E N S O L U M

October 12, 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 301 Incident Number NAPP2307558601 Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Maverick Permian, LLC (Maverick), has prepared this *Closure Request* to document assessment, excavation, and soil sampling activities performed at the MCA 301 (Site). The purpose of the assessment, excavation, and soil sampling activities was to address impacts to soil resulting from a release of produced water at the Site. Based on the excavation activities and laboratory analytical results for the soil sampling events, Maverick is submitting this *Closure Request*, describing remediation that has occurred and requesting closure for Incident Number NAPP2307558601.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit J, Section 28, Township 17 South, Range 32 East, in Lea County, New Mexico (32.80370°, -103.76860°) and is associated with oil and gas exploration and production operations on federal land managed by the Bureau of Land Management (BLM).

On February 23, 2023, internal corrosion caused a casing leak on a shut-in injection well, resulting in the release of approximately 6.9 barrels (bbls) of produced water onto the surface of the well pad and into the pasture south of the pad. 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 March 16, 2023. The release was assigned Incident Number NAPP2307558601.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

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

There is a network of over 20 monitoring wells within a 0.7-mile radius of the Site indicating depth to groundwater greater than 80 feet below ground surface (bgs). The monitoring wells are used to monitor groundwater impacts from historical releases at the Maljamar Gas Plant (Incident Number NAUTOFGP000196 and AP-115-1) and the MCA 357 (Incident Number NTO1423043689). Monitoring

wells/NMOSE wells MW-1/RA-12204 POD1, MW-2/RA-12574 POD1, MW-3/RA-12574 POD2, and MW-8/RA-12721-POD3 are located between 800 feet and 975 feet of the Site; however, they are temporary monitoring wells and are not used for domestic or livestock purposes, but solely to monitor existing groundwater impacts originating from historical releases at the Maljamar Gas Plant and MCA 357 locations. The monitoring wells are being sampled on a quarterly or semi-annual basis and results are reported to the NMOCD in annual reports. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well records are included in Appendix A.

Maverick and Ensolum do not believe the monitoring wells located between 800 feet and 975 feet of the Site are sensitive receptors for the subject release. The monitoring wells are not fresh water wells. Water quality documented in monitoring wells MW-1, MW-2, MW-3, and MW-8 characterize an extensive groundwater plume associated with a historical produced water release down- and cross-gradient of the Site. Monitoring wells MW-1, MW-2, and MW-3 have consistently contained greater than 10,000 milligrams per liter (mg/L) total dissolved solids (TDS), a water quality parameter used to define freshwater in 19.15.2 NMAC. The monitoring wells were installed to investigate subsurface impacts and conduct long-term monitoring of affected groundwater. They are not utilized for any beneficial use and will be plugged and abandoned upon completion of corrective action.

As detailed in the below Closure Request, the impacted soil at the Site was excavated to below the most stringent Table I Closure Criteria in the top four feet of the release extent. Additionally, the release was delineated vertically to below the most stringent Table I Closure Criteria at depths ranging from 4 feet to 11 feet bgs. Depth to water is well documented to be greater than 80 feet bgs near the Site, leaving virtually no pathway for chloride impacts in the shallow soil interval between 4 feet and 11 feet bgs to reach groundwater deeper than 80 feet in monitoring wells located over 800 feet away. Based on the documented water quality, use of the monitoring wells, distance between the wells and the release extent, the delineation and remediation activities completed at the Site, and lack of a pathway for the release to encounter groundwater, the monitoring wells are not being considered a sensitive receptor for this Site.

The closest continuously flowing or significant watercourse to the Site is an emergent wetland, located approximately 2,640 feet west of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet from a spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

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

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

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



SITE ASSESSMENT ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

Site assessment activities were conducted to evaluate the release extent based on information provided on the Form C-141 and visual observations. Four assessment soil samples (SS01 through SS04) were collected around the visible release extent at a depth of 0.5 feet bgs to confirm the lateral extent of the release. The release extent and soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included in Appendix B.

The assessment soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody procedures to Cardinal Laboratories for analysis of the following constituents of concern (COC): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 4500.

Laboratory analytical results for assessment soil samples SS01 through SS04, collected around the release extent, indicated that all COC concentrations were compliant with the most stringent Table I Closure Criteria and provided lateral definition of the release. Based on visible staining in the release area, delineation and excavation activities were warranted.

EXCAVATION AND DELINEATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

Between September 6, 2023 and September 14, 2023, Ensolum personnel were at the Site to oversee excavation of impacted soil resulting from the February 23, 2023 produced water release. 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 4 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 FS36, FS11A, and FS17A were collected from the floor of the excavation at depths ranging from 4-feet to 4.5 feet bgs. Composite soil samples SW01 through SW16 were collected from the sidewalls of the excavation at depths ranging from the ground surface to 4 feet bgs. The excavation soil samples were handled and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations were mapped utilizing a handheld GPS and are presented on Figure 3. Photographic documentation was completed during the Site visits and a photographic log is included in Appendix B.

Five potholes (PH01 through PH05) were advanced within the open excavation to depths ranging from 8 feet to 11 feet bgs. Soil from the potholes was field screened at 1-foot intervals for VOCs and chloride. Final depth of the potholes was determined by field screening results indicating compliance with the most stringent Table I Closure Criteria. Field screening results and observations for the potholes were logged on lithologic soil sampling logs, which are included in Appendix C. Two discrete delineation samples were selected from each pothole for laboratory analysis; the sample with the highest field screening result and the sample from the final pothole depth. The pothole and delineation soil sample locations are presented on Figure 2.

The excavation and delineation soil samples were handled following the same procedures as described above and submitted to Cardinal Laboratories for analysis of BTEX, TPH, and chloride.



Laboratory analytical results for excavation floor samples FS01 through FS10, FS11A, FS12 through FS16, FS17A, FS18 through FS36 and excavation sidewall samples SW01 through SW16, collected from the final excavation extent, indicated all COC concentrations were compliant with the Site Closure Criteria and reclamation requirements for samples collected in the top four feet. Laboratory analytical results for excavation floor samples FS11 and FS17 initially exceeded the Site Closure Criteria for chloride; additional soil was removed from these areas and subsequent floor samples FS11A and FS17A were compliant.

Laboratory analytical results for the delineation samples collected from potholes PH01 through PH05 indicated all COC concentrations were compliant with the Site Closure Criteria. Additionally, the final depth delineation sample from each pothole, collected at a depth ranging from 8 feet to 11 feet bgs, was compliant with the most stringent Table I Closure Criteria and provided vertical delineation of the release. Laboratory analytical results are summarized on Table 1 and the complete laboratory analytical reports are included as Appendix D.

The excavation measured approximately 6,750 square feet in areal extent. A total of approximately 1,460 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 February 23, 2023, release of produced water. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated all COC concentrations were compliant with the Site Closure Criteria and reclamation requirements, where applicable. Additionally, the release was laterally and vertically delineated to below the most stringent Table I Closure Criteria. Based on the laboratory analytical results, no further remediation is required. Maverick will backfill the excavation with material purchased locally and recontour the Site to match pre-existing conditions.

Excavation of impacted soil has mitigated impacts at this Site. Depth to groundwater is well documented to be greater than 80 feet bgs and no sensitive receptors were identified near the release extent. The impacted soil at the Site was excavated to below the most stringent Table I Closure Criteria in the top four feet of the release extent. Additionally, the release was delineated vertically to below the most stringent Table I Closure Criteria at depths ranging from 4 feet to 11 feet bgs. Although there are four monitoring wells within 1,000 feet of the Site, they do not contain freshwater and are used only to monitor existing groundwater impacts. The groundwater that is present in the monitoring wells is over 70 feet deeper than the vertical extent of this release and over 800 feet away. Based on the documented water quality, use of the monitoring wells, the distance between the wells and the release extent, the delineation and remediation activities completed at the Site, and lack of a pathway for the release to encounter groundwater, the monitoring wells are not being considered a sensitive receptor for this Site.

Maverick believes the remedial actions completed are protective of human health, the environment, and groundwater and respectfully requests closure for Incident Number NAPP2307558601. NMOCD notifications are included in Appendix E and the final Form C-141 is included in Appendix F.



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

Sincerely, Ensolum, LLC

Run Huge

Ronni Hayes Assistant 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 Soil Sample Locations
- Figure 3 Excavation and Delineation Soil Sample Locations
- Table 1Soil Sample Analytical Results
- Appendix A Referenced Well Records
- Appendix B Photographic Log
- Appendix C Lithologic Soil Sampling Logs
- Appendix D Laboratory Analytical Reports & Chain of Custody Documentation
- Appendix E NMOCD Notifications
- Appendix F Final C-141



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FIGURES

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TABLES

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				Maverick N	TABLE 1ANALYTICALMCA 301latural ResourceDunty, New Mexic	s, LLC				
Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1	1 Closure Criteria (NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	10,000
				Assess	ment Soil Samp	es				I
SS01	9/14/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
SS02	9/14/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
SS03	9/14/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
SS04	9/14/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	544
				Deline	ation Soil Sample	es				
PH01B	9/22/2023	7	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	3,000
PH01F	9/22/2023	11	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
PH02	9/11/2023	5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,120
PH02D	9/11/2023	9	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
PH03A	9/11/2023	6	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	6,400
PH03C	9/11/2023	8	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
PH04	10/4/2023	6	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2,200
PH04A	10/4/2023	8	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
PH05	10/4/2023	6	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2,320
PH05A	10/4/2023	8	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	176
				Excavatio	on Floor Soil San	nples				
FS01	9/6/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
FS02	9/6/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	752
FS03	9/6/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	3,080
FS04	9/6/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,760
FS05	9/6/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,100
FS06	9/6/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	368
FS07	9/6/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	5,840
FS08	9/8/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	880
FS09	9/8/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,720
FS10	9/8/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,230

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TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS MCA 301 Maverick Natural Resources, LLC Lea County, New Mexico												
Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)		
NMOCD Table 7	1 Closure Criteria (NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	10,000		
FS11	9/8/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	18,000		
FS11A	9/14/2023	4.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	5,600		
FS12	9/8/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	3,000		
FS13	9/8/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,490		
FS14	9/8/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,520		
FS15	9/8/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	6,960		
FS16	9/8/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	768		
FS17	9/8/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	18,400		
FS17A	9/14/2023	4.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	3,120		
FS18	9/8/2023	4	<0.050	<0.300	<10.0	173	126	173	299	8,660		
FS19	9/8/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	576		
FS20	9/8/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,310		
FS21	9/8/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,520		
FS22	9/8/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,380		
FS23	9/8/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,310		
FS24	9/11/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,220		
FS25	9/12/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,680		
FS26	9/12/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2,040		
FS27	9/12/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,740		
FS28	9/12/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	9,120		
FS29	9/14/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192		
FS30	9/14/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	496		
FS31	9/14/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	656		
FS32	9/14/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	592		
FS33	9/14/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	672		
FS34	9/14/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	624		
FS35	9/14/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	496		
FS36	9/14/2023	4	<0.050	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128		

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ENSOLUM

	TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS MCA 301 Maverick Natural Resources, LLC Lea County, New Mexico													
Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)				
NMOCD Table 7	1 Closure Criteria (NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	10,000				
				Excavation	Sidewall Soil Sa	amples		•						
SW01*	9/6/2023	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0				
SW02*	9/6/2023	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0				
SW03*	9/6/2023	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0				
SW04*	9/6/2023	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0				
SW05*	9/6/2023	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0				
SW06*	9/8/2023	0-4	<0.050	<0.300	<10.0	55.8	41.0	55.8	96.8	192				
SW07*	9/8/2023	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192				
SW08*	9/8/2023	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144				
SW09*	9/8/2023	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	432				
SW10*	9/8/2023	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0				
SW11*	9/8/2023	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0				
SW12*	9/8/2023	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0				
SW13*	9/8/2023	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0				
SW14*	9/12/2023	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208				
SW15*	9/12/2023	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	224				
SW16*	9/12/2023	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	256				

