRO >C10-C28*	<10.0	10.0	07/13/2023	ND	214	107	200	9.63	
EXT DRO >C28-C36	<10.0	10.0	07/13/2023	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 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, LLC  
 KALEI JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	07/12/2023	Sampling Date:	07/12/2023
Reported:	07/13/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	32.8001,-103.7521		

**Sample ID: FS 17 2.5' (H233573-05)**

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	07/13/2023	ND	2.04	102	2.00	1.94	
Toluene*	<0.050	0.050	07/13/2023	ND	2.01	101	2.00	1.22	
Ethylbenzene*	<0.050	0.050	07/13/2023	ND	2.00	100	2.00	0.806	
Total Xylenes*	<0.150	0.150	07/13/2023	ND	6.07	101	6.00	0.114	
Total BTEX	<0.300	0.300	07/13/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 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	07/13/2023	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/13/2023	ND	201	101	200	9.76	
DRO >C10-C28*	<10.0	10.0	07/13/2023	ND	214	107	200	9.63	
EXT DRO >C28-C36	<10.0	10.0	07/13/2023	ND					

Surrogate: 1-Chlorooctane 100 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 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, LLC  
 KALEI JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	07/12/2023	Sampling Date:	07/12/2023
Reported:	07/13/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	32.8001,-103.7521		

**Sample ID: FS 18 2.5' (H233573-06)**

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	07/13/2023	ND	2.04	102	2.00	1.94	
Toluene*	<0.050	0.050	07/13/2023	ND	2.01	101	2.00	1.22	
Ethylbenzene*	<0.050	0.050	07/13/2023	ND	2.00	100	2.00	0.806	
Total Xylenes*	<0.150	0.150	07/13/2023	ND	6.07	101	6.00	0.114	
Total BTEX	<0.300	0.300	07/13/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/13/2023	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/13/2023	ND	201	101	200	9.76	
DRO >C10-C28*	<10.0	10.0	07/13/2023	ND	214	107	200	9.63	
EXT DRO >C28-C36	<10.0	10.0	07/13/2023	ND					

Surrogate: 1-Chlorooctane 89.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 100 % 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, LLC  
 KALEI JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	07/12/2023	Sampling Date:	07/12/2023
Reported:	07/13/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	32.8001,-103.7521		

**Sample ID: SW 06 0-2.5' (H233573-07)**

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	07/13/2023	ND	2.04	102	2.00	1.94	
Toluene*	<0.050	0.050	07/13/2023	ND	2.01	101	2.00	1.22	
Ethylbenzene*	<0.050	0.050	07/13/2023	ND	2.00	100	2.00	0.806	
Total Xylenes*	<0.150	0.150	07/13/2023	ND	6.07	101	6.00	0.114	
Total BTEX	<0.300	0.300	07/13/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 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
<b>Chloride</b>	<b>16.0</b>	16.0	07/13/2023	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/13/2023	ND	201	101	200	9.76	
DRO >C10-C28*	<10.0	10.0	07/13/2023	ND	214	107	200	9.63	
EXT DRO >C28-C36	<10.0	10.0	07/13/2023	ND					

Surrogate: 1-Chlorooctane 87.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.9 % 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

**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: <b>Enslun, LLC</b>		<b>BILL TO</b>	
Project Manager: <b>Kalei Jennings</b>		P.O. #:	
Address: <b>601 N. Maricopa St. #400</b>		Company: <b>Enslun, LLC</b>	
City: <b>Midland</b>		Attn: <b>Kalei Jennings</b>	
State: <b>TX</b> Zip: <b>79701</b>		Address: <b>601 N. Maricopa St. #400</b>	
Phone #: <b>817-683-2503</b> Fax #:		City: <b>Midland</b>	
Project #: _____ Project Owner:		State: <b>TX</b> Zip: <b>79701</b>	
Project Name: <b>MCA 204</b>		Phone #: <b>817-683-2503</b>	
Project Location: <b>32, 8001, -103, 7521</b>		Fax #:	
Sampler Name: <b>Peter Van Ratten</b>			

Lab I.D.	Sample I.D.	Depth	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	TPH	BTEX	Chlorides
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					
<b>HA3357B</b>															
1	ES04	1.5'	C	1						7-12-23	1400	✓	✓	✓	
2	ES09	3.25'	C	1							1405	✓	✓	✓	
3	ES14	3.25'	C	1							1410	✓	✓	✓	
4	ES16	2.5'	C	1							1420	✓	✓	✓	
5	ES17	2.5'	C	1							1425	✓	✓	✓	
6	ES18	2.5'	C	1							1430	✓	✓	✓	
7	SD06	0-25'	C	1							1440	✓	✓	✓	

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

Relinquished By: <b>Peter Van Ratten</b>	Date: <b>7-12-23</b>	Received By: <b>Shodrakuef</b>	Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date: <b>7-12-23</b>	Time: <b>1345</b>	Received By: <b>Shodrakuef</b>	Add'l Phone #:
Date: _____	Time: _____	REMARKS: <b>TEMP BLANK 0.4: Shodrakuef</b>	All Results are emailed. Please provide Email address:

Delivered By: (Circle One)	Observed Temp. °C	Sample Condition	CHECKED BY:
Sampler - UPS - Bus - Other:	<b>60.1</b>	Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>Shodrakuef</b>
FORWARD TO: 33071022	Corrected Temp. °C	Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	(Initials)
		Turnaround Time: <b>Standard</b>	Bacteria (only) Sample Condition
		Thermometer ID #13	Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No
		Correction Factor -0.6°C	Observed Temp. °C
		<b>24 hr</b>	Corrected Temp. °C



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

---

July 18, 2023

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: MCA 204

Enclosed are the results of analyses for samples received by the laboratory on 07/14/23 13:15.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	07/14/2023	Sampling Date:	07/14/2023
Reported:	07/18/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Shari Cisneros
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 19 @ 3' (H233657-01)**

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	07/15/2023	ND	2.08	104	2.00	2.83	
Toluene*	<0.050	0.050	07/15/2023	ND	2.05	103	2.00	0.837	
Ethylbenzene*	<0.050	0.050	07/15/2023	ND	2.13	107	2.00	1.12	
Total Xylenes*	<0.150	0.150	07/15/2023	ND	6.44	107	6.00	0.626	
Total BTEX	<0.300	0.300	07/15/2023	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	32.0	16.0	07/17/2023	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	07/16/2023	ND	207	103	200	2.63	
DRO >C10-C28*	<10.0	10.0	07/16/2023	ND	199	99.4	200	4.11	
EXT DRO >C28-C36	<10.0	10.0	07/16/2023	ND					

Surrogate: 1-Chlorooctane 118 % 48.2-134

Surrogate: 1-Chlorooctadecane 132 % 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:	07/14/2023	Sampling Date:	07/14/2023
Reported:	07/18/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Shari Cisneros
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 20 @ 3' (H233657-02)**

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	07/15/2023	ND	2.08	104	2.00	2.83	
Toluene*	<0.050	0.050	07/15/2023	ND	2.05	103	2.00	0.837	
Ethylbenzene*	<0.050	0.050	07/15/2023	ND	2.13	107	2.00	1.12	
Total Xylenes*	<0.150	0.150	07/15/2023	ND	6.44	107	6.00	0.626	
Total BTEX	<0.300	0.300	07/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 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	07/17/2023	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	07/16/2023	ND	207	103	200	2.63	
DRO >C10-C28*	<10.0	10.0	07/16/2023	ND	199	99.4	200	4.11	
EXT DRO >C28-C36	<10.0	10.0	07/16/2023	ND					

Surrogate: 1-Chlorooctane 117 % 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  
 KALEI JENNINGS  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received:	07/14/2023	Sampling Date:	07/14/2023
Reported:	07/18/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Shari Cisneros
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 21 @ 3' (H233657-03)**

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	07/15/2023	ND	2.08	104	2.00	2.83	
Toluene*	<0.050	0.050	07/15/2023	ND	2.05	103	2.00	0.837	
Ethylbenzene*	<0.050	0.050	07/15/2023	ND	2.13	107	2.00	1.12	
Total Xylenes*	<0.150	0.150	07/15/2023	ND	6.44	107	6.00	0.626	
Total BTEX	<0.300	0.300	07/15/2023	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	64.0	16.0	07/17/2023	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	07/16/2023	ND	207	103	200	2.63	
DRO >C10-C28*	<10.0	10.0	07/16/2023	ND	199	99.4	200	4.11	
EXT DRO >C28-C36	<10.0	10.0	07/16/2023	ND					

Surrogate: 1-Chlorooctane 128 % 48.2-134

Surrogate: 1-Chlorooctadecane 146 % 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:	07/14/2023	Sampling Date:	07/14/2023
Reported:	07/18/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Shari Cisneros
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 22 @ 3' (H233657-04)**

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	07/15/2023	ND	2.08	104	2.00	2.83	
Toluene*	<0.050	0.050	07/15/2023	ND	2.05	103	2.00	0.837	
Ethylbenzene*	<0.050	0.050	07/15/2023	ND	2.13	107	2.00	1.12	
Total Xylenes*	<0.150	0.150	07/15/2023	ND	6.44	107	6.00	0.626	
Total BTEX	<0.300	0.300	07/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 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	07/17/2023	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	07/16/2023	ND	207	103	200	2.63	
DRO >C10-C28*	<10.0	10.0	07/16/2023	ND	199	99.4	200	4.11	
EXT DRO >C28-C36	<10.0	10.0	07/16/2023	ND					

Surrogate: 1-Chlorooctane 114 % 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  
KALEI JENNINGS  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received:	07/14/2023	Sampling Date:	07/14/2023
Reported:	07/18/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Shari Cisneros
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: SW 07 @ 0-3' (H233657-05)**

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	07/15/2023	ND	2.08	104	2.00	2.83		
Toluene*	<0.050	0.050	07/15/2023	ND	2.05	103	2.00	0.837		
Ethylbenzene*	<0.050	0.050	07/15/2023	ND	2.13	107	2.00	1.12		
Total Xylenes*	<0.150	0.150	07/15/2023	ND	6.44	107	6.00	0.626		
Total BTEX	<0.300	0.300	07/15/2023	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	07/17/2023	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	07/16/2023	ND	207	103	200	2.63		
DRO >C10-C28*	<10.0	10.0	07/16/2023	ND	199	99.4	200	4.11		
EXT DRO >C28-C36	<10.0	10.0	07/16/2023	ND						

Surrogate: 1-Chlorooctane 115 % 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  
 KALEI JENNINGS  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received:	07/14/2023	Sampling Date:	07/14/2023
Reported:	07/18/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Shari Cisneros
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: SW 08 @ 0-3' (H233657-06)**

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	07/15/2023	ND	2.08	104	2.00	2.83	
Toluene*	<0.050	0.050	07/15/2023	ND	2.05	103	2.00	0.837	
Ethylbenzene*	<0.050	0.050	07/15/2023	ND	2.13	107	2.00	1.12	
Total Xylenes*	<0.150	0.150	07/15/2023	ND	6.44	107	6.00	0.626	
Total BTEX	<0.300	0.300	07/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 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	07/17/2023	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	07/16/2023	ND	207	103	200	2.63	
DRO >C10-C28*	<10.0	10.0	07/16/2023	ND	199	99.4	200	4.11	
EXT DRO >C28-C36	<10.0	10.0	07/16/2023	ND					

Surrogate: 1-Chlorooctane 114 % 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

Notes and Definitions

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

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: <u>PERSONAL LLC</u>		P.O. #:				
Project Manager: <u>Aimee Cole</u>		Company: <u>A-A</u>				
Address: <u>8122 North Park Hills Hwy</u>		Attn:				
City: <u>Portland</u>		Address:				
State: <u>OR</u> Zip: <u>97220</u>		City:				
Phone # <u>503 440-7814</u> Fax #:		State:				
Project #: <u>03D2057058</u> Project Owner: <u>Mauverick</u>		City:				
Project Name: <u>MEA 104</u>		State:				
Project Location: <u>82.78457, -103.52357</u>		Phone #:				
Sampler Name: <u>JULIANNA FALCONI</u>		Fax #:				
FOR LAB USE ONLY		PRESERV				
Lab I.D. <u>H233657</u>	Sample I.D.	(G)RAB OR (C)OMP.	DATE	TIME	ANALYSIS	
		# CONTAINERS	7/14/23	1200		X BTEX
		GROUNDWATER		1205		X TPH
		WASTEWATER		1215		X CHLORIDES
MATRIX	SOIL	X				
	OIL					
	SLUDGE					
	OTHER:					
	ACID/BASE:	X				
	ICE / COOL					
	OTHER:					
	DATE					
	TIME					

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising under this 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 upon any of the above stated reasons or otherwise.

Relinquished By: [Signature] Date: 7/14/23 Time: 13:15  
 Received By: [Signature] Date: 7/14/23 Time: 13:15

Delivered By: (Circle One) Observed Temp. °C 6.0 Sample Condition Intact CHECKED BY: [Signature]  
 Corrected Temp. °C 4.4 Cool Intact  Yes  No  
 Sampler - UPS - Bus - Other: UPS Bacteria (only) Sample Condition  Yes  No  
 Turnaround Time: 48hr Standard  Rush  Bacteria (only) Sample Condition  Yes  No  
 Thermometer ID # 143 Corrected Temp. °C 4.8 Cool Intact  Yes  No  
 Correction Factor 0.8°C Corrected Temp. °C 4.8



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

---

July 18, 2023

AIMEE COLE

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: MCA 204

Enclosed are the results of analyses for samples received by the laboratory on 07/17/23 14:52.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	07/17/2023	Sampling Date:	07/17/2023
Reported:	07/18/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 23 @ 3' (H233685-01)**

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	07/17/2023	ND	2.10	105	2.00	0.540	
Toluene*	<0.050	0.050	07/17/2023	ND	2.07	103	2.00	0.0760	
Ethylbenzene*	<0.050	0.050	07/17/2023	ND	2.17	108	2.00	0.265	
Total Xylenes*	<0.150	0.150	07/17/2023	ND	6.50	108	6.00	0.346	
Total BTEX	<0.300	0.300	07/17/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 118 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	07/18/2023	ND	432	108	400	3.64	

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	07/18/2023	ND	170	85.1	200	0.445	
DRO >C10-C28*	<10.0	10.0	07/18/2023	ND	167	83.6	200	3.05	
EXT DRO >C28-C36	<10.0	10.0	07/18/2023	ND					

Surrogate: 1-Chlorooctane 80.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.9 % 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:	07/17/2023	Sampling Date:	07/17/2023
Reported:	07/18/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 24 @ 3' (H233685-02)**

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	07/17/2023	ND	2.10	105	2.00	0.540	
Toluene*	<0.050	0.050	07/17/2023	ND	2.07	103	2.00	0.0760	
Ethylbenzene*	<0.050	0.050	07/17/2023	ND	2.17	108	2.00	0.265	
Total Xylenes*	<0.150	0.150	07/17/2023	ND	6.50	108	6.00	0.346	
Total BTEX	<0.300	0.300	07/17/2023	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	160	16.0	07/18/2023	ND	432	108	400	3.64	

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	07/18/2023	ND	170	85.1	200	0.445	
DRO >C10-C28*	<10.0	10.0	07/18/2023	ND	167	83.6	200	3.05	
EXT DRO >C28-C36	<10.0	10.0	07/18/2023	ND					

Surrogate: 1-Chlorooctane 79.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.1 % 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:	07/17/2023	Sampling Date:	07/17/2023
Reported:	07/18/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 25 @ 4' (H233685-03)**

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	07/17/2023	ND	2.10	105	2.00	0.540	
Toluene*	<0.050	0.050	07/17/2023	ND	2.07	103	2.00	0.0760	
Ethylbenzene*	<0.050	0.050	07/17/2023	ND	2.17	108	2.00	0.265	
Total Xylenes*	<0.150	0.150	07/17/2023	ND	6.50	108	6.00	0.346	
Total BTEX	<0.300	0.300	07/17/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 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	07/18/2023	ND	432	108	400	3.64	

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	07/18/2023	ND	170	85.1	200	0.445	
DRO >C10-C28*	<10.0	10.0	07/18/2023	ND	167	83.6	200	3.05	
EXT DRO >C28-C36	<10.0	10.0	07/18/2023	ND					

Surrogate: 1-Chlorooctane 74.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 82.1 % 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:	07/17/2023	Sampling Date:	07/17/2023
Reported:	07/18/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: SW 09 @ 0-3' (H233685-04)**