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in **bold** exceed the NMOCD Table 1

Closure Criteria or reclamation standard where applicable.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

Grey text represents samples that have been excavated

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



APPENDIX A

Referenced Well Records



			(quarte	ers are	1=NV	N 2=N	E 3=SW	4=SE)			
							largest)			TM in meters)	
Well Tag	POD) Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	
NA	RA	12721 POD3	2	3	4	28	17S	32E	615417	3629979 🌍	
Driller Lic	ense:	1456	Driller	Com	pan	y:	WE	ITE DI	RILLING CO	OMPANY	
Driller Nai	me:	JOHN W WHITE									
Drill Start	Date:	04/18/2019	Drill F	inish	Dat	e:	04	i /19/20	19 Pl	ug Date:	
Log File D	ate:	05/15/2019	PCW F	Rev D	ate:				So	urce:	Shallow
Pump Type	e:		Pipe D	ischa	rge	Size:			Es	timated Yield:	0 GPM
Casing Size	e:	2.00	Depth	Well:			1	5 feet	De	epth Water:	
X	Wate	er Bearing Stratific	cations:		То	p I	Bottom	Desc	ription		
					8	8	111	Sand	stone/Grave	l/Conglomerate	
					11	1	112	Shale	e/Mudstone/	Siltstone	
					11	2	114	Shale	/Mudstone/	Siltstone	
					11	4	115	Sand	stone/Grave	l/Conglomerate	
X		Casing Perfo	orations:		То	p I	Bottom				
					8	35	115				

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

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WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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z	OSE POD NO MW-8). (WELL NO	·		WELL TAG ID NO.			OSE FILE NO(RA-12721	S).		
LIO	WELL OWN		POD3	•				PHONE (OPTI			
CA'	ConocoPh	•	•					432-258-34	•		
LLC	WELL OWN	- ER MAILIN	G ADDRESS					СПҮ		STATE	ZII'
GENERAL AND WELL LOCATION	901 W Wa							Midland		TX	79701
ND /	WELL		DE	GREES	MINUTES	SECON	NDS	·		<u> </u>	
AL A	LOCATIC		TITUDE	32	48	6.2	23 N	* ACCURACY	REQUIRED: ONE TEN	TH OF A SECOND	
NER.	(FROM GI	PS) LC	DNGITUDE	103	46	2.1	8 W	* DATUM RE	QUIRED: WGS 84		
1. GEI		ON RELATI	NG WELL LOCATION TO	STREET ADD	RESS AND COMMON	LANDM	ARKS – PLS	S (SECTION, TO	WNSHJIP, RANGE) WH	ERE AVAILABLE	,
1	MCA 357	·							·····		
	LICENSE NO		NAME OF LICENSED	DRILLER	T 1 XX7 XX71 */			· · · ·	NAME OF WELL DR		
	WD-1			<u></u>	John W. White					rilling Company, In	
	DRILLING S 04/18/		DRILLING ENDED 04/19/2019	DEPTH OF CO	DMPLETED WELL (FT) 115.0)	BORE HOI	LE DEPTH (FT)	DEPTH WATER FIR	ST ENCOUNTERED (F	T)
N	COMPLETE	D WELL IS:	ARTESIAN	DRY HO	LE 🔽 SHALLOW	V (UNCO	NFINED)	,	STATIC WATER LEV	VEL IN COMPLETED V 92.8	VELL (FT)
TIO	DRILLING F	LUID:	AIR	MUD	ADDITIVE	ES – SPEC	CIFY:	·	<u>, </u>		
RMA	DRILLING N	ÆTHOD:	F ROTARY	П намме	R CABLE TO	DOL	OTHE	R-SPECIFY:			· · · · · · · · · · · · · · · · · · ·
NFO	DEPTH	(feet bgl)	BORE HOLE	CASING	MATERIAL AND/	/OR		ASING	CASING	CASING WALL	SLOT
DRILLING & CASING INFORMATION	FROM	TO	DIAM (inches)		GRADE each casing string, a sections of screen)	and	CONN T	NECTION TYPE	INSIDE DIAM. (inches)	THICKNESS (inches)	SIZE (inches)
s CA	-2.7	85.0	6.0		Sch. 40 PVC			ling diameter) hreads	2.0	1/4"	
NG &	85.0	115.0	6.0	<u> </u>	Sch. 40 PVC		TI	hreads	2.0	1/4"	.010
ILLI											
DRI					<u> </u>						
5.											
		L							<u> </u>	<u> </u>	
			-								
			· · · · · · · · · · · · · · · · · · ·	<u> </u>					<u> </u>	<u> </u>	
л I		(feet bgl)	BORE HOLE DIAM. (inches)		IST ANNULAR SEA				AMOUNT	METH PLACE	
RIA	FROM 0.0	TO 10.0	6.0		Type 2 Portland Cen				(cubic feet) 1.963		/Tremie Pipe
ATE	10.0	82.0	6.0		Bentoni				21 Bags		Mix
R M	82.0	115.0) Sand			16 Bags		t Mix
ULA	;							·····			
ANNULAR MATERIAL											
3	· · ·								┣		
	0.000 0 00000	l		L		<u> </u>	<u> </u>				
FOR FILE	$\frac{\text{OSE INTER}}{1000}$	NAL USE	271		POD NO.			WR-2 TRN I	0 WELL RECORD A	<u>& LOG (Version 04</u>	/30/19)
	<u> </u>		<u>~</u>	<u>575</u>			<u> </u>		<u> </u>		

WELL TAG ID NO.

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	LOCATION	v Z	4	2	-1	TZ	5
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34

LOCATION

PAGE 1 OF 2

			·									
	DEPTH (1 FROM	feet bgl) TO	THICKNESS (feet)	INCLUDE WA	TER-BEARIN	MATERIAL E G CAVITIES O sheets to fully do	R FRAC	TURE ZONE	s	BEAR	TER RING? / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	0.0	0.5	0.5			aliche base				Y	✓ N	
	0.5	5.5	5.0			sand/clayey sand				Y	✓ N	
	5.5	22.0	16.5			Caliche				Y	√ N	
	22.0	34.0	12.0		Tan bro	wn sand/sandstor				Ŷ	√ N	
	34.0	35.0	1.0			sand/sandstone g				Ŷ	✓ N	
,	35.0	44.0	9.0			sand/sandstone			_	Y	√ N	
4. HYDROGEOLOGIC LOG OF WELL	44.0	47.0	3.0			own sand w/grav				Ŷ	✓ N	
JF W	47.0	66.0	19.0			rown sand/sands				Ŷ	✓ N	
0.00	66.0	67.0	1.0			sand/sandstone				Ŷ	✓ N	-
сц	67.0	72.0	5.0			wn sand/sandsto				Y	✓ N	
OGI	72.0	83.0	11.0			n/tan sandstone				Y	✓ N	
EOL	83.0	86.0	3.0	v		nd green/brown	eandetor	P		Y	✓ N	
(DO)	86.0	88.0	2.0			en/gray sandstor				Y	✓ N	
YDR	88.0	111.0	23.0			/gray sandstone				✓ Y		
4. H	111.0	112.0	1.0			ay silty shale				✓ Y	N	
	111.0	112.0	2.0			ish brown silty s	hale			✓ Y	N	
	112.0	114.0	1.0		· · ·	brown sandston				• 1 ✓ Y	N	
	114.0	115.0	1.0			ish brown silty s				✓ I ✓ Y	N	
	113.0	110.0	1.0			ish brown shiry s.	Hale			Y	N	
										Y	N	
										Y	N	-
	METHOD U	SED TO ES	TIMATE VIELD	OF WATER-BEAR	ING STRATA				тоти	LESTR		<u> </u>
) (gpm):	0.00
	PUM		IR LIFT	BAILER	OTHER – SPE							
NO	WELL TES	T TEST	RESULTS - ATT I TIME, END TII	ACH A COPY OF D ME, AND A TABLE	ATA COLLEC SHOWING D	TED DURING	WELL T D DRA	TESTING, INC WDOWN OVI	CLUDR ER THI	NG DISC E TESTI	HARGE	METHOD, DD.
VISI	MISCELLA	NEOUS INF	ORMATION:									<u> </u>
ER												
TEST; RIG SUPERVISIOI												
RIG												
IST;						are alteria			OTDIK			
5. TI			RILL RIG SUPER	RVISOR(S) THAT PI	KUVIDED UN	SHE SUPERVI	SION O.	F WELL CON	ISTRUC	TION U	THER IF	IAN LICENSEE:
	William B.	Atkins										
				IAT TO THE BEST								
JRE	RECORD O	F THE ABO ƏRD WILL	VE DESCRIBED ALSO BE FILED	WELL. I ALSO CE	RTIFY THAT T HOLDER W	THE WELL TA ITHIN 30 DAYS	G, IF RI S AFTEI	EQUIRED, HA R THE COMPI	AS BEE	N INSTA 1 OF WE	LLED AL	ND THAT THIS LING.
IATU			\sim									
6. SIGNATURE	(h	12							5/7	/2019	
6.5				R / PRINT SIGNE	FNAME		_				DATE	
						<u>_</u>					DATE	
FO	R OSE INTER	NAL USE						WR-20 WE	LL REC	CORD &	LOG (Ve	rsion 04/30/2019)
FIL	<u>eno. R</u>	<u>A-12</u>	721		POD NO.	3	· · · · · · · · · · · · · · · · · · ·	TRN NO.	64	550	5	- I
LO	CATION '	342	. Sec 2	8 T175	<u>R32</u>	6	WELL	TAG ID NO.				PAGE 2 OF 2



	(quarters are 1=N	W 2=N	JE 3=SW	/ 4=SE)			
	(quarters are sn	allest to	o largest)		(NAD83 UT	'M in meters)	
POD Number	Q64 Q16 Q4	Sec	Tws	Rng	Х	Y	
RA 12721 POD1	3 2 3	28	17S	32E	614645	3630141 🍯	
ense: 1456	Driller Compa	ny:	WH	IITE DR	ILLING CC	OMPANY	
me: JOHN W WHIT	Έ						
Date: 04/18/2019	Drill Finish Da	te:	04	4/19/201	9 Plu	g Date:	04/19/2019
ate: 05/15/2019	PCW Rev Date	e:			Sou	irce:	
e:	Pipe Discharge	Size:	:		Est	imated Yield	:
e: 2.00	Depth Well:		12	25 feet	De	pth Water:	
Casing Pe	rforations: 7	on I	Rottom				
Casing I ci		85	125				
	RA 12721 POD1 ense: 1456 ne: JOHN W WHIT Date: 04/18/2019 ate: 05/15/2019 e: e: 2.00	POD Number Q64 Q16 Q4 RA 12721 POD1 3 2 3 ense: 1456 Driller Compa ne: JOHN W WHITE Drill Finish Da Date: 04/18/2019 Drill Finish Da ate: 05/15/2019 PCW Rcv Date e: Pipe Discharge e: 2.00 Depth Well:	POD Number Q64 Q16 Q4 Sec RA 12721 POD1 3 2 3 28 ense: 1456 Driller Company: ne: JOHN W WHITE Date: 04/18/2019 ate: 05/15/2019 PCW Rcv Date: e: Pipe Discharge Size: e: 2.00 Depth Well:	POD Number Q64 Q16 Q4 Sec Tws RA 12721 POD1 3 2 3 28 178 ense: 1456 Driller Company: WH ne: JOHN W WHITE Drill Finish Date: 04 Date: 04/18/2019 Drill Finish Date: 04 ate: 05/15/2019 PCW Rcv Date: 12 e: Pipe Discharge Size: 12 e: 2.00 Depth Well: 12 Casing Perforations: Top Bottom	RA 12721 POD1 3 2 3 28 17S 32E ense: 1456 Driller Company: WHITE DR ne: JOHN W WHITE 04/18/2019 Drill Finish Date: 04/19/201 ate: 05/15/2019 PCW Rev Date: 04/19/201 e: Pipe Discharge Size: 04/12/201 e: 2.00 Depth Well: 125 feet Casing Perforations:	POD Number Q64 Q16 Q4 Sec Tws Rng X RA 12721 POD1 3 2 3 28 17S 32E 614645 ense: 1456 Driller Company: WHITE DRILLING COmpany: WHITE DRILLING COmpany: WHITE DRILLING COmpany: WHITE DRILLING COmpany: POUND PLUE Date: 04/18/2019 Drill Finish Date: 04/19/2019 Plue ate: 05/15/2019 PCW Rev Date: Source Source e: Pipe Discharge Size: Est Est e: 2.00 Depth Well: 125 feet Dept	POD Number Q64 Q16 Q4 Sec Tws Rng X Y RA 12721 POD1 3 2 3 28 17S 32E 614645 3630141 ense: 1456 Driller Company: WHITE DRILLING COMPANY ne: JOHN W WHITE Drill Finish Date: 04/19/2019 Plug Date: ate: 05/15/2019 PCW Rev Date: Source: Estimated Yield e: 2.00 Depth Well: 125 feet Depth Water:

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3/13/23 4:06 PM

LOCATION 233 T155 R Released to Imaging: 2/13/2024 2:26:32 PM



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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	OSE POD NO). (WELI	L NO.))		WELL 1	AG ID NO.			OSE FILE NO(S).	—		
N	MW-6			POD	×Ì -					RA-12721				
Ę	WELL OWN				<u>. </u>					PHONE (OPTI	ONAL)		· · · ·	<u> </u>
Q Q	ConocoPh	illips (Comp	pany						432-258-34	51			
ΓŢ.	WELL OWN						<u>-</u>			CITY	<u> </u>	STATE		ZIP
VEL	901 W Wa	all St, S	Suite	100						Midland		TX		79701
Â				DI	EGREES	MIN	UTES SE	CONDS						
A	WELL LOCATIO	I			32	4		1178	N	* ACCURACY	REQUIRED: ONE TEN	TH OF A SEC	COND	
RAI	(FROM GI	- F	LAT	ITUDE	103	4	6		w		QUIRED: WGS 84			
GENERAL AND WELL LOCATION				GITUDE										
B		ON REL	ATIN	G WELL LOCATION TO	STREET ADD	RESS ANE	COMMON LAN	DMARKS –	PLSS	S (SECTION, TO	WNSHJIP, RANGE) WH	ERE AVAIL	ABLE	
-	MCA 357													
	LICENSE NO)		NAME OF LICENSED	DRIFTER						NAME OF WELL DR		PANY	
	WD-					John W	. White					rilling Con		
	DRILLING S	TADTE		DRILLING ENDED	DEPTH OF CC	MDI ETER	WEILCET	BODE	HOT	E DEPTH (FT)	DEPTH WATER FIR			
	04/18/		۲ I	04/19/2019	DEFINIO	125.0		BORE	101.	ie Die maart)	DEFIII WATERING	Dry		
							······································				STATIC WATER LEV	-		
	COMPLETE	COMPLETED WELL IS: ARTESIAN 7 DRY HOLE SHALLOW (UNC									STATIC WATER LEV	Dry	PLEIED WE	LL (F I)
CASING INFORMATION														·····
IAT	DRILLING F			✓ AIR			ADDITIVES – S	-	_					
RM	DRILLING N	1ETHOL):	✓ ROTARY	HAMMER	R 🗌	CABLE TOOL	го 🗌	THEF	R SPECIFY:				
NFC	DEPTH	(feet b	gl)	BORE HOLE	CASING	MATER	IAL AND/OR				CASING			
C B	FROM		0	DIAM		GRAI		cc		SING ECTION	INSIDE DIAM.		G WALL KNESS	SLOT SIZE
SIN				(inches)			ng string, and of screen)		Т	YPE	(inches)	(inc	hes)	(inches)
C	-2.7	84	5.0	6.0		Sch. 40	<u> </u>	(add ci		ing diameter) reads	2.0	1/	4"	╂────
2. DRILLING &	85.0	l	5.0	6.0		Sch. 40				reads	2.0		4"	.010
Ĩ.														
กม					<u>+</u>									
DI											· · · · · · · · · · · · · · · · · · ·	<u> </u>		
7		<u> </u>								<u> </u>				<u>;</u>
											-			
		<u> </u>										<u> </u>		
	······						<u></u>							
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					<u> </u>					·		L		<u> </u>
	DEPTH	(feet b	gl)	BORE HOLE	LI	ST ANN	ULAR SEAL N	MATERIA	LA	ND	AMOUNT		METHO	
IAL	FROM	Т	0	DIAM. (inches)	GRA	VEL PA	CK SIZE-RAN	GE BY IN	TE	RVAL	(cubic feet)		PLACEM	IENT
ERI	0.0	10).0	6.0	1	Гуре 2 Ро	ortland Cement	w/5% Ben	itoni	ite	1.963	Purr	p Mix w/I	remie Pipe
IAT	10.0	82	2.0	6.0	<u> </u>		Bentonite C	hips			25 Bags		Hand M	/lix
R M	82.0	12	5.0	6.0			20/40 Sar	d			16 Bags		Hand N	Mix
	·				<u> </u>						· · · · · · · · · · · · · · · · · · ·			
ANNULAR MATERIAL														<u></u>
3. AI											·······			
[]				+			<u></u>							
		I			1		<u> </u>							
	OSE INTER										0 WELL RECORD		ersion 04/3	0/19)
FILE	e no. – K	Aul	2				POD NO.		1	TRN 1		<u>05</u>]
LOC	ATION	23	3	マリン	R 326	i Se	128		1	WELL TAG I	dno. MA		PAGE	1 OF 2

-	DEPTH (feet bgl) TO	THICKNESS (feet)	INCLUDE WATI	ID TYPE OF MATERIAL E ER-BEARING CAVITIES O oplemental sheets to fully d	R FRACTURE ZONE	S BEA	ATER ARING? S / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	0.0	0.5	0.5		Base caliche		Y	√ N	
	0.5	9.0	8.5		Brown sand/clayey sand	1	Y	√ N	
	9.0	13.0	4.0		Light brown/tan sand		Y	√ N	
	13.0	19.0	6.0		Brown sand w/gravel	· · · · ·	Y	√ N	
	19.0	40.0	21.0		Brown sand/sandstone	•••••••••••••••••••••••••••••••••••••••	Y	√ N	
L .	40.0	42.0	2.0	· · · · ·	Brown sand w/gravel		Y	✓ N	
VEL	42.0	48.0	6.0	· · · · · · · · · · · · · · · · · · ·	Brown/reddish brown clayey	' sand	Y	√ N	
4. HYDROGEOLOGIC LOG OF WELL	48.0	53.0	5.0		wn/reddish brown silty sand/		Y	√ N	· · · ·
00	53.0	60.0	7.0		Brown silty sand w/grav		Y	√ N	
CL	60.0	68.0	8.0		Brown silty sand/sandsto		Y	✓ N	
0 <u>0</u>	68.0	85.0	17.0		Conglomerated sandstone and		Y	√ N	
EOI	85.0	95.0	10.0		rown/reddish brown silty sar		Y	√ N	· ·
SOG	95.0	125.0	20.0		rown silty shale w/gray silty		Y	√ N	
Ιαλι					<u></u> ,,		Y	N	
4, H			·····				Y	N	<u></u>
ļ					·····		Y	N	
							Y	N	
							Y	N	· · ·
							Y	N	
							Y	N	
							Y	N	
	METHOD U	L ISED TO ES	I TIMATE YIELD	OF WATER-BEARIN	G STRATA.		TOTAL EST		
	PUM				THER - SPECIFY:		WELL YIEI		0.00
					THER - SPECIF I :	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·
z	WELL TES				TA COLLECTED DURING HOWING DISCHARGE AN				
TEST; RIG SUPERVISION									
ßVI	MISCELLA	NEOUS INI	FORMATION:						
SUPE									
ELG S									
T; F									
	PRINT NAM	AE(S) OF D	RILL RIG SUPER	RVISOR(S) THAT PRO	VIDED ONSITE SUPERVI	SION OF WELL CON	STRUCTION	OTHER TH	IAN LICENSEE:
ŝ	William B.	Atkins							
	DV SIGNIN		I CEDTIEV TU	IAT TO THE BEST O	F MY KNOWLEDGE AN	DEFIET THE FOR	PECOING IS		
Æ	RECORD O	F THE ABC	VE DESCRIBED	WELL. I ALSO CERT	TFY THAT THE WELL TA	G, IF REQUIRED, HA	AS BEEN INST	ALLED AN	ID THAT THIS
TUL	WELL REC	ORDWILL	ALSO BE FILED	WITH THE PERMIT I	HOLDER WITHIN 30 DAYS	S AFTER THE COMP	LETION OF W	ELL DRILI	LING.
SIGNATURE							5/	7/2019	
6. SI		A	(
		SIGNAL	URE OF DRILLE	ER / PRINT SIGNEE	NAME			DATE	
	R OSE INTER	NAL ROT				WD on Ha		& T OG GV	nion 04/20/2010
	E NO. A		121		POD NO.	TRN NO.	6455		rsion 04/30/2019)
	CATION 2	-2, -2, -2, -	· · · · · · · · · · · · · · · · · · ·	25 R32E	Sec. 28	WELL TAG ID NO	<u> </u>	•	PAGE 2 OF 2

Released to Imaging: 2/13/2024 2:26:32 PM

Received by OCD: 10/23/2023 11:35:44 AM

John R. D Antonio, Jr ?.E. State Engineer



Roswell Office 1900 WEST SECOND STREET ROSWELL, NM 88201

STATE OF NEW MEXICO OFFICE OF THE STATE ENGINEER

Trn Nbr: 645505 File Nbr: RA 12721 Well File Nbr: RA 12721 POD1

May. 28, 2019

JULIE EVANS, TETRA TECH AGENT CONOCOPHILLIPS COMPANY 901 W WALL ST SUITE 100 MIDLAND, TX 79701

Greetings:

The above numbered permit was issued in your name on 04/16/2019.

The Well Record was received in this office on 05/15/2019, stating that it had been completed on 04/19/2019, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 04/30/2020.

If you have any questions, please feel free to contact us.

Sincerely, NI

Andrew Dennis (575)622-6521

drywell



		(quart	ers are	1=NV	W 2=N	E 3=SV	/ 4=SE)			
		(qua	rters ar	e sma	ıllest to	argest)	(NAD83 UT	M in meters)	
POD	Number	Q64	Q16	Q4	Sec	Tws	Rng	Χ	Y	
RA	12721 POD4	1	1	2	33	17S	32E	615055	3629589 🌍	
ense:	1456	Drille	r Con	ipan	ıy:	WF	HTE DR	RILLING CC	MPANY	
me:	JOHN W WHITE									
Date:	04/18/2019	Drill F	inish	Dat	te:	0	4/19/201	19 Plu	g Date:	04/19/2019
ate:	05/15/2019	PCW	Rcv I	Date:	:			Sou	irce:	
e:		Pipe D	lischa	rge	Size:			Est	imated Yield:	0 GPM
e:	6.00	Depth	Well	:		1	40 feet	Dej	pth Water:	
	Casing Perfor				p E	Botton	1			
	U			0	- 90	130	、 、			
	RA ense: me: Date: ate: e:	me: JOHN W WHITE Date: 04/18/2019 ate: 05/15/2019 e: e: 6.00	POD Number Q64 RA 12721 POD4 1 ense: 1456 Driller me: JOHN W WHITE Date: 04/18/2019 Drill F ate: 05/15/2019 PCW 3 PCW 3 e: Pipe D Pipe D	POD NumberQ64 Q16RA 12721 POD41ense:1456Driller Comme:JOHN W WHITEDate:04/18/2019Drill Finishate:05/15/2019PCW Rcv Ie:Pipe Dischae:6.00Depth Wells	POD Number Q64 Q16 Q4 RA 12721 POD4 1 1 2 ense: 1456 Driller Company me: JOHN W WHITE Date: 04/18/2019 Date: 04/18/2019 Drill Finish Date ense: 05/15/2019 PCW Rcv Date ense: 6.00 Depth Well:	POD Number Q64 Q16 Q4 Sec RA 12721 POD4 1 1 2 33 ense: 1456 Driller Company: me: JOHN W WHITE Date: 04/18/2019 Drill Finish Date: prize: 05/15/2019 PCW Rcv Date: Pipe Discharge Size: e: 6.00 Depth Well: Depth Well:	POD NumberQ64 Q16 Q4 SecTwsRA 12721 POD41123317Sense:1456Driller Company:WHme:JOHN W WHITEWHWHWHDate:04/18/2019Drill Finish Date:04/18/2019ense:05/15/2019PCW Rev Date:04/18/2019ense:6.00Depth Well:14/14/2019	RA 12721 POD4 1 1 2 33 17S 32E ense: 1456 Driller Company: WHITE DF me: JOHN W WHITE 04/18/2019 Drill Finish Date: 04/19/2019 Date: 04/18/2019 Drill Finish Date: 04/19/2019 ate: 05/15/2019 PCW Rev Date: e: 6.00 Depth Well: 140 feet	POD NumberQ64 Q16 Q4SecTwsRngXRA 12721 POD41123317S32E615055ense:1456Driller Company:WHITE DRILLING CCme:JOHN W WHITEDate:04/18/2019Drill Finish Date:04/19/2019Pluate:05/15/2019PCW Rcv Date:Souense:6.00Depth Well:140 feetDep	POD Number Q64 Q16 Q4 Sec Tws Rng X Y RA 12721 POD4 1 1 2 33 17S 32E 615055 3629589 Image: Size: 615055 3629589 Image: Size: Source: Image: Size: Source: Source: Image: Size: Estimated Yield: Image: Size: Estimated Yield: Image: Size: Image: Size: Source: Image: Size: Im

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3/13/23 4:07 PM

LOCATION [2] T175 R32E Released to Imaging: 2/13/2024 2:26:32 PM 1. 1. **1**. 1.

1816 1917 NA

WELL TAG ID NO.

PAGE 1 OF 2



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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NO	OSE POD NO. MW-9	. (WELL NO	PODY	W	ELL TAG ID NO.			OSE FI RA-12	le no(\$ 2721	5).		
GENERAL AND WELL LOCATION	WELL OWNE ConocoPhi			I					е (ортіс 58-345			:
E	WELL OWNE		G ADDRESS					СПҮ	_		STATE	ZIP
NELI	901 W Wal							Midla	nd		TX	79701
No.	WELL	1	DE	GREES	MINUTES	SECON	DS			· · · · ·		
L AI	LOCATIO		TITUDE	32	47	53.7	0 _N	* ACC	URACY	REQUIRED: ONE TEN	TH OF A SECOND	:• :
ERA	(FROM GP	s) 🗖		103	46	16.2	7 W	* DAT	UM REC	QUIRED: WGS 84		
GEN	DESCRIPTIO	ON RELATI	NG WELL LOCATION TO	STREET ADDRESS	S AND COMMON	LANDMA	RKS – PLS	S (SECTI	ION, TO	WNSHJIP, RANGE) WH	ERE AVAILABLE	···· · · · · · ·
I. (MCA 357											
	LICENSE NO		NAME OF LICENSED	DRILLER						NAME OF WELL DRI	LLING COMPANY	
	WD-1	456		Jol	ın W. White					White D	rilling Company, In	c.
	DRILLING ST	FARTED	DRILLING ENDED	DEPTH OF COMP	LETED WELL (FI	0	BORE HO	LE DEPT	H (FT)	DEPTH WATER FIRS	ST ENCOUNTERED (F	r)
	04/18/2	2019	04/19/2019]	140.0						Dry	
	COMPLETED	WELL IS:	ARTESIAN	DRY HOLE	SHALLO	W (UNCON	IFINED)			STATIC WATER LEV	EL IN COMPLETED W Dry	ELL (FT)
NO			,									
ATI	DRILLING FI	LUID:	AIR	MUD	ADDITIV	ES – SPECI					<u></u>	
CASING INFORMATION	DRILLING M	ETHOD:	7 ROTARY	HAMMER	CABLE T	OOL	OTHE	R – SPEC	IFY:			
NFC	DEPTH	(feet bgl)	BORE HOLE		TERIAL AND)/OR	С.	ASING		CASING	CASING WALL	SLOT
- Q	FROM	то	DIAM		RADE	and	CON	NECTIC	ON	INSIDE DIAM.	THICKNESS	SIZE
ASI			(inches)		tions of screen)		(add coup	TYPE ling diam	neter)	(inches)	(inches)	(inches)
	-2.7	90.0	6.0	Sci	n. 40 PVC			hreads		2.0	1/4"	
2. DRILLING &	90.0	130.0	6.0	Sel	n. 40 PVC		T	hreads		2.0	1/4"	.010
LLI												
DRI												
5												
		<u> </u>										
		/E		<u> </u>								
Г	DEPTH		BORE HOLE DIAM. (inches)		ANNULAR SE L PACK SIZE					AMOUNT (cubic feet)	METH	
RIA	FROM 0.0	TO 10.0	6.0		e 2 Portland Ce					1.963	Pump Mix w	
ΛTE	10.0	85.0	6.0	I yp		nite Chips				23 Bags	Hand	
t M/	85.0	130.0				0 Sand		<u> </u>		16 Bags	Hand	
ANNULAR MATERIAL		1.50.0										
UNI												
3. AN			 									
(**)												
				J							· LOC (1/	(20/10)
	$\frac{1}{1} \cos \frac{1}{1} \cos \frac{1}$	$\Delta \sim 12$	-721		POD NC). L		I	TRN 1	$\frac{0 \text{ Well record}}{100}$		50/19)
		¬ ∠	_ /~ 1		1 - 00 +10	-	L I			···· 01) .) (1 1	I

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Sec

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	DEPTH (1 FROM	eet bgl) TO	THICKNESS (feet)	INCLUDE WATE	R-BEARING CAVI	RIAL ENCOUNTERED - TIES OR FRACTURE ZON fully describe all units)	ÆS	WATE BEARIN (YES / N	IG?	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	0.0	4.5	4.5		Brown sand w/cl	ayey sand		Y	√ N	
	4.5	10.0	5.5		Light brown				✓ N	
	10.0	15.0	5.0		Brown sand w		·		✓ N	
	15.0	57.0	42.0		Brown sand/sa				√ N	
	57.0	59.0	2.0	······································	Light brown sand		• •		√ N	
_	59.0	63.0	4.0		Green/brown sa				✓ N	
HYDROGEOLOGIC LOG OF WELL	63.0	67.0	4.0	Conglo		sandstone w/gravel			✓ N	
DF V	67.0	72.0	5.0		Green/gray sa				✓ N	
0C	72.0	75.0	3.0		Dark brown sa				✓ N	
CTV	75.0	93.0	18.0	Lavers of bro		dark green/gray sandstone		· · ·	✓ N	
OGI	93.0	118.0	25.0		Light gray/green				✓ N	
EOL	118.0	119.0	1.0		Gray silty s				✓ N	· ·
(OCI	118.0	119.0	17.0		Red silty sl				✓ N	
YDR	136.0	130.0	17.0		Gray sands		- "		✓ N	
4. H	136.0	137.0	3.0						✓ N	
	137.0	140.0			Red/brown silf			Y	v N N	
								Y		
						<u></u>			N	
								Y	N	
								Y		
								Y	N	
								Y	N	
				OF WATER-BEARING	HER - SPECIFY:		1	AL ESTIMA LL YIELD (0.00
N	WELL TES	T TEST	RESULTS - ATT ſ TIME, END TI	ACH A COPY OF DAT. ME, AND A TABLE SH	A COLLECTED DU OWING DISCHAR	JRING WELL TESTING, I GE AND DRAWDOWN O	NCLUDI VER TH	NG DISCHA E TESTING	ARGE N PERIO	AETHOD, D.
TEST; RIG SUPERVISION	MISCELLA	NEOLIS INF	ORMATION							
ERV	MIGOLLEA		Pl	ugged back from 130-	140 w/3 Bags of I	Bentonite				
SUP										
RIG										
ST;										
s. TE	PRINT NAM	fE(S) OF DI	RILL RIG SUPER	VISOR(S) THAT PRO	VIDED ONSITE SU	PERVISION OF WELL CO	ONSTRU	CTION OTH	IER TH	AN LICENSEE:
2	William B.	Atkins								
	BY SIGNIN	G BELOW	I CERTIFY TH	AT TO THE BEST OF	MY KNOWLED	GE AND BELIEF, THE F	OREGO	NG IS A T	RUE A	ND CORRECT
RE	RECORD O	F THE ABO	VE DESCRIBED	WELL. I ALSO CERTI	FY THAT THE WI	ELL TAG, IF REQUIRED, I 0 DAYS AFTER THE COM	IAS BEE	IN INSTALI	LED AN	ID THAT THIS
SIGNATURE	WELL REC	JED-WILL	ALSO DE FILED	WITH THE PERMIT H	OLDER WITHIN 5	0 DATS AFTER THE COM	FLETIO	N OF WELL	DKILL	AING.
IGN/	(h						5/7/20)19	
6. S]		A	floren and the second s							
		SIGNAT	URE OF DRILLE	R / PRINT SIGNEE	NAME			E	DATE	
FOI	R OSE INTER	NAL ISF				W/R_20 W	ELL RE)G (Ver	sion 04/30/2019)
		4.12.7	21		POD NO. 4	TRN NO.		4550	Sec. 2	5.5H 0 150/2017)
LO	CATION	21	\$128 R	325 Sec 3	5	WELL TAG ID N	٨	JA		PAGE 2 OF 2
										· .

John R. D Antonio, Jr., P.E. State Engineer



Roswell Office 1900 WEST SECOND STREET ROSWELL, NM 88201

STATE OF NEW MEXICO OFFICE OF THE STATE ENGINEER

Trn Nbr: 645505 File Nbr: RA 12721 Well File Nbr: RA 12721 POD4

May. 28, 2019

JULIE EVANS, TETRA TECH AGENT CONOCOPHILLIPS COMPANY 901 W WALL ST SUITE 100 MIDLAND, TX 79701

Greetings:

The above numbered permit was issued in your name on 04/16/2019.

The Well Record was received in this office on 05/15/2019, stating that it had been completed on 04/19/2019, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 04/30/2020.

If you have any questions, please feel free to contact us.