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	07/17/2023	ND	2.10	105	2.00	0.540	
Toluene*	<0.050	0.050	07/17/2023	ND	2.07	103	2.00	0.0760	
Ethylbenzene*	<0.050	0.050	07/17/2023	ND	2.17	108	2.00	0.265	
Total Xylenes*	<0.150	0.150	07/17/2023	ND	6.50	108	6.00	0.346	
Total BTEX	<0.300	0.300	07/17/2023	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	160	16.0	07/18/2023	ND	432	108	400	3.64	

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	07/18/2023	ND	170	85.1	200	0.445	
DRO >C10-C28*	<10.0	10.0	07/18/2023	ND	167	83.6	200	3.05	
EXT DRO >C28-C36	<10.0	10.0	07/18/2023	ND					

Surrogate: 1-Chlorooctane 76.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.5 % 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:	07/17/2023	Sampling Date:	07/17/2023
Reported:	07/18/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: SW 10 @ 0-3' (H233685-05)**

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	07/17/2023	ND	2.10	105	2.00	0.540	
Toluene*	<0.050	0.050	07/17/2023	ND	2.07	103	2.00	0.0760	
Ethylbenzene*	<0.050	0.050	07/17/2023	ND	2.17	108	2.00	0.265	
Total Xylenes*	<0.150	0.150	07/17/2023	ND	6.50	108	6.00	0.346	
Total BTEX	<0.300	0.300	07/17/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 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	144	16.0	07/18/2023	ND	432	108	400	3.64	

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	07/18/2023	ND	170	85.1	200	0.445	
DRO >C10-C28*	<10.0	10.0	07/18/2023	ND	167	83.6	200	3.05	
EXT DRO >C28-C36	<10.0	10.0	07/18/2023	ND					

Surrogate: 1-Chlorooctane 81.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.5 % 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:	07/17/2023	Sampling Date:	07/17/2023
Reported:	07/18/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: SW 11 @ 0-3' (H233685-06)**

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	07/17/2023	ND	2.10	105	2.00	0.540	
Toluene*	<0.050	0.050	07/17/2023	ND	2.07	103	2.00	0.0760	
Ethylbenzene*	<0.050	0.050	07/17/2023	ND	2.17	108	2.00	0.265	
Total Xylenes*	<0.150	0.150	07/17/2023	ND	6.50	108	6.00	0.346	
Total BTEX	<0.300	0.300	07/17/2023	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	80.0	16.0	07/18/2023	ND	352	88.0	400	16.7	

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	07/18/2023	ND	170	85.1	200	0.445	
DRO >C10-C28*	<10.0	10.0	07/18/2023	ND	167	83.6	200	3.05	
EXT DRO >C28-C36	<10.0	10.0	07/18/2023	ND					

Surrogate: 1-Chlorooctane 73.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.0 % 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**

- 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





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

---

July 19, 2023

AIMEE COLE

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: MCA 204

Enclosed are the results of analyses for samples received by the laboratory on 07/18/23 14:02.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing 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:	07/18/2023	Sampling Date:	07/18/2023
Reported:	07/19/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 26 @ 3' (H233723-01)**

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	07/19/2023	ND	2.02	101	2.00	1.43	
Toluene*	<0.050	0.050	07/19/2023	ND	1.95	97.7	2.00	2.24	
Ethylbenzene*	<0.050	0.050	07/19/2023	ND	1.94	97.0	2.00	1.49	
Total Xylenes*	<0.150	0.150	07/19/2023	ND	6.31	105	6.00	1.95	
Total BTEX	<0.300	0.300	07/19/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/19/2023	ND	432	108	400	0.00	

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	07/19/2023	ND	173	86.6	200	2.72		
DRO >C10-C28*	102	10.0	07/19/2023	ND	168	83.9	200	0.669		
EXT DRO >C28-C36	49.3	10.0	07/19/2023	ND						

Surrogate: 1-Chlorooctane 48.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 58.8 % 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

**Analytical Results For:**

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

Received:	07/18/2023	Sampling Date:	07/18/2023
Reported:	07/19/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 27 @ 3' (H233723-02)**

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	07/19/2023	ND	2.02	101	2.00	1.43	
Toluene*	<0.050	0.050	07/19/2023	ND	1.95	97.7	2.00	2.24	
Ethylbenzene*	<0.050	0.050	07/19/2023	ND	1.94	97.0	2.00	1.49	
Total Xylenes*	<0.150	0.150	07/19/2023	ND	6.31	105	6.00	1.95	
Total BTEX	<0.300	0.300	07/19/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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
<b>Chloride</b>	<b>16.0</b>	16.0	07/19/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/19/2023	ND	173	86.6	200	2.72	
<b>DRO &gt;C10-C28*</b>	<b>89.7</b>	10.0	07/19/2023	ND	168	83.9	200	0.669	
<b>EXT DRO &gt;C28-C36</b>	<b>65.7</b>	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane 51.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 65.3 % 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:	07/18/2023	Sampling Date:	07/18/2023
Reported:	07/19/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 28 @ 3' (H233723-03)**

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	07/19/2023	ND	2.02	101	2.00	1.43	
Toluene*	<0.050	0.050	07/19/2023	ND	1.95	97.7	2.00	2.24	
Ethylbenzene*	<0.050	0.050	07/19/2023	ND	1.94	97.0	2.00	1.49	
Total Xylenes*	<0.150	0.150	07/19/2023	ND	6.31	105	6.00	1.95	
Total BTEX	<0.300	0.300	07/19/2023	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	07/19/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/19/2023	ND	173	86.6	200	2.72	
DRO >C10-C28*	<10.0	10.0	07/19/2023	ND	168	83.9	200	0.669	
EXT DRO >C28-C36	<10.0	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane 51.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 60.4 % 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:	07/18/2023	Sampling Date:	07/18/2023
Reported:	07/19/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: FS 29 @ 3' (H233723-04)**

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	07/19/2023	ND	2.02	101	2.00	1.43	
Toluene*	<0.050	0.050	07/19/2023	ND	1.95	97.7	2.00	2.24	
Ethylbenzene*	<0.050	0.050	07/19/2023	ND	1.94	97.0	2.00	1.49	
Total Xylenes*	<0.150	0.150	07/19/2023	ND	6.31	105	6.00	1.95	
Total BTEX	<0.300	0.300	07/19/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>16.0</b>	16.0	07/19/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/19/2023	ND	173	86.6	200	2.72	
<b>DRO &gt;C10-C28*</b>	<b>136</b>	10.0	07/19/2023	ND	168	83.9	200	0.669	
<b>EXT DRO &gt;C28-C36</b>	<b>77.1</b>	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane 53.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 65.7 % 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:	07/18/2023	Sampling Date:	07/18/2023
Reported:	07/19/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: SW 12 @ 0-3' (H233723-05)**

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	07/18/2023	ND	2.01	101	2.00	2.04	
Toluene*	<0.050	0.050	07/18/2023	ND	1.99	99.6	2.00	1.65	
Ethylbenzene*	<0.050	0.050	07/18/2023	ND	1.96	98.2	2.00	2.22	
Total Xylenes*	<0.150	0.150	07/18/2023	ND	5.84	97.3	6.00	2.61	
Total BTEX	<0.300	0.300	07/18/2023	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	07/19/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/19/2023	ND	206	103	200	7.39	
<b>DRO &gt;C10-C28*</b>	<b>78.6</b>	10.0	07/19/2023	ND	205	103	200	7.17	
<b>EXT DRO &gt;C28-C36</b>	<b>67.7</b>	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane 78.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.2 % 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:	07/18/2023	Sampling Date:	07/18/2023
Reported:	07/19/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK 32.798457,-103.752337		

**Sample ID: SW 13 @ 0-3' (H233723-06)**

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	07/18/2023	ND	2.01	101	2.00	2.04		
Toluene*	<0.050	0.050	07/18/2023	ND	1.99	99.6	2.00	1.65		
Ethylbenzene*	<0.050	0.050	07/18/2023	ND	1.96	98.2	2.00	2.22		
Total Xylenes*	<0.150	0.150	07/18/2023	ND	5.84	97.3	6.00	2.61		
Total BTEX	<0.300	0.300	07/18/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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	07/19/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/19/2023	ND	206	103	200	7.39		
DRO >C10-C28*	<10.0	10.0	07/19/2023	ND	205	103	200	7.17		
EXT DRO >C28-C36	<10.0	10.0	07/19/2023	ND						

Surrogate: 1-Chlorooctane 91.6 % 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

Notes and Definitions

- 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.
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.

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**

Company Name: <b>GRENUM, LLC</b> Project Manager: <b>Amel Jale</b> Address: <b>6721 W 4th Parks Hwy</b> City: <b>Durkwood</b> State: <b>NM</b> Zip: <b>88220</b> Phone #: <b>720-384-7365</b> Fax #: _____ Project #: <b>BD2057098</b> Project Owner: <b>Maverick</b> Project Name: <b>MPA2021</b> Project Location: <b>32.768457 - 108.792337</b> Sampler Name: <b>JUANITA FALCÓN</b>		<b>BILL TO</b> P.O. #: _____ Company: <b>A.A.</b> Attn: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____	
FOR LAB USE ONLY Lab I.D.: <b>H233723</b> Sample I.D.: _____ Sample I.D.: _____		<b>ANALYSIS REQUEST</b>	
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 terms, or otherwise.		(G)RAB OR (C)OMP. # CONTAINERS MATRIX: GROUNDWATER, WASTEWATER, SOIL, OIL, SLUDGE, OTHER: _____ PRESERV: ACID/BASE: _____, ICE / COOL: _____, OTHER: _____	
Requisitioned By: _____ Date: <b>7/18/23</b> Relinquished By: _____ Date: <b>7/18/23</b> Received By: <b>Stoddigress</b>		DATE TIME 7/18/23 12:20 12:25 12:30 12:50 12:55	
Delivered By: (Circle One) <b>UPS</b> Corrected Temp. °C: <b>4.1</b> Sample Condition: <input checked="" type="checkbox"/> Intact, <input type="checkbox"/> Cool, <input type="checkbox"/> Yes, <input type="checkbox"/> No CHECKED BY: <b>SR</b>		Turnaround Time: <b>#140</b> Standard <input type="checkbox"/> Rush <input checked="" type="checkbox"/> Bacteria (only) <input type="checkbox"/> Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No Corrected Temp. °C: _____	
REMARKS: <b>APPO@ersolum.com falcónmarta@ersolum.com</b>		Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #: _____ All Results are emailed. Please provide Email address: _____	



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

---

July 21, 2023

AIMEE COLE

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: MCA 204

Enclosed are the results of analyses for samples received by the laboratory on 07/19/23 15:16.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". 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:	07/19/2023	Sampling Date:	07/19/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Jodi Henson
Project Location:	MAVERICK (32.798457,-103.752337)		

**Sample ID: FS 26A @ 4' (H233759-01)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/20/2023	ND	2.09	104	2.00	2.61	
Toluene*	<0.050	0.050	07/20/2023	ND	2.05	102	2.00	2.17	
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.98	98.8	2.00	2.39	
Total Xylenes*	<0.150	0.150	07/20/2023	ND	5.92	98.7	6.00	3.15	
Total BTEX	<0.300	0.300	07/20/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/20/2023	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	07/20/2023	ND	162	80.8	200	2.89	
DRO >C10-C28*	<10.0	10.0	07/20/2023	ND	173	86.7	200	3.84	
EXT DRO >C28-C36	<10.0	10.0	07/20/2023	ND					

Surrogate: 1-Chlorooctane 102 % 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:	07/19/2023	Sampling Date:	07/19/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Jodi Henson
Project Location:	MAVERICK (32.798457,-103.752337)		

**Sample ID: FS 27A @ 4' (H233759-02)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/20/2023	ND	2.09	104	2.00	2.61	
Toluene*	<0.050	0.050	07/20/2023	ND	2.05	102	2.00	2.17	
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.98	98.8	2.00	2.39	
Total Xylenes*	<0.150	0.150	07/20/2023	ND	5.92	98.7	6.00	3.15	
Total BTEX	<0.300	0.300	07/20/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/20/2023	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	07/20/2023	ND	162	80.8	200	2.89	
DRO >C10-C28*	<10.0	10.0	07/20/2023	ND	173	86.7	200	3.84	
EXT DRO >C28-C36	<10.0	10.0	07/20/2023	ND					

Surrogate: 1-Chlorooctane 102 % 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:	07/19/2023	Sampling Date:	07/19/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Jodi Henson
Project Location:	MAVERICK (32.798457,-103.752337)		

**Sample ID: FS 29A @ 4' (H233759-03)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/20/2023	ND	2.09	104	2.00	2.61	
Toluene*	<0.050	0.050	07/20/2023	ND	2.05	102	2.00	2.17	
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.98	98.8	2.00	2.39	
Total Xylenes*	<0.150	0.150	07/20/2023	ND	5.92	98.7	6.00	3.15	
Total BTEX	<0.300	0.300	07/20/2023	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	07/20/2023	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	07/20/2023	ND	162	80.8	200	2.89	
DRO >C10-C28*	<10.0	10.0	07/20/2023	ND	173	86.7	200	3.84	
EXT DRO >C28-C36	<10.0	10.0	07/20/2023	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 123 % 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:	07/19/2023	Sampling Date:	07/19/2023
Reported:	07/21/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Jodi Henson
Project Location:	MAVERICK (32.798457,-103.752337)		

**Sample ID: SW 12A @ 0-4' (H233759-04)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/20/2023	ND	2.09	104	2.00	2.61		
Toluene*	<0.050	0.050	07/20/2023	ND	2.05	102	2.00	2.17		
Ethylbenzene*	<0.050	0.050	07/20/2023	ND	1.98	98.8	2.00	2.39		
Total Xylenes*	<0.150	0.150	07/20/2023	ND	5.92	98.7	6.00	3.15		
Total BTEX	<0.300	0.300	07/20/2023	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	07/20/2023	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	07/20/2023	ND	162	80.8	200	2.89		
DRO >C10-C28*	<10.0	10.0	07/20/2023	ND	173	86.7	200	3.84		
EXT DRO >C28-C36	<10.0	10.0	07/20/2023	ND						

Surrogate: 1-Chlorooctane 102 % 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

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



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: <u>AROLUM LLC</u> Project Manager: <u>Phyllis Dole</u> Address: <u>2122 Nat'l Parks Hwy</u> City: <u>Durbin NM</u> State: <u>NM</u> Zip: <u>88122</u> Phone #: <u>720-584-1365</u> Fax #: _____ Project #: <u>BD2057058</u> Project Owner: <u>Maverick</u> Project Name: <u>1104104</u> Project Location: <u>32.798457 -108.732337</u> Sampler Name: <u>WILMUNA EXHIBIT 2023</u> FOR LAB USE ONLY		P.O. #: _____ Company: <u>A.A.</u> Attn: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____						
Lab I.D. <u>H233758</u> Sample I.D. <u>1</u> <u>2</u> <u>3</u> <u>4</u>	(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:	MATRIX ACID/BASE: ICE / COOL OTHER:	DATE TIME	BTEX TPH Chlorides	SAMPLED PRESERVED	Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #: _____ All Results are emailed. Please provide Email address: REMARKS: <u>MOLE @ AROLUM, NM PALOMAR @ AROLUM, NM</u>		
							Date: <u>7/19/23</u> Received By: <u>Staci Henderson</u>	Turnaround Time: _____ Standard <input type="checkbox"/> Rush <input checked="" type="checkbox"/>
							Delivered By: (Circle One) Sampler - UPS - Bus - Other: _____	Observed Temp. °C <u>41</u> Corrected Temp. °C _____
							Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Bacteria (only) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Observed Temp. °C _____ Corrected Temp. °C _____



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

---

July 24, 2023

AIMEE COLE

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: MCA 204

Enclosed are the results of analyses for samples received by the laboratory on 07/21/23 10:10.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	07/21/2023	Sampling Date:	07/21/2023
Reported:	07/24/2023	Sampling Type:	Soil
Project Name:	MCA 204	Sampling Condition:	Cool & Intact
Project Number:	03D2057088	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.798457,-103.752337)		

**Sample ID: SW 01 A @ 0-4' (H233810-01)**

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	07/21/2023	ND	2.13	106	2.00	1.75	
Toluene*	<0.050	0.050	07/21/2023	ND	2.09	104	2.00	0.752	
Ethylbenzene*	<0.050	0.050	07/21/2023	ND	2.04	102	2.00	1.22	
Total Xylenes*	<0.150	0.150	07/21/2023	ND	6.14	102	6.00	1.08	
Total BTEX	<0.300	0.300	07/21/2023	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	07/21/2023	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/21/2023	ND	199	99.3	200	18.6	
DRO >C10-C28*	<10.0	10.0	07/21/2023	ND	225	113	200	5.66	
EXT DRO >C28-C36	<10.0	10.0	07/21/2023	ND					