Sincerely,

Andrew Dennis (575)622-6521

drywell



			(quarters	are 1=N	W 2=N	E 3=SW	4=SE)			
			(quarters	s are sma	llest to	o largest)		(NAD83 U	ΓM in meters)	
Well Tag	POE) Number	Q64 Q2	16 Q4	Sec	Tws	Rng	Х	Y	
NA	RA	12721 POD5	2 4	4 4	28	17S	32E	615650	3629961	
Driller Lic	cense:	1456	Driller C	ompar	ıy:	WH	ITE DR	RILLING CO	OMPANY	
Driller Na	me:	WHITE, JOHNN	IOWN.GENEI	λ						
Drill Start	t Date:	04/27/2020	Drill Fini	sh Dat	e:	04	/28/202	20 Plu	ıg Date:	
Log File D	Date:	05/18/2020	PCW Rev	v Date	:			So	urce:	Shallow
Pump Typ	e:		Pipe Disc	harge	Size:			Est	timated Yield	:
Casing Siz	ze:	2.00	Depth W	ell:		13	0 feet	De	pth Water:	124 feet
X	Wate	er Bearing Stratif	ications:	Тс	p l	Bottom	Desci	ription		
				10)9	121	Sands	stone/Gravel	/Conglomerat	e
				12	21	125	Sands	stone/Gravel	/Conglomerat	e
				12	25	130	Sands	stone/Gravel	/Conglomerat	e
X		Casing Per	forations:	Тс	p l	Bottom				
				ç	90	130				

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3/13/23 4:07 PM



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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	OSE POD NO.	(WELL NO)		WELL TAG ID NO			OSE FILE NO(S).			
NC	MW-10		7005					RA-12721				
VIIC	WELL OWNE	R NAME(S)		I				PHONE (OPTIC	ONAL)			
oC/	ConocoPhil	llips Com	pany					432-258-345	51			
ΤT	WELL OWNE							CITY		STATE	ZIP	
WEI	901 W Wal	ll St, Suite	e 100					Midland		TX	79701	
Q	WELL		DE	GREES	MINUTES	SECONI	DS					
TA	LOCATION	N LAT	ITUDE	32	48	5.56	5 N	* ACCURACY	REQUIRED: ONE TEN	TH OF A SECOND		
ERA	(FROM GPS	S) LON	IGITUDE	103	45	53.2	3 W	* DATUM REC	QUIRED: WGS 84			
GENERAL AND WELL LOCATION	DESCRIPTIO	N RELATIN	G WELL LOCATION TO	STREET ADDRE	SS AND COMMON	I LANDMA	RKS – PLS	S (SECTION, TO	WNSHJIP, RANGE) WH	ERE AVAILABLE		
1. 1	MCA 357											
	LICENSE NO.		NAME OF LICENSED						NAME OF WELL DR			
	WD-1		NAME OF LICENSED		ohn W. White					Filling Company, Inc		
	DRILLING ST	TARTED	DRILLING ENDED	DEPTH OF COM	PLETED WELL (F	Г)	BORE HO	LE DEPTH (FT)) DEPTH WATER FIRST ENCOUNTERED (FT)			
	04/27/2	2020	04/28/2020		130.0					124.25		
	COMPLETED					W (UNCON		EL IN COMPLETED WI	ELL (FT)			
Z	COMPLETED	WELL IS:	ARTESIAN	DRY HOLE	✓ SHALLO	(FINED)			124.25			
ATIC	DRILLING FL	JUID:	🖌 AIR	MUD	ADDITIV	ES – SPECI	FY:					
DRILLING & CASING INFORMATION	DRILLING M	ETHOD	ROTARY	HAMMER	CABLE T	OOL	OTHE:	R - SPECIFY:				
NFO	DEPTH (feet bgl) BORE HOLE			CASING MATERIAL AND/OR GRADE CAS			SING	CASING	CASING WALL	SLOT		
NG]	FROM	то	DIAM	GRADE CONNI			VECTION	INSIDE DIAM.	THICKNESS	SIZE		
ASI			(inches)		ctions of screen)		T (add coupl	YPE ling diameter)	(inches)	(inches)	(inches)	
& C	-2.7	90.0	6.0	S	ch. 40 PVC		Tł	nreads	2.0	1/4"		
ŊG	90.0	130.0	6.0	S	ch. 40 PVC		Tł	nreads	2.0	1/4"	.010	
ILLI												
DR												
7												
									,			
		<u> </u>							· · · · · · · · · · · · · · · · · · ·			
	DEPTH ((feet bgl)	BORE HOLE	LIST	I ANNULAR SH	EAL MAT	ERIAL A	ND	AMOUNT	METHO	D OF	
IAL	FROM	то	DIAM. (inches)	GRAV	EL PACK SIZE	RANGE	BY INTE	RVAL	(cubic feet)	PLACE	MENT	
TER	0.0	10.0	6.0	Туре	2 Portland Ceme	nt w/5% E	Bentonite	Grout	1.963	Pump Mix w/	Tremie Pipe	
MAJ	10.0	87.0	6.0			nite Chips			22 Bags	Hand		
AR	87.0	130.0	6.0		20/4	0 Sand			16 Bags	Hand	Mix	
ANNULAR MATERIAL												
		<u> </u>										
З.					****							
	OSE DITED		- k	I	,				WELL RECORD]	

FOR OSE INT	ERNAL_USE			WR-20 WEL	L RECORD & LOG (Vers	sion 04/30/19)
FILE NO.	RA-12721	POD NO.	5	TRN NO.	670406	
LOCATION	175.32E.	26.442		WELL TAG ID NO.		PAGE 1 OF 2
	,				입니는데, 영상, 운영, 운영, 운영, 운영, 영영, 영영, 영영, 영영, 영영, 영영	and and a second se

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	DEPTH (feet bgl) TO	THICKNESS (feet)	INCLUDE WATE	ID TYPE OF MATERIAL E ER-BEARING CAVITIES O pplemental sheets to fully de	R FRACTURE Z		WA BEAR (YES	ING?	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	0.0	0.5	0.5		Caliche base	T TOT BEAU		Y	√ N	
	0.5	2.0	1.5		Brown sand/sandstone			Y	√ N	
	2.0	3.0	1.0		Red/brown sand/sandstor	1e		Y	√ N	
	3.0	17.0	14.0		Caliche			Y	✓ N	
	17.0	28.0	11.0		Light brown sand/sandsto	ne		Y	√ N	
L	28.0	37.0	9.0		Red/brown sand/sandstor	ıe	·	Y	✓ N	
4. HYDROGEOLOGIC LOG OF WELL	37.0	42.0	5.0		Light brown sand/sandsto	ne		Y	√ N	
OF V	42.0	49 .0	7.0		Red/brown silty sandstor			Y	√ N	
000	49.0	52.0	3.0		Gray sandstone			Y	✓ N	
IC IV	52.0	60.0	8.0	Purple	gray and light brown layers	of sandstone		Y	√ N	
,0GI	60.0	80.0	20.0		Purple/brown sandstone			Y	√ N	
EOI	80.0	98.0	18.0		Brown and tan sandston			Y	√ N	<u></u>
sog	98.0	109.0	11.0	1 10 - 77 - 1.	Light gray tan sandtston	e		Y	√ N	
IdYI	109.0	121.0	12.0		Green and brown mixes sand			✓ Y	N	
4. H	121.0	125.0	4.0	Ye	ellow, brown and gray silty sa	ndstone		✓ Y	N	
	125.0	130.0	5.0	u	Green brown silty sandsto			✓ Y	N	
								Y	N	
					<u> </u>			Y	N	
								Y	N	
								Y	N	
-								Y	N	
	METHOD I	I ISED TO ES	I STIMATE YIELD	OF WATER-BEARIN	G STRATA:		тот	AL ESTIN	AATED	
	D PUM				THER – SPECIFY:		WE	LL YIELD) (gpm):	0.00
NOIS	WELL TES	T TEST STAR	RESULTS - ATT T TIME, END TI	ACH A COPY OF DAT ME, AND A TABLE SI	TA COLLECTED DURING HOWING DISCHARGE AN	WELL TESTING D DRAWDOWN	, INCLUD OVER TH	ING DISC IE TESTIN	HARGE N IG PERIO	1ETHOD, D.
TEST; RIG SUPERVISIO	MISCELLA	NEOUS INI	FORMATION:				1			
TEST	PRINT NAM	ME(S) OF D	RILL RIG SUPER	VISOR(S) THAT PRO	VIDED ONSITE SUPERVI	SION OF WELL	CONSTRU	JCTION O	THER TH	AN LICENSEE:
5.7	William B.	Atkins								
6. SIGNATURE	RECORD C	F THE ABC	OVE DESCRIBED ALSO BE FILED	WELL, I ALSO CERT	DF MY KNOWLEDGE ANI TIFY THAT THE WELL TA HOLDER WITHIN 30 DAYS NAME	G, IF REQUIREI), HAS BE	EN INSTA)N OF WE	LLED AN	ID THAT THIS
FO	R OSE INTER	NALINE				WR-20	WELL R	ECORD &	LOG (Ver	sion 04/30/2019)
	E NO.	R	4-12-	721	POD NO. 5	TRN N		704	06	
LO	CATION			.		WELL TAG ID	NO.			PAGE 2 OF 2



			• •	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)						(NAD83 UTM in meters)		
Well Tag POD		Number	Q64	Q16	Q4	Sec	Tws	Rng	Х	Y		
NA	RA 1	2721 POD6	1	2	2	33	17S	32E	615530	3629431 🍯)	
Driller Lic	ense:	1456	Drille	· Con	npar	ıy:	WF	HITE DR	ILLING CO	MPANY		
Driller Nar	me:	WHITE, JOHNN	OWN.GEN	JER								
Drill Start	Date:	04/28/2020	Drill F	inish	Dat	te:	0	4/28/202	0 Plu	g Date:	04/28/2020	
Log File Da	ate:	05/18/2020	PCW	Rcv I	Date	:			Sou	irce:		
Pump Type	e:		Pipe D	ischa	irge	Size:			Est	imated Yield	1:	
	Casing Size:				Depth Well:			130 feet		Depth Water:		

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WELL RECORD & LOG

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NO	OSE POD NO MW-11	. (WELL NO	POI	ψ	FELL TAG ID NO.		ose file no(s). RA-12721					
GENERAL AND WELL LOCATION	WELL OWNE ConocoPhi	• • •		{				PHONE (OPTIC 432-258-345				
LL	WELL OWNE	ER MAILING	ADDRESS					CITY		STATE	ZIP	
WEL	901 W Wal	ll St, Suite	: 100					Midland		TX	79701	
R	WELL		DE	GREES	MINUTES	SECOND						
LA	LOCATIO	N LAT	TITUDE	32	47	48.48	N	* ACCURACY	REQUIRED: ONE TEN	TH OF A SECOND		
ERA	(FROM GP	S) LON	IGITUDE	103	45	58.22	2 W	* DATUM REC	UIRED: WGS 84			
GEN	DESCRIPTIC	N RELATIN	G WELL LOCATION TO	STREET ADDRES	S AND COMMON	LANDMAR	KS – PLS	S (SECTION, TO	WNSHJIP, RANGE) WH	ERE AVAILABLE		
-	MCA 357											
	LICENSE NO		NAME OF LICENSED	DRILLER					NAME OF WELL DR	LLING COMPANY		
	WD-1				hn W. White					rilling Company, Inc		
:	DRILLING ST 04/28/2		DRILLING ENDED 04/28/2020		LETED WELL (FT) 130.0	`) E	SORE HOI	LE DEPTH (FT)	DEPTH WATER FIR:	ST ENCOUNTERED (FT DRY)	
7	COMPLETED	O WELL IS:		DRY HOLE	FINED)		STATIC WATER LEV	EL IN COMPLETED WI DRY	ELL (FT)			
O Image: Construction of the second seco												
2. DRILLING & CASING INFORMATION	DRILLING M	ETHOD:	✓ ROTARY	HAMMER	CABLE TO	DOL [OTHE	R - SPECIFY:				
INF	DEPTH (feet bgl) BORE HOLE						ASING	CASING	CASING WALL	SLOT		
NG	FROM TO DIAM				th casing string, a	and		NECTION TYPE	INSIDE DIAM.	THICKNESS	SIZE (inches)	
SASI			(inches)		tions of screen)		add coup	ling diameter)	(inches)	(inches)	(inclics)	
& (-2.7	90.0	6.0		h. 40 PVC			hreads	2.0	1/4"	010	
BNI	90.0	130.0	6.0	Sc	h. 40 PVC		11	hreads	2.0	1/4"	.010	
III												
DR												
7												
	DEPTH	(feet bgl)	BORE HOLE	LIST	ANNULAR SE	AL MATI	ERIAL A	AND	AMOUNT	METHO	DD OF	
Ί	FROM	то	DIAM. (inches)	GRAVE	EL PACK SIZE-I	RANGE E	BY INTE	RVAL	(cubic feet)	PLACE		
ERI	0.0	10.0	6.0	Type 2	Portland Cemen	nt w/5% B	entonite	Grout	1.963	Pump Mix w/	Tremie Pipe	
ANNULAR MATERIAL	10.0	86.0	6.0		Bentoni	ite Chips			22 Bags	Hand	Mix	
NR N	86.0	130.0	6.0		20/40) Sand			16 Bags	Hand	Mix	
UL.												
NN												
3.7												
								• • • • • • • • • • • • • • • • •				
FOR	OCE NITED								WELL RECORD		0/10)	