Surrogate: 1-Chlorooctane 93.8 % 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

Notes and Definitions

- QR-03 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCS/D recovery and/or RPD values.
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

Company Name: <u>Cardinal Labs</u>		P.O. #:	
Project Manager: <u>Amel Goff</u>		Company: <u>AA</u>	
Address: <u>622 North Park Hwy</u>		Attn:	
City: <u>Corbudo</u>		Address:	
State: <u>NM</u> Zip: <u>88020</u>		City:	
Phone #: <u>781-584-1805</u> Fax #:		State:	
Project #: <u>03D2057088</u> Project Owner: <u>Maverick</u>		Zip:	
Project Name: <u>MOA 209</u>		Phone #:	
Project Location: <u>32.768451, -103.752357</u>		Fax #:	
Sampler Name: <u>Sullivan, Falkenmeyer</u>		MATRIX	
FOR LAB USE ONLY		PRESERV	
SAMPLING			

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	ANALYSIS REQUEST
<u>H233810</u>	<u>5001A 0-4</u>	<u>C</u>	<u>1</u>			<u>X</u>				<u>X</u>	<u>X</u>		<u>7/21/2020</u>	<u>12:00</u>	<u>BTEX</u> <u>TPH</u> <u>Chlorides</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 rendered by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <u>[Signature]</u>	Date: <u>7/21/23</u>	Received By: <u>[Signature]</u>	Date: <u>7/21/23</u>
Reinquired By: <u>[Signature]</u>	Date: <u>7/21/23</u>	Received By: <u>[Signature]</u>	Date: <u>7/21/23</u>
Delivered By: (Circle One) <input checked="" type="checkbox"/> UPS - Bus - Other: <u>4/1</u>	Observed Temp. °C <u>4/1</u>	Corrected Temp. °C	Sample Condition Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Turnaround Time: <u>4/1/20</u>	Standard <input checked="" type="checkbox"/>	Bacteria (only) <input type="checkbox"/>	Cool Intact <input type="checkbox"/>
Thermometer ID: <u>4443</u>	RUSH <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Correction Factor: <u>4443</u>	24 hr <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Vertical Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:	Corrected Temp. °C	Sample Condition
REMARKS: <u>MOA@cardinalnm.com, Falkenmeyer@cardinalnm.com</u>			

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



Environment Testing

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Aimee Cole  
 Ensolum  
 601 N. Marienfeld St.  
 Suite 400  
 Midland, Texas 79701  
 Generated 7/20/2023 12:59:31 PM

## JOB DESCRIPTION

MCA 204  
 SDG NUMBER 03D2057088

## JOB NUMBER

880-30744-1

Eurofins Midland  
 1211 W. Florida Ave  
 Midland TX 79701



# Eurofins Midland

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

## Authorization



Generated  
7/20/2023 12:59:31 PM

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client: Ensolum  
Project/Site: MCA 204

Laboratory Job ID: 880-30744-1  
SDG: 03D2057088

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Client Sample Results . . . . .	6
Surrogate Summary . . . . .	9
QC Sample Results . . . . .	10
QC Association Summary . . . . .	14
Lab Chronicle . . . . .	16
Certification Summary . . . . .	17
Method Summary . . . . .	18
Sample Summary . . . . .	19
Chain of Custody . . . . .	20
Receipt Checklists . . . . .	21

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

## Definitions/Glossary

Client: Ensolum  
Project/Site: MCA 204

Job ID: 880-30744-1  
SDG: 03D2057088

## Qualifiers

## GC VOA

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

## GC Semi VOA

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

## HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

## Glossary

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

### Case Narrative

Client: Ensolum  
Project/Site: MCA 204

Job ID: 880-30744-1  
SDG: 03D2057088

---

**Job ID: 880-30744-1**

---

**Laboratory: Eurofins Midland****Narrative****Job Narrative  
880-30744-1****Receipt**

The samples were received on 7/14/2023 10:54 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.8°C

**Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: FS01A (880-30744-1), FS02A (880-30744-2) and FS03A (880-30744-3).

**GC VOA**

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-57697 and analytical batch 880-57653 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8021B: Surrogate recovery for the following sample was outside control limits: FS02A (880-30744-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (LCS 880-57697/1-A). Evidence of matrix interferences is not obvious.

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

**GC Semi VOA**

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-57730 and analytical batch 880-57996 was outside the upper control limits.

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (890-4939-A-1-F). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

**HPLC/IC**

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



### Client Sample Results

Client: Ensolum  
Project/Site: MCA 204

Job ID: 880-30744-1  
SDG: 03D2057088

**Client Sample ID: FS01A**

**Lab Sample ID: 880-30744-1**

Date Collected: 07/14/23 09:15

Matrix: Solid

Date Received: 07/14/23 10:54

Sample Depth: 4.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		07/14/23 13:11	07/15/23 09:52	1
Toluene	<0.00198	U	0.00198	mg/Kg		07/14/23 13:11	07/15/23 09:52	1
Ethylbenzene	<0.00198	U **	0.00198	mg/Kg		07/14/23 13:11	07/15/23 09:52	1
m-Xylene & p-Xylene	<0.00396	U **	0.00396	mg/Kg		07/14/23 13:11	07/15/23 09:52	1
o-Xylene	<0.00198	U **	0.00198	mg/Kg		07/14/23 13:11	07/15/23 09:52	1
Xylenes, Total	<0.00396	U **	0.00396	mg/Kg		07/14/23 13:11	07/15/23 09:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	07/14/23 13:11	07/15/23 09:52	1
1,4-Difluorobenzene (Surr)	74		70 - 130	07/14/23 13:11	07/15/23 09:52	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			07/17/23 14:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			07/20/23 13:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		07/14/23 17:17	07/19/23 15:13	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		07/14/23 17:17	07/19/23 15:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		07/14/23 17:17	07/19/23 15:13	1
Total TPH	<49.9	U	49.9	mg/Kg		07/14/23 17:17	07/19/23 15:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	125		70 - 130	07/14/23 17:17	07/19/23 15:13	1
o-Terphenyl	129		70 - 130	07/14/23 17:17	07/19/23 15:13	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	82.3		4.99	mg/Kg			07/15/23 01:06	1

**Client Sample ID: FS02A**

**Lab Sample ID: 880-30744-2**

Date Collected: 07/14/23 09:17

Matrix: Solid

Date Received: 07/14/23 10:54

Sample Depth: 3.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		07/14/23 13:11	07/15/23 10:13	1
Toluene	<0.00201	U	0.00201	mg/Kg		07/14/23 13:11	07/15/23 10:13	1
Ethylbenzene	<0.00201	U **	0.00201	mg/Kg		07/14/23 13:11	07/15/23 10:13	1
m-Xylene & p-Xylene	<0.00402	U **	0.00402	mg/Kg		07/14/23 13:11	07/15/23 10:13	1
o-Xylene	<0.00201	U **	0.00201	mg/Kg		07/14/23 13:11	07/15/23 10:13	1
Xylenes, Total	<0.00402	U **	0.00402	mg/Kg		07/14/23 13:11	07/15/23 10:13	1

### Client Sample Results

Client: Ensolum  
Project/Site: MCA 204

Job ID: 880-30744-1  
SDG: 03D2057088

**Client Sample ID: FS02A**

**Lab Sample ID: 880-30744-2**

Date Collected: 07/14/23 09:17

Matrix: Solid

Date Received: 07/14/23 10:54

Sample Depth: 3.5'

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130	07/14/23 13:11	07/15/23 10:13	1
1,4-Difluorobenzene (Surr)	69	S1-	70 - 130	07/14/23 13:11	07/15/23 10:13	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			07/17/23 14:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			07/20/23 13:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		07/14/23 17:17	07/19/23 15:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		07/14/23 17:17	07/19/23 15:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		07/14/23 17:17	07/19/23 15:35	1
Total TPH	<50.0	U	50.0	mg/Kg		07/14/23 17:17	07/19/23 15:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130	07/14/23 17:17	07/19/23 15:35	1
o-Terphenyl	121		70 - 130	07/14/23 17:17	07/19/23 15:35	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	31.1		4.96	mg/Kg			07/15/23 01:22	1