FILE NO.A - 1272POD NO.TRN NO.O D U O ULOCATION175.32C.3322Well TAG ID NO.PAGE 1 OF 2

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	DEPTH (I FROM	feet bgl) TO	THICKNESS (feet)	INCLUDE WATE	D TYPE OF MATEI ER-BEARING CAVI	TIES OR	FRAC	FURE ZONE	s	WA BEAR (YES	ING?	ESTIMATED YIELD FOR WATER- BEARING
				(attach su	plemental sheets to	iuny ues				(115	, 1(0)	ZONES (gpm)
	0.0	0.5	0.5	- API-	Base calic	he				Y	√ N	
	0.5	13.0	12.5		Brown/red brown sa	nd/sandst	tone			Y	🖌 N	
	13.0	17.0	4.0		Red brown sand/s	andstone	e			Y	√ N	
	17.0	19.0	2.0		Brown sand/sandsto	ne w/gra	vel			Y	✓ N	
	19.0	26.0	7.0		Light brown sand	sandston	e			Y	🗸 N	
T	26.0	28.0	2.0		Red/brown:	and				Y	🗸 N	
4. HYDROGEOLOGIC LOG OF WELL	28.0	35.0	7.0		Light brown sand	sandston	e			Y	🗸 N	
OF	35.0	52.0	17.0		Red/brown/brown si	ty sandst	tone			Y	🗸 N	
,0G	52.0	68.0	16.0	· · · · ·	Brown sand/sau	dstone				Y	🗸 N	
ICI	68.0	78.0	10.0	Gray s	and/sandstone w/purj	le sands	tone mi	ked		Y	🗸 N	
DOG	78.0	100.00	22.0		Light gray/brown sa	nd/sandst	tone			Y	✓ N	
EOI	100.00	111.00	11.0		Green brown sa	ndstone				Y	√ N	
ROG	111.0	115.0	4.0		Brown silty sat	dstone				Y	√ N	
IQY	115.0	130.0	15.0	1	Yellow and green bro		stone			Y	✓ N	
4. H										Y	N	
				• • • •						Y	N	
										Y	N	
										Y	N	
										Y	N	
										Y	N	
										Y	N	
	METHODI			OF WATER-BEARIN	C STD & T & .				тота	L ESTIN		
) (gpm):	0.00
	PUM		IR LIFT	BAILER 01	THER - SPECIFY:							
NOIS	WELL TES	T TEST	RESULTS - ATT T TIME, END TI	ACH A COPY OF DAT ME, AND A TABLE SI	TA COLLECTED DU HOWING DISCHAR	RING W GE ANE	VELL T D DRAV	ESTING, ING VDOWN OV	CLUDIN ER THE	G DISC TESTII	HARGE I	METHOD, DD.
ISIV	MISCELLA	NEOUS INF	FORMATION:									
PER												
SUI												
RIG												
TEST; RIG SUPERVI	DDDTTMA				VIDED ONGITE CU	DEDVIC		WELL CON	ISTRUC		THED TI	IAN LICENSEE
5. TH			RILL RIG SUPER	RVISOR(S) THAT PRO	OVIDED ONSITE SU	PERVIS	ION OF	WELL CON	SIRUC	TION U	THEK IF	IAN LICENSEE.
-47	William B.	Atkins										
	BY SIGNIN	G BELOW	, I CERTIFY TH	AT TO THE BEST O	F MY KNOWLED	E AND	BELIE	F, THE FOI	REGOIN	G IS A	TRUE A	ND CORRECT
RE	RECORD O	E THE ABC	VE DESCRIBED	WELL. I ALSO CERT WITH THE PERMIT I	IFY THAT THE WE	LL TAG	, IF RE	QUIRED, HA	AS BEEN	I INSTA	LLED A	ND THAT THIS
VIV	WELL BEC		ALSO DE FILED	WITH THE FERMIT		DAIS				01 111	LL DIGL	LING.
SIGNATURE	(/							05/1	1/2020	
6. SI		- 44	V				_					
		SIGNAT	URE OF DRILLE	ER / PRINT SIGNEE	NAME						DATE	
EO							<u> </u>	WR_20 W/E	TI PEC	በዩኮ ቃ	106.0%	rsion 04/30/2019)
	R OSE INTER E NO.	SA-	1272		POD NO.	10	,	TRN NO.	10	ŤĈ	ŤΟČ	<i>•</i>
	CATION	_11	,0,,		I	- U	WELL	TAG ID NO.			~ /	PAGE 2 OF 2

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			(quar	ers are	1=N	W 2=N	E 3=SV	V 4=SE)				
			(qua	rters ai	e sma	allest to	largest)	(NAD83 U	(NAD83 UTM in meters)		
Well Tag	POD	Number	Q64	Q16	Q4	Sec	Tws	Rng	Х	Y		
NA	RA	12721 POD7	1	3	2	33	17S	32E	615064	3629198 🧲		
x Driller Lic	ense:	1456	Drille	r Con	npar	ıy:	WF	HITE DF	RILLING CO	OMPANY		
Driller Na	me:	WHITE, JOHNN	OWN.GEI	VER								
Drill Start	Date:	04/28/2020	Drill I	inish) Dat	te:	0	4/28/202	20 Plu	ıg Date:	04/28/2020	
Log File D	ate:	05/18/2020	PCW	Rcv I	Date	:			So	urce:		
Pump Type	e:		Pipe I	lischa	arge	Size:			Es	timated Yield	:	
Casing Siz			Depth	Well			1	30 feet	Da	pth Water:		

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WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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NO	OSE POD NO MW-12	. (WELL NO	POD	7 WELL TAG ID NO.			OSE FILE NO(S). RA-12721				
OCATI	WELL OWN ConocoPhi	• •				·	PHONE (OPTIC 432-258-345				
MELL I	WELL OWN 901 W Wa						CITY Midland		state TX	ZIP 79701	
GENERAL AND WELL LOCATION	WELL LOCATIO	1.4 1.	ITTUDE	GREES MINUTES 32 47	seconds 40.82	N		REQUIRED: ONE TENT	TH OF A SECOND		
NER	(FROM GP	LOI	GIUDE	103 46	15.93						
1. GF	DESCRIPTIO MCA 357	ON RELATIN	IG WELL LOCATION TO	STREET ADDRESS AND COMMON	LANDMARK	S – PLS	S (SECTION, TO	WNSHJIP, RANGE) WH	ERE AVAILABLE		
	LICENSE NO WD-1		NAME OF LICENSED	DRILLER John W. White				NAME OF WELL DRI White D	LLING COMPANY rilling Company, Inc	o.	
	DRILLING S 04/28/		DRILLING ENDED 04/28/2020	DEPTH OF COMPLETED WELL (FT) 130.0	RE HOI	LE DEPTH (FT)	DEPTH WATER FIRS	ST ENCOUNTERED (FI DRY	Γ)		
Z	COMPLETEI	D WELL IS:		DRY HOLE SHALLOW	W (UNCONFIN	ED)		STATIC WATER LEV	EL IN COMPLETED W DRY	ELL (FT)	
VIIO	DRILLING F	LUID:	🗹 AIR	MUD ADDITIVE	ES - SPECIFY:						
RM	DRILLING M	ETHOD:	ROTARY	HAMMER CABLE TO	DOL 🗌	OTHE	R - SPECIFY:				
INFO	DEPTH	(feet bgl)	BORE HOLE	CASING MATERIAL AND	/OR	CA	SING	CASING	CASING WALL	SLOT	
2. DRILLING & CASING INFORMATION	FROM	то	DIAM (inches)	GRADE (include each casing string, a note sections of screen)	and	CONN T	VECTION YPE ling diameter)	INSIDE DIAM. (inches)	THICKNESS (inches)	SIZE (inches)	
& C	-2.7	90.0	6.0	, (F			reads	2.0	1/4"		
5NG	90.0	130.0	6.0	Sch. 40 PVC		Tł	nreads	2.0	1/4"	.010	
NLL											
2. DF								·····			
	DEPTH	(feet bgl)	BORE HOLE	LIST ANNULAR SE				AMOUNT	METHO		
IAL	FROM	то	DIAM. (inches)	GRAVEL PACK SIZE-I				(cubic feet)	PLACE		
TEF	0.0	10.0	6.0	Type 2 Portland Cemen		tonite	Grout	1.963	Pump Mix w/	-	
S MA	10.0 86.0	86.0 130.0	6.0		ite Chips			22 Bags 16 Bags	Hand Hand		
ANNULAR MATERIAL	86.0 130.0 6.0 20/40 Sand							10 19460			
INN											
3. A								· · · · · · · · · · · · · · · · · · ·		-	
				975_78 0							

FOR OSE INT <u>ERNAL</u>			WR-20 WELL I	RECORD & LOG (Ver	sion 04/30/19)
FILE NO. RA-	1272	POD NO. 7	TRN NO.	1040C	0
LOCATION	175.32K	33,031	WELL TAG ID NO.		PAGE 1 OF 2
	-				

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	DEPTH (feet bgl) TO	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
	0.0	()	(0)	Brown sand	Y / N	ZONES (gpm)
	0.0	6.0	6.0		$\begin{array}{c c} Y & \checkmark N \\ \hline Y & \checkmark N \end{array}$	
	6.0	15.0	9.0	Caliche w/brown sand	- <u></u>	
	15.0	45.0	30.0	Red brown sand/sandstone	Y V N	
	45.0	68.0	23.0	Red brown silty sandstone	Y ✓ N	
	68.0	71.0	3.0	Brown sand/sandstone w/gravel	Y √ N	
TT	71.0	74.0	3.0	Green sand/sandstone	Y √ N	
HYDROGEOLOGIC LOG OF WELL	74.0	78.0	4.0	Gray sand/sandstone	Y ✓ N	
10 5	78.0	81.0	3.0	Green brown sand/sandstone	Y √N	
ΓO	81.0	84.0	3.0	Streaks of gray, green and brown sandstone	Y √N	
GIC	84.0	88.0	4.0	Firm gray silty limestone	Y √ N	
010	88.0	90.0	2.0	Green brown sandstone	Y ✓ N	
GEC	90.0	96.0	6.0	Dark green gray sandstone	Y ✓ N	
ORO	96.0	115.0	19.0	Light green gray sandstone	Y VN	
НVI	115.0	117.0	2.0	Dark gray sandstone	Y 🗸 N	
4	117.0	119.0	2.0	Light gray/green sandstone	Y ✓ N	
	119.0	130.0	11.0	Green brown sandstone	Y VN	
					Y N	
			· ·		Y N	
					Y N	
					Y N	
					Y N	
	METHOD U	ISED TO ES	TIMATE YIELD	OF WATER-BEARING STRATA	TOTAL ESTIMATED	
	PUM		IR LIFT	BAILER OTHER ~ SPECIFY:	WELL YIELD (gpm):	0.00
NOIS	WELL TES	T TEST	RESULTS - ATT	ACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCL ME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVE		
TEST; RIG SUPERVISIO	MISCELLA	NEOUS INF	ORMATION:			
TES	PRINT NAM	AE(S) OF D	RILL RIG SUPER	VISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONS	TRUCTION OTHER TI	HAN LICENSEE:
5.	William B.	Atkins				
6. SIGNATURE	RECORD O	F THE ABC	INE DESCRIBED	AT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE FOR WELL. I ALSO CERTIFY THAT THE WELL TAG, IF REQUIRED, HAS WITH THE PERMIT HOLDER WITHIN 30 DAYS AFTER THE COMPLI	BEEN INSTALLED A	ND THAT THIS
		//				
	R OSE INTER	NAL USE			L RECORD & LOG (Ve	rsion 04/30/2019)
	E NO.	11/1-	1010	POD NO. / TRN NO.	4107	
	CATION			WELL TAG ID NO.		PAGE 2 OF 2



			(quarters are 1=NW 2=NE 3=SW 4=SE)									
			(quarters are smallest to largest)						(NAD83	M in meters)		
Well Tag	POD) Number	Q64	Q16	Q4	Sec	Tws	Rng		X	Y	
NA	RA	12721 POD8	1	2	1	33	17S	32E	61464	0	3629463 🌍	
Driller License: 1456			Driller Company:				WHITE DRILLING COMPANY					
Driller Nai	me:	JOHN W WHITE										
Drill Start Date: 09/28/2020		Drill Finish Date: PCW Rcv Date:				09/28/2020			Plug Date: Source: Shalle			
Log File Date: 10/14/2020											Shallow	
Pump Type	Pipe D	Pipe Discharge Size:						Estimated Yield:				
Casing Size:		2.00	Depth Well:				130 feet			Dep	oth Water:	108 feet
X	ations:		To	p l	Bottom	Desc	cription					
		106			115	Sand	Sandstone/Gravel/Conglomerate					
					11	5	117	Sand	lstone/Gra	.vel/	Conglomerate	
					11	7	118	Sand	lstone/Gra	vel/	Conglomerate	
Casing Perfor				118			130	Sandstone/Gravel/Conglomerate				
			rations:	rations: Top			Bottom					
					ç	0	130					

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WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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NO	OSE POD NO RA-12721				WELL TAG ID NO.			OSE FILE NO(RA-12721	S).				
GENERAL AND WELL LOCATION	WELL OWNER NAME(S) ConocoPhillips Company							PHONE (OPTIONAL) 432-258-3451					
	WELL OWNER MAILING ADDRESS 1500 City West, Suite 1000							CITY Houston		state TX 77042	ZIP		
	WELL LOCATION		TITUDE	GREES MINUTES SECONDS 32 47 49.75 N			* ACCURACY REQUIRED: ONE TENTH OF A SECOND						
NER	(FROM GP	PS) LO	NGITUDE	103 46 32.26 W			* DATUM REQUIRED: WGS 84						
1. GE)	DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHJIP, RANGE) WHERE AVAILABLE MCA 357												
	LICENSE NO. NAME OF LICENSED DRILLER						NAME OF WELL DRILLING COMPANY						
& CASING INFORMATION	WD-1	1456	John W. White						White D	Drilling Company, Inc.			
	DRILLING STARTED 09/28/2020		DRILLING ENDED 09/28/2020	DEPTH OF COMPLETED WELL (FT) 130.0			BORE HOI	E DEPTH (FT).	DEPTH WATER FIRST ENCOUNTERED (FT) 108				
	COMPLETED WELL IS:		ARTESIAN	DRY HOLE	W (UNCON	FINED)		STATIC WATER LEV	EL IN COMPLETED WELL (FT) 116				
	DRILLING F	LU ID :	🗸 AIR	MUD ADDITIVES – SPECIFY:					L				
	DRILLING METHOD: ROTARY HAMMER CABLE TOOL OTHER - SPECIFY:												
	DEPTH (feet bgl)		BORE HOLE	CASING MATERIAL AND/OR GRADE			CASING		CASING	CASING WALL	SLOT		
	FROM TO		DIAM	(include ea	lude each casing string, and		CONNECTION TYPE		INSIDE DIAM.	THICKNESS	SIZE		
			(inches)	note sections of screen)			(add coupling diameter) Threads		(inches)	(inches)	(inches)		
3	-2.7 90.0 90.0 130.0		6.0	Sch. 40 PVC Sch. 40 PVC			Threads		2.0	1/4"	.010		
2. DRILLING			0.0	Sch. 40 FVC					2.0	1/4	.010		
LIIA											+		
2. D													
	·												
										<u></u>	1		
ANNULAR MATERIAL	DEPTH (feet bgl) BORE HOLE			LIST ANNULAR SEAL MATERIAL A					AMOUNT		METHOD OF		
	FROM TO		DIAM. (inches) GRAVEL PACK SIZE-RANGE BY INTERVAL						PLACEMENT				
	0.0	10.0 6.0 Type 2 Portland Cement w/5% Benton				Bentonite	Grout	1.963		Pump Mix w/Tremie Pipe			
		10.0 86.0 6.0 86.0 130.0 6.0			Bentonite Chips 20/40 Sand				26 Bags 16 Bags		Hand Mix Hand Mix		
	86.0 130.0 6.0			20/40 Sand					16 Bags		VIIX		
INN													
3. AN													
FOR	OSE INTER	NALUSE	<u>.</u>	<u> </u>				WR-20	WELL RECORD	& LOG (Version 04/3	0/19)		
FILE			2721	·	POD NO.	. 8		TRN N			<u>,,,,,</u>		

R32

E

Sec

WELL TAG ID NO.

PAGE 1 OF 2

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LOCATION

2
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	DEPTH (feet bgl)	THICKNESS	COLOR AND TYPE OF MATERIAL ENCOUNTERED -	WATER	ESTIMATED YIELD FOR
	FROM	то	(feet)	INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	BEARING? (YES / NO)	WATER- BEARING ZONES (gpm)
	0.0	1.0	1.0	Caliche base	Y 🖌 N	
	1.0	9.0	8.0	Brown sand	Y VN	
	9.0	13.0	4.0	Light brown sand/sandstone w/gravel "Caliche"	Y VN	
	13.0	48.0	35.0	Brown and light brown sandstone	Y VN	
in the second	48.0	59.0	9.0	Brown and red brown sand/sandstone	Y VN	
N	59.0	60.0	1.0	Firm brown sandstone	Y VN	
HYDROGEOLOGIC LOG OF WELL	60.0	62.0	2.0	Brown sandstone	Y 🖌 N	
OF	62.0	73.0	11.0	Gray and green brown sandstone	Y 🖌 N	
50G	73.0	76.0	3.0	Mixed brown, green, and light brown sandstone	Y 🖌 N	
i C I	76.0	84.0	8.0	Light gray sandstone	Y 🖌 N	
FO	84.0	92.0	8.0	Light gray sandstone w/brown sandstone mixed	Y 🖌 N	
GEO	92.0	98.0	7.0	Firm brown and gray sandstone	Y 🖌 N	
RO	98.0	101.0	3.0	Brown sandstone	Y 🗸 N	
HYI	101.0	104.0	3.0	Gray and light brown mixed sandstone	Y 🗸 N	
4	104.0	106.0	2.0	Dark gray silty sandstone	Y 🖌 N	
	106.0	115.0	9.0	Green and gray silty sandstone	✓Y N	
	115.0	117.0	2.0	Firm gray sandstone	✓Y N	
	117.0	118.0	1.0	Mixed gray and brown sandstone	✓Y N	
	118.0	130.0	12.0	Dark red/brown siltstone/shale w/molded gray silty sandstone	✓Y N	
					Y N	
					Y N	
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:			TAL ESTIMATED		
				BAILER OTHER – SPECIFY:	ELL YIELD (gpm):	0.00
NOIS	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.					
ISIV	MISCELLA	NEOUS INF	ORMATION:			
TEST; RIG SUPERVI						
G SU						
; RI						
EST	PRINT NAM	IE(S) OF DE	RILL RIG SUPER	VISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTR	UCTION OTHER TH	IAN LICENSEE:
5.1	William B.					
				AT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE FOREG		
IRE	RECORD O	F THE ABO	VE DESCRIBED	WELL. I ALSO CERTIFY THAT THE WELL TAG, IF REQUIRED, HAS B WITH THE PERMIT HOLDER WITHIN 30 DAYS AFTER THE COMPLETI	EEN INSTALLED AN	ND THAT THIS
ATU						Linto.
SIGNATURE	(hi		10/6/2020	
6. S			<u> </u>			
		SIGNAT	UKE OF DRILLE	R / PRINT SIGNEE NAME	DATE	
FOF	OSE INTER	NAL USE		WR-20 WELL F	ECORD & LOG (Ve	rsion 04/30/2019)
FIL	eno. R	<u>A-12</u>	.721	POD NO. 8 TRN NO. 6	77686	
LOC	CATION (2 11	1	775 R32 F Sec.33 WELL TAGID NO.	NA	PAGE 2 OF 2



NEW MEXICO OFFICE OF THE STATE ENGINEER



APPLICATION FOR PERMIT TO DRILL A WELL WITH NO CONSUMPTIVE USE OF WATER



(check applicable box):

	For fees, see State Engineer websi			
Purpose:	Pollution Control And / Or Recovery	Geo-Thermal		
Exploratory	Construction Site De-Watering	Other (Describe):		
🛛 Monitoring	Mineral De-Watering		ر	ROST
A senarate nermit wil	I be required to apply water to beneficial use.		<u></u>	
			are the	al constraints attraction
Temporary Reque	est - Requested Start Date:	Requested End Date:	· · ·	
			500 gan 12 - 12 - 12 12 - 12 - 12 12 - 12 - 12 12 - 12 12 12 - 12 12 12 - 12 12 12 - 12 12 12 12 12 12 12 12 12 12 12 12 12 1	
Plugging Plan of Operations Submitted? 🔲 Yes 🛛 No				
L			5 Д	<u> </u>
			r~)	2

1. APPLICANT(S)

Name: ConocoPhillips Co	ompany	Name:	
Contact or Agent: Todd Wells with Tetra Te	check here if Agent 🛛 ch, agent for ConocoPhillips	Contact or Agent:	check here if Agent 📋
Mailing Address: 4000 N. E	Big Spring St., Suite 401	Mailing Address:	
City: Midland		City:	
State: TX	Zip Code: 79705	State:	Zip Code:
Phone: (432) 682-4559 Phone (Work): (432) 687-8	Home Cell	Phone: Phone (Work):	Home Cell
E-mail (optional): Todd.We	ells@tetratech.com	E-mail (optional):	

FOR OSE INTERNAL USE	Application for Permit, Form wr-07, Rev 4/12/12	
File Number: RA-1257	4 Trn Number: 617940	
Trans Description (optional): EXP	- DODS1-4- Monitor	
Sub-Basin: NA		
PCW/LOG Due Date: 1-31	~ 9	
	Page 1 of 3	

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), <u>or</u> Latitude/Longitude (Lat/Long - WGS84). District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.					
 NM State Plane (NAD83) NM West Zone NM East Zone NM Central Zone 	NM East Zone 200 Zone 13N				
Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:			
MW-2 RA- 125747 POD1 MW-3	w. 103.77177° 10 ³ ,46, 18.37 2	n. 32.80406° <i>32,4B, 14.616</i>	NENESW Sec. 28, T-17S, R-32E		
MW-3	w. 103.76961°	n. 32.80162°	, Sec. 28, T-17S, R-32E		
RA-12574- PODZ MW-4	103,46, 10.596	32,48,5.832	NWSWSE		
MW-4	w. 103.77118°	n. 32.80056°	* Sec. 28, T-17S, R-32E		
RA-12574-POD3	103,46,16.248	32,48, 2.016	NWSWSE 200	<i></i>	
MW-5	w. 103.77312°	n. 32.80239°	Sec. 28, T-17S, R-32E	and No. 1	
RA-12574-P004	103,46,23.232	32,48, 8.604	SENESW		
NOTE: If more well location Additional well descriptions			WR-08 (Attachment 1 – POD Descriptions)		
Other description relating well			n yes, now many to the part of the pa		
Well is on land owned by: Fed	Well is on land owned by: Federal Bureau Of Land Management				
Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? Yes X No					
If yes, how many					
Approximate depth of well (feet): 120.00 Outside diameter of well casing (inches): 2.00					
Driller Name: White Drilling Driller License Number: 1456					

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

The proposed monitor wells MW-2, MW-3, MW-4 and MW-5 are on Federal Bureau of Land Management land. On September 14, 2017, Shelly Tucker with the BLM was notified via telephone of the proposed activities. On September 15, 2017, a Sundry Notice was submitted to her via email at her request. The monitor wells will be used for sampling to assess groundwater quality for potential chloride impacts from a flow line release.