**Client Sample ID: FS03A**

**Lab Sample ID: 880-30744-3**

Date Collected: 07/14/23 09:20

Matrix: Solid

Date Received: 07/14/23 10:54

Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		07/14/23 13:11	07/15/23 10:33	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/14/23 13:11	07/15/23 10:33	1
Ethylbenzene	<0.00200	U **	0.00200	mg/Kg		07/14/23 13:11	07/15/23 10:33	1
m-Xylene & p-Xylene	<0.00401	U **	0.00401	mg/Kg		07/14/23 13:11	07/15/23 10:33	1
o-Xylene	<0.00200	U **	0.00200	mg/Kg		07/14/23 13:11	07/15/23 10:33	1
Xylenes, Total	<0.00401	U **	0.00401	mg/Kg		07/14/23 13:11	07/15/23 10:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	07/14/23 13:11	07/15/23 10:33	1
1,4-Difluorobenzene (Surr)	73		70 - 130	07/14/23 13:11	07/15/23 10:33	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			07/17/23 14:24	1

Eurofins Midland

### Client Sample Results

Client: Ensolum  
Project/Site: MCA 204

Job ID: 880-30744-1  
SDG: 03D2057088

**Client Sample ID: FS03A**  
Date Collected: 07/14/23 09:20  
Date Received: 07/14/23 10:54  
Sample Depth: 2'

**Lab Sample ID: 880-30744-3**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2	mg/Kg			07/20/23 13:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2	mg/Kg		07/14/23 17:17	07/19/23 15:58	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2	mg/Kg		07/14/23 17:17	07/19/23 15:58	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2	mg/Kg		07/14/23 17:17	07/19/23 15:58	1
Total TPH	<50.2	U	50.2	mg/Kg		07/14/23 17:17	07/19/23 15:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130	07/14/23 17:17	07/19/23 15:58	1
o-Terphenyl	122		70 - 130	07/14/23 17:17	07/19/23 15:58	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43.6		5.02	mg/Kg			07/15/23 01:27	1

## Surrogate Summary

Client: Ensolum  
Project/Site: MCA 204

Job ID: 880-30744-1  
SDG: 03D2057088

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-30744-1	FS01A	84	74
880-30744-1 MS	FS01A	120	83
880-30744-1 MSD	FS01A	121	96
880-30744-2	FS02A	80	69 S1-
880-30744-3	FS03A	92	73
LCS 880-57697/1-A	Lab Control Sample	132 S1+	92
LCSD 880-57697/2-A	Lab Control Sample Dup	126	98
MB 880-57697/5-A	Method Blank	75	83
MB 880-57700/5-A	Method Blank	77	87

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
880-30744-1	FS01A	125	129
880-30744-2	FS02A	118	121
880-30744-3	FS03A	120	122
LCS 880-57730/2-A	Lab Control Sample	85	90
LCSD 880-57730/3-A	Lab Control Sample Dup	84	90
MB 880-57730/1-A	Method Blank	161 S1+	169 S1+

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

### QC Sample Results

Client: Ensolum  
Project/Site: MCA 204

Job ID: 880-30744-1  
SDG: 03D2057088

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

Lab Sample ID: MB 880-57697/5-A  
Matrix: Solid  
Analysis Batch: 57653

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 57697

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		07/14/23 13:11	07/15/23 09:31	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/14/23 13:11	07/15/23 09:31	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		07/14/23 13:11	07/15/23 09:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		07/14/23 13:11	07/15/23 09:31	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		07/14/23 13:11	07/15/23 09:31	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		07/14/23 13:11	07/15/23 09:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	75		70 - 130	07/14/23 13:11	07/15/23 09:31	1
1,4-Difluorobenzene (Surr)	83		70 - 130	07/14/23 13:11	07/15/23 09:31	1

Lab Sample ID: LCS 880-57697/1-A  
Matrix: Solid  
Analysis Batch: 57653

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 57697

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1049		mg/Kg		105	70 - 130
Toluene	0.100	0.09855		mg/Kg		99	70 - 130
Ethylbenzene	0.100	0.1115		mg/Kg		112	70 - 130
m-Xylene & p-Xylene	0.200	0.2249		mg/Kg		112	70 - 130
o-Xylene	0.100	0.1159		mg/Kg		116	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: LCSD 880-57697/2-A  
Matrix: Solid  
Analysis Batch: 57653

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 57697

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1214		mg/Kg		121	70 - 130	15	35
Toluene	0.100	0.1106		mg/Kg		111	70 - 130	11	35
Ethylbenzene	0.100	0.1337	*+	mg/Kg		134	70 - 130	18	35
m-Xylene & p-Xylene	0.200	0.2772	*+	mg/Kg		139	70 - 130	21	35
o-Xylene	0.100	0.1423	*+	mg/Kg		142	70 - 130	20	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	126		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-30744-1 MS  
Matrix: Solid  
Analysis Batch: 57653

Client Sample ID: FS01A  
Prep Type: Total/NA  
Prep Batch: 57697

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U	0.0994	0.1097		mg/Kg		110	70 - 130
Toluene	<0.00198	U	0.0994	0.1021		mg/Kg		103	70 - 130

Eurofins Midland

### QC Sample Results

Client: Ensolum  
Project/Site: MCA 204

Job ID: 880-30744-1  
SDG: 03D2057088

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

Lab Sample ID: 880-30744-1 MS  
Matrix: Solid  
Analysis Batch: 57653

Client Sample ID: FS01A  
Prep Type: Total/NA  
Prep Batch: 57697

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier		Result	Qualifier				
Ethylbenzene	<0.00198	U *	0.0994	0.1217		mg/Kg		122	70 - 130
m-Xylene & p-Xylene	<0.00396	U *	0.199	0.2458		mg/Kg		124	70 - 130
o-Xylene	<0.00198	U *	0.0994	0.1237		mg/Kg		124	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	83		70 - 130

Lab Sample ID: 880-30744-1 MSD  
Matrix: Solid  
Analysis Batch: 57653

Client Sample ID: FS01A  
Prep Type: Total/NA  
Prep Batch: 57697

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Benzene	<0.00198	U	0.0998	0.09983		mg/Kg		100	70 - 130	9	35
Toluene	<0.00198	U	0.0998	0.09448		mg/Kg		95	70 - 130	8	35
Ethylbenzene	<0.00198	U *	0.0998	0.1145		mg/Kg		115	70 - 130	6	35
m-Xylene & p-Xylene	<0.00396	U *	0.200	0.2286		mg/Kg		115	70 - 130	7	35
o-Xylene	<0.00198	U *	0.0998	0.1143		mg/Kg		115	70 - 130	8	35

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	121		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: MB 880-57700/5-A  
Matrix: Solid  
Analysis Batch: 57653

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 57700

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		07/14/23 13:20	07/14/23 22:57	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/14/23 13:20	07/14/23 22:57	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		07/14/23 13:20	07/14/23 22:57	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		07/14/23 13:20	07/14/23 22:57	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		07/14/23 13:20	07/14/23 22:57	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		07/14/23 13:20	07/14/23 22:57	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	77		70 - 130	07/14/23 13:20	07/14/23 22:57	1
1,4-Difluorobenzene (Surr)	87		70 - 130	07/14/23 13:20	07/14/23 22:57	1

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

Lab Sample ID: MB 880-57730/1-A  
Matrix: Solid  
Analysis Batch: 57996

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 57730

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		07/14/23 17:17	07/19/23 10:55	1

Eurofins Midland

### QC Sample Results

Client: Ensolum  
Project/Site: MCA 204

Job ID: 880-30744-1  
SDG: 03D2057088

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

Lab Sample ID: MB 880-57730/1-A  
Matrix: Solid  
Analysis Batch: 57996

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 57730

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		07/14/23 17:17	07/19/23 10:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		07/14/23 17:17	07/19/23 10:55	1
Total TPH	<50.0	U	50.0	mg/Kg		07/14/23 17:17	07/19/23 10:55	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	161	S1+	70 - 130	07/14/23 17:17	07/19/23 10:55	1
o-Terphenyl	169	S1+	70 - 130	07/14/23 17:17	07/19/23 10:55	1

Lab Sample ID: LCS 880-57730/2-A  
Matrix: Solid  
Analysis Batch: 57996

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 57730

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	853.8		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	1000	812.0		mg/Kg		81	70 - 130

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

Lab Sample ID: LCSD 880-57730/3-A  
Matrix: Solid  
Analysis Batch: 57996

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 57730

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD
		Result	Qualifier					RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	826.1		mg/Kg		83	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	809.3		mg/Kg		81	70 - 130	0	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1-Chlorooctane	84		70 - 130
o-Terphenyl	90		70 - 130

#### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-57699/1-A  
Matrix: Solid  
Analysis Batch: 57705

Client Sample ID: Method Blank  
Prep Type: Soluble

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Chloride	<5.00	U	5.00	mg/Kg			07/15/23 00:20	1

Eurofins Midland

### QC Sample Results

Client: Ensolum  
 Project/Site: MCA 204

Job ID: 880-30744-1  
 SDG: 03D2057088

**Method: 300.0 - Anions, Ion Chromatography (Continued)**

**Lab Sample ID: LCS 880-57699/2-A**  
**Matrix: Solid**  
**Analysis Batch: 57705**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	252.8		mg/Kg		101	90 - 110

**Lab Sample ID: LCSD 880-57699/3-A**  
**Matrix: Solid**  
**Analysis Batch: 57705**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	254.4		mg/Kg		102	90 - 110	1	20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

### QC Association Summary

Client: Ensolum  
Project/Site: MCA 204

Job ID: 880-30744-1  
SDG: 03D2057088

#### GC VOA

##### Analysis Batch: 57653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30744-1	FS01A	Total/NA	Solid	8021B	57697
880-30744-2	FS02A	Total/NA	Solid	8021B	57697
880-30744-3	FS03A	Total/NA	Solid	8021B	57697
MB 880-57697/5-A	Method Blank	Total/NA	Solid	8021B	57697
MB 880-57700/5-A	Method Blank	Total/NA	Solid	8021B	57700
LCS 880-57697/1-A	Lab Control Sample	Total/NA	Solid	8021B	57697
LCSD 880-57697/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	57697
880-30744-1 MS	FS01A	Total/NA	Solid	8021B	57697
880-30744-1 MSD	FS01A	Total/NA	Solid	8021B	57697

##### Prep Batch: 57697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30744-1	FS01A	Total/NA	Solid	5035	
880-30744-2	FS02A	Total/NA	Solid	5035	
880-30744-3	FS03A	Total/NA	Solid	5035	
MB 880-57697/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-57697/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-57697/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-30744-1 MS	FS01A	Total/NA	Solid	5035	
880-30744-1 MSD	FS01A	Total/NA	Solid	5035	

##### Prep Batch: 57700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-57700/5-A	Method Blank	Total/NA	Solid	5035	

##### Analysis Batch: 57862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30744-1	FS01A	Total/NA	Solid	Total BTEX	
880-30744-2	FS02A	Total/NA	Solid	Total BTEX	
880-30744-3	FS03A	Total/NA	Solid	Total BTEX	

#### GC Semi VOA

##### Prep Batch: 57730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30744-1	FS01A	Total/NA	Solid	8015NM Prep	
880-30744-2	FS02A	Total/NA	Solid	8015NM Prep	
880-30744-3	FS03A	Total/NA	Solid	8015NM Prep	
MB 880-57730/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-57730/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-57730/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

##### Analysis Batch: 57996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30744-1	FS01A	Total/NA	Solid	8015B NM	57730
880-30744-2	FS02A	Total/NA	Solid	8015B NM	57730
880-30744-3	FS03A	Total/NA	Solid	8015B NM	57730
MB 880-57730/1-A	Method Blank	Total/NA	Solid	8015B NM	57730
LCS 880-57730/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	57730
LCSD 880-57730/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	57730

Eurofins Midland

## QC Association Summary

Client: Ensolum  
Project/Site: MCA 204

Job ID: 880-30744-1  
SDG: 03D2057088

## GC Semi VOA

## Analysis Batch: 58145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30744-1	FS01A	Total/NA	Solid	8015 NM	
880-30744-2	FS02A	Total/NA	Solid	8015 NM	
880-30744-3	FS03A	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 57699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30744-1	FS01A	Soluble	Solid	DI Leach	
880-30744-2	FS02A	Soluble	Solid	DI Leach	
880-30744-3	FS03A	Soluble	Solid	DI Leach	
MB 880-57699/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-57699/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-57699/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

## Analysis Batch: 57705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30744-1	FS01A	Soluble	Solid	300.0	57699
880-30744-2	FS02A	Soluble	Solid	300.0	57699
880-30744-3	FS03A	Soluble	Solid	300.0	57699
MB 880-57699/1-A	Method Blank	Soluble	Solid	300.0	57699
LCS 880-57699/2-A	Lab Control Sample	Soluble	Solid	300.0	57699
LCSD 880-57699/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	57699

## Lab Chronicle

Client: Ensolum  
Project/Site: MCA 204Job ID: 880-30744-1  
SDG: 03D2057088

Client Sample ID: FS01A

Lab Sample ID: 880-30744-1

Date Collected: 07/14/23 09:15

Matrix: Solid

Date Received: 07/14/23 10:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			57697	EL	EET MID	07/14/23 13:11
Total/NA	Analysis	8021B		1	57653	AJ	EET MID	07/15/23 09:52
Total/NA	Analysis	Total BTEX		1	57862	AJ	EET MID	07/17/23 14:24
Total/NA	Analysis	8015 NM		1	58145	SM	EET MID	07/20/23 13:08
Total/NA	Prep	8015NM Prep			57730	TKC	EET MID	07/14/23 17:17
Total/NA	Analysis	8015B NM		1	57996	SM	EET MID	07/19/23 15:13
Soluble	Leach	DI Leach			57699	KS	EET MID	07/14/23 13:15
Soluble	Analysis	300.0		1	57705	CH	EET MID	07/15/23 01:06

Client Sample ID: FS02A

Lab Sample ID: 880-30744-2

Date Collected: 07/14/23 09:17

Matrix: Solid

Date Received: 07/14/23 10:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			57697	EL	EET MID	07/14/23 13:11
Total/NA	Analysis	8021B		1	57653	AJ	EET MID	07/15/23 10:13
Total/NA	Analysis	Total BTEX		1	57862	AJ	EET MID	07/17/23 14:24
Total/NA	Analysis	8015 NM		1	58145	SM	EET MID	07/20/23 13:08
Total/NA	Prep	8015NM Prep			57730	TKC	EET MID	07/14/23 17:17
Total/NA	Analysis	8015B NM		1	57996	SM	EET MID	07/19/23 15:35
Soluble	Leach	DI Leach			57699	KS	EET MID	07/14/23 13:15
Soluble	Analysis	300.0		1	57705	CH	EET MID	07/15/23 01:22

Client Sample ID: FS03A

Lab Sample ID: 880-30744-3

Date Collected: 07/14/23 09:20

Matrix: Solid

Date Received: 07/14/23 10:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			57697	EL	EET MID	07/14/23 13:11
Total/NA	Analysis	8021B		1	57653	AJ	EET MID	07/15/23 10:33
Total/NA	Analysis	Total BTEX		1	57862	AJ	EET MID	07/17/23 14:24
Total/NA	Analysis	8015 NM		1	58145	SM	EET MID	07/20/23 13:08
Total/NA	Prep	8015NM Prep			57730	TKC	EET MID	07/14/23 17:17
Total/NA	Analysis	8015B NM		1	57996	SM	EET MID	07/19/23 15:58
Soluble	Leach	DI Leach			57699	KS	EET MID	07/14/23 13:15
Soluble	Analysis	300.0		1	57705	CH	EET MID	07/15/23 01:27

## Laboratory References:

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

### Accreditation/Certification Summary

Client: Ensolum  
Project/Site: MCA 204

Job ID: 880-30744-1  
SDG: 03D2057088

#### Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24

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

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

### Method Summary

Client: Ensolum  
 Project/Site: MCA 204

Job ID: 880-30744-1  
 SDG: 03D2057088

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

**Protocol References:**

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

**Laboratory References:**

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



### Sample Summary

Client: Ensolum  
Project/Site: MCA 204

Job ID: 880-30744-1  
SDG: 03D2057088

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-30744-1	FS01A	Solid	07/14/23 09:15	07/14/23 10:54	4.5'
880-30744-2	FS02A	Solid	07/14/23 09:17	07/14/23 10:54	3.5'
880-30744-3	FS03A	Solid	07/14/23 09:20	07/14/23 10:54	2'