FOR OSE INTERNAL USE	Application for Permit, Form wr-07
File Number: RA-12574	Trn Number: 617940
	Page 2 of 3

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4. SPECIFIC REQUIREMENTS: The applic just include the following, as applicable to ea boxes, to indicate the information has been included and/or attached to this application:

Page 40 of 185

Exploratory:	Pollution Control and/or Recovery:	Construction	Mine De-Watering:					
Include a	Include a plan for pollution	De-Watering:	Include a plan for pollution					
description of	control/recovery, that includes the	Include a description of the	control/recovery, that includes the followin					
any proposed	following:	proposed dewatering	A description of the need for mine					
pump test, if	A description of the need for the	operation,	dewatering.					
applicable.	pollution control or recovery operation.	The estimated duration of	The estimated maximum period of time					
-1-1	The estimated maximum period of	the operation,	for completion of the operation.					
	time for completion of the operation.	The maximum amount of	The source(s) of the water to be diverted					
	The annual diversion amount.	water to be diverted,	The geohydrologic characteristics of the					
	The annual consumptive use	A description of the need	aquifer(s).					
	amount.	for the dewatering operation,	The maximum amount of water to be					
	The maximum amount of water to be	and,	diverted per annum.					
	diverted and injected for the duration of	A description of how the	The maximum amount of water to be					
	the operation.	diverted water will be disposed	diverted for the duration of the operation.					
	The method and place of discharge.	of.	The quality of the water.					
Monitoring:	The method of measurement of	Geo-Thermal:	The method of measurement of water					
🖾 Include the	water produced and discharged.	🛛 🔲 Include a description of the	diverted.					
reason for the	The source of water to be injected.	geothermal heat exchange	The recharge of water to the aquifer.					
monitoring	The method of measurement of	project,	Description of the estimated area of					
well, and,	water injected.	The amount of water to be	hydrologic effect of the project.					
🗌 The	The characteristics of the aquifer.	diverted and re-injected for the	The method and place of discharge.					
duration	The method of determining the	project,	An estimation of the effects on surface					
of the planned	resulting annual consumptive use of	The time frame for	water rights and underground water rights					
monitoring.	water and depletion from any related	constructing the geothermal	from the mine dewatering project.					
	stream system.	heat exchange project, and,	A description of the methods employed					
	Proof of any permit required from the	The duration of the project.	estimate effects on surface water rights ar					
	New Mexico Environment Department.	Preliminary surveys, design	underground water rights.					
	An access agreement if the	data, and additional	Information on existing wells, rivers,					
	applicant is not the owner of the land on	information shall be included to	springs, and wetlands within the area of					
	which the pollution plume control or	provide all essential facts	hydrologic effect.					
	recovery well is to be located.		0.0					
	Tecovery well is to be located.	relating to the request.						
								
	AU	KNOWLEDGEMENT	strate here					
i, we (name of a	pplicant(s)), Todd Wells, Agent for Conc		n i station Response Marco					
	Pr	int Name(s)	المحكمة المحكمة محكمة المحكمة ال محكمة المحكمة ال					
affirm that the fo	regoing statements are true to the best of (my our) knowledge and bolief						
annin that the 10	regoing statements are true to the best of (iny, our knowledge and bellel.	, Se					
	1.11							
- Zala	4JAVIZ .							
John Welle S								
Applicant Signat	ure	Applicant Signature Applicant Signature						
Applicant Signat	ure	Applicant Signature	3					

This application is:

partially approved denied

approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

20 18 , for the State Engineer, Witness my hand and seal this 5 Tom Blaine, P.E. State Engineer Andy Morley By: Signature Print Title: <u>District II Manager</u> Print Application for Permit, Form wr-07 FOR OSE INTERNAL USE File Number: Trn Number: Page 3 of 3

NEW MEXICO STATE ENGINEER OFFICE PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL

- 17-1A Depth of the well shall not exceed the thickness of the valley fill.
- 17-4 No water shall be appropriated and beneficially used under this permit.
- 17-7 The Permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.
- 17-B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with 72-12-12 NMSA 1978. A licensed driller shall not be required for the construction of a well driven without the use of a drill rig, provided that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter.
- 17-C The well driller must file the well record with the State Engineer and the applicant within 30 days after the well is drilled or driven. It is the well owner's responsibility to ensure that the well driller files the well record. The well driller may obtain the well record form from any District Office or the Office of the State Engineer website.
- 17-P The well shall be constructed, maintained, and operated to prevent inter-aquifer exchange of water and to prevent loss of hydraulic head between hydrogeologic zones.
- 17-Q The State Engineer retains jurisdiction over this permit.

Trn Desc: RA 12574 PODS1-4

File Number: <u>RA 12574</u> Trn Number: 617940

page: l

NEW MEXICO STATE ENGINEER OFFICE PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL (Continued)

- LOG The Point of Diversion RA 12574 POD1 must be completed and the Well Log filed on or before 01/31/2019.
- LOG The Point of Diversion RA 12574 POD2 must be completed and the Well Log filed on or before 01/31/2019.
- LOG The Point of Diversion RA 12574 POD3 must be completed and the Well Log filed on or before 01/31/2019.
- LOG The Point of Diversion RA 12574 POD4 must be completed and the Well Log filed on or before 01/31/2019.

IT IS THE PERMITTEE'S RESPONSIBILITY TO OBTAIN ALL AUTHORIZATIONS AND PERMISSIONS TO DRILL ON PROPERTY OF OTHER OWNERSHIP BEFORE COMMENCING ACTIVITIES UNDER THIS PERMIT.

ACTION OF STATE ENGINEER

Notice of Intention Rcvd:	Date Rcvd. Corrected:
Formal Application Rcvd: 10/12/20	17 Pub. of Notice Ordered:
Date Returned - Correction:	Affidavit of Pub. Filed:

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific conditions listed previously.

Witness my hand and seal this 54 day of Jan A.D., 2018 Tom Bla ngineer $\sim 10^{10}$ Bv:

Trn Desc: RA 12574 PODS1-4

File	Number:	RA 12574
Trn	Number:	617940

page: 2



Roswell Office 1900 WEST SECOND STREET ROSWELL, NM 88201

STATE OF NEW MEXICO OFFICE OF THE STATE ENGINEER

Trn Nbr: 617940 File Nbr: RA 12574

Jan. 05, 2018

TODD WELLS TETRA TECH CONOCOPHILLIPS COMPANY 4000 NORTH BIG SPRING STREET SUITE 401 MIDLAND, TX 79705

Greetings:

Enclosed is your copy of the above numbered permit that has been approved subject to the conditions set forth on the approval page. In accordance with the conditions of approval, the well(s) are for monitoring purposes and will be monitored for the duration of the project.

A Well Record & Log (OSE Form wr-20) shall be filed in this office within twenty (20) days after completion of drilling, but no later than 01/31/2019.

Appropriate forms can be downloaded from the OSE website www.ose.state.nm.us or will be mailed upon request.

Sincerely,

Deborah Dunaway (575)622-6521

Enclosure

explore



Coor dinates <u>State Plane - NAD 83 (f) - Zone E</u> Easting 713883.172 Northing 656705.671 <u>UTM - NAD 83 (m) - Zone 13</u> Easting 614993.601 Northing 3630232.573 <u>Degrees Minutes Seconds</u> Latitude 32:48:14.616000 Longitude -103:46:18.372000

Selected POD

GIS WATERS PODs

PEN

OSE District Boundary

Released to Imaging: 2/13/2024 2:26:32 PM

NEW MEXICO OFFICE OF THE STATE ENGINEER 1:4,514



Image Info Source: USDA FSA Date: 5/11/2016 Resolution (m):1 Accuracy (m): 6 Spatial Information County: Lea Groundwater Basin: Roswell Sub-Basin: Land Grant: Not in Land Grant <u>Restrictions:</u> NA

<u>PLSS Description</u> SENENESW Qtr of Sec 28 of 017S 032E

Derived from CADNSDI- Qtr Sec. locations are calculated and are only approximations

POD Information Owner: CONOCOPHILLIPS COMPANY File Number: RA-12574 PODS 1-4 POD Status: NoData Permit Status: NoData Permit Use: NoData Purpose: NEW PERMIT

D Dunaway 1/4/2018

ensem spip accurately in the pinks the source duits used in the inpreparation is inhinent in all maps, and these maps may contain ormissions and enso cation, position accuracy, development methodology, interpretation of in materials.



		File No. RA	12204			
of the Store En	NEW MEXICO OFFICE OF THE STATE ENGINEER					
	APPLICATION FOR PERM WITH NO CONSUMPTIN					
	(check applica		1912-0			
	For fees, see State Engineer websit	e: http://www.ose.state.nm.us/				
Purpose:	Pollution Control And / Or Recovery	Geo-Thermal	ZOJA DEC			
Exploratory	Construction Site De-Watering	Other (Describe):	-J			
Monitoring	Mineral De-Watering		AM			
A separate permit will be	required to apply water to beneficial use.		II: 02			
Temporary Request - Requested Start Date: Requested End Date:						
Plugging Plan of Operations Submitted?						

1. APPLICANT(S)

Name: White Drilling / C.C.	onoco Phillips	Name:	
Contact or Agent: Irene M White / white	check here if Agent [] Obsilling CO.	Contact or Agent:	check here if Agent
Mailing Address: PO Box 906		Mailing Address:	
City: Clyde		City:	
State: TX	Zip Code: 79510	State:	Zip Code:
Phone: 325-370-0713	🗌 Home 🖾 Cell	Phone:	Home Cell
Phone (Work): 325-893-2950		Phone (Work):	
E-mail (optional): office@whited	rilling.com	E-mail (optional):	

FOR OSE INTERNAL USE	Application for Permit, Form wr-07, Rev 4/12/12
File Number: RA-12204	Trn Number: 559003
Trans Description (optional):	monitoring
Sub-Basin: N/A	
PCW/LOG Due Date: 12-31	-2015
	Page 1 of 3

Released to Imaging: 2/13/2024 2:26:32 PM

2. WELL(S) Describe the well(s) applicable to this application.

Location Required: Coordi	nate location must l	be reported in NM	State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude
District II (Roswell) and Dis	strict VII (Cimerren)		Latitude/Longitude
NM State Plane (NAD83)) (Feet)	UTM (NAD83) (Me Zone 12N Zone 13N	ters) Lat/Long (WGS84) (to the nearest 1/10 th of second)
Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (Quarters or Halves, Section, Township, Range) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
MW-1	32°48'9.222"n	103°46'16.288"	Section 28, T17S, R32E
		w	
		ň	201 BOD
NOTE: If more well locations Additional well descriptions	need to be describe	ed, complete form	WR-08 (Attachment 1 – POD Descriptions)
Other description relating well to			in yes, now many
		, succes, or other.	M II:
Well is on land owned by: BIm			
	re than one (1) well	neede to be door	ribed, provide attachment. Attached? Yes No
If yes, how many 1	in the (1) wen	needs to be desc	ribed, provide attachment. Attached? Yes No
Approximate depth of well (feet)	: 65t.00	0	utside diameter of well casing (inches): 2"
Driller Name: John White			iller License Number: WD-1456
			Lissing Humber, WD-1456

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

1	nstallation of a near-source monitor well (MW-1) for sampling purposes.
S	See attached NMOCD and BLM approved Corrective Action Plan.

FOR OSE INTERNAL USE

2201

File Number:

Application for Permit, Form wr-07

) Page 2 of 3

Trn Number:

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Bage 3 of 3

4. SPECIFIC REQUIREMENTS