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



Environment Testing Xenco

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

Chain of Custody

Work Order No:

60744

www.xenco.com Page 1 of 1

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

Program: UST/PST	<input type="checkbox"/>	PRP	<input type="checkbox"/>	Brownfields	<input type="checkbox"/>	RRC	<input type="checkbox"/>	Superfund	<input type="checkbox"/>
State of Project:									
Reporting Level II	<input checked="" type="checkbox"/>	Level III	<input type="checkbox"/>	PST/UST	<input type="checkbox"/>	TRRP	<input type="checkbox"/>	Level IV	<input type="checkbox"/>
Deliverables EDD	<input checked="" type="checkbox"/>	ADAPT	<input type="checkbox"/>	Other					

Project Name	MCA 204	Turn Around	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush	Free Code	ANALYSIS REQUEST				
Project Number	03D2057083	Due Date	7/15/23						
Project Location	Hodlice Green	TAT starts the day received by the lab if received by 4:30pm							
Sampler's Name	Hodlice Green	Temp Blank	Yes (No) Wet Ice	Yes (No)					
PO #:		Samples Received Intact	Yes (No) Thermometer ID	Yes (No)					
		Cooler Custody Seals	Yes (No) Correction Factor	Yes (No)					
		Sample Custody Seals	Yes (No) Temperature Reading	Yes (No)					
		Total Containers	Corrected Temperature	49					

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	Preservative Codes	Sample Comments
FS01A	S	7/14/23	9:15	4.5'	C	1	CHLORIDES (EPA: 300.0)	None NO	
FS02A	S		9:17	3.5'	C	1	TPH (8015)	Cool Cool	
FS03A	S		9:20	2'	C	1	BTEX (8021)	HCL HC	
								H <sub>2</sub> S <sub>04</sub> H <sub>2</sub>	
								H <sub>3</sub> PO <sub>4</sub> HP	
								NaHSO <sub>4</sub> NABIS	
								Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> NaSO <sub>3</sub>	
								Zn Acetate+NaOH Zn	
								NaOH+Ascorbic Acid SAPC	



Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO<sub>2</sub> Na Sr Ti Sn U V Zn  
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 245 / 7470 / 7471

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

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
<i>Kate Jennings</i>	<i>[Signature]</i>	7/14/23			
		1054			

### Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-30744-1

SDG Number: 03D2057088

**Login Number: 30744**

**List Number: 1**

**Creator: Rodriguez, Leticia**

**List Source: Eurofins Midland**

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



APPENDIX D

NMOCD Notifications

---

**From:** [Velez, Nelson, EMNRD](#)  
**To:** [Aimee Cole](#)  
**Cc:** [Bryce.Wagoner@mavresources.com](mailto:Bryce.Wagoner@mavresources.com); [Kalei Jennings](#); [Bratcher, Michael, EMNRD](#)  
**Subject:** Maverick Permian- Extension Request - MCA 204 (Incident Number NAPP2311751602)  
**Date:** Tuesday, July 18, 2023 12:24:09 PM  
**Attachments:** [Outlook-2lvh3xsx.png](#)

---

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

Aimee,

Your 45-day time extension request is approved. The Remediation Due date has been updated to 09/05/2023.

Regards,

**Nelson Velez** • Environmental Specialist - Adv  
Environmental Bureau | EMNRD - Oil Conservation Division  
1000 Rio Brazos Road | Aztec, NM 87410  
(505) 469-6146 | [nelson.velez@emnrd.nm.gov](mailto:nelson.velez@emnrd.nm.gov)  
<http://www.emnrd.state.nm.us/OCD/>



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

---

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

Good afternoon,

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

Regards,

**Mike Buchanan** • Environmental Specialist  
Environmental Bureau  
EMNRD - Oil Conservation Division  
8801 Horizon Blvd. NE | Albuquerque, NM 87113  
| [michael.buchanan@emnrd.nm.gov](mailto:michael.buchanan@emnrd.nm.gov)  
<http://www.emnrd.nm.gov/oed>



---

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

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

All,

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

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

MCA #1 South Transfer Line / NAPP2314650185

- Sampling Date: 7/6/2023
- EVGSAU 2437-001 / NAPP2303273838
  - Sampling Date: 7/6/2023

Thank you,



**Kalei Jennings**

Senior Scientist

817-683-2503

**Ensolum, LLC**



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

---

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

Kalei,

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

JH

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



---

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

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

All,

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

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

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

Thank you,



**Kalei Jennings**

Senior Scientist

817-683-2503

**Ensolum, LLC**



**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](mailto: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

Final C-141

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

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

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

Incident ID	NAPP2311751602
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

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

### Location of Release Source

Latitude 32.8001257 \_\_\_\_\_ Longitude -103.7520913 \_\_\_\_\_  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: MCA 204	Site Type:
Date Release Discovered: April 20 <sup>th</sup> , 2023	API# (if applicable): 30-025-00723

Unit Letter	Section	Township	Range	County
O	27	17S	32E	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) 5 bbls	Volume Recovered (bbls) 0 bbls
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 10	Volume Recovered (bbls) 0 bbls
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input 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:

A leak developed in the stuffing box resulting in the release of roughly 10 barrels of produced water and 5 barrels of crude oil. An area roughly 552 feet by 25 feet by 3 inches was impacted. A vacuum truck was immediately called and recovered all standing fluid.

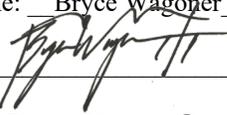
State of New Mexico  
Oil Conservation Division

Incident ID	NAPP2311751602
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>5/1/2023</u> email: <u>Bryce.Wagoner@mavresources.com</u> Telephone: <u>928-241-1862</u>
<b><u>OCD Only</u></b> Received by: <u>Jocelyn Harimon</u> Date: <u>05/01/2023</u>

<b>Spill Volume(Bbls) Calculator</b>		
<i>Inputs in blue , Outputs in red</i>		
<b>Contaminated Soil measurement</b>		
Length(Ft)	Width(Ft)	Depth(Ft)
<u>552</u>	<u>25.000</u>	<u>0.125</u>
Cubic Feet of Soil Impacted		<u>1725.000</u>
Barrels of Soil Impacted		<u>307.49</u>
Soil Type		Clay
Barrels of Oil Assuming 100% Saturation		<u>30.75</u>
Saturation	Fluid present when squeezed	
Estimated Barrels of Oil Released		<u>15.37</u>
Free Standing Fluid Only		

Incident ID	NAPP2311751602
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?	>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 <b>not</b> on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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

<p><b>Characterization Report Checklist:</b> <i>Each of the following items must be included in the report.</i></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.</li> <li><input checked="" type="checkbox"/> Field data</li> <li><input checked="" type="checkbox"/> Data table of soil contaminant concentration data</li> <li><input checked="" type="checkbox"/> Depth to water determination</li> <li><input checked="" type="checkbox"/> Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release</li> <li><input checked="" type="checkbox"/> Boring or excavation logs</li> <li><input checked="" type="checkbox"/> Photographs including date and GIS information</li> <li><input checked="" type="checkbox"/> Topographic/Aerial maps</li> <li><input checked="" type="checkbox"/> Laboratory data including chain of custody</li> </ul>
---

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

Page 4

Incident ID	NAPP2311751602
District RP	
Facility ID	
Application ID	

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

Printed Name:  Bryce Wagoner  Title:  Permian HSE Specialist II

Signature:  Date:  08/10/2023

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

**OCD Only**

Received by:  Shelly Wells  Date:  8/10/2023

Incident ID	NAPP2311751602
District RP	
Facility ID	
Application ID	

## Closure

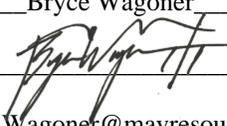
The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled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

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

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

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

Printed Name: Bryce Wagoner Title: Permian HSE Specialist II

Signature:  Date: 08/10/2023

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

**OCD Only**

Received by: Shelly Wells Date: 8/10/2023

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: Scott Rodgers Date: 11/15/2023

Printed Name: Scott Rodgers Title: Environmental Specialist/ Adv

**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 250680

**CONDITIONS**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 250680
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
scott.rodgers	None	11/15/2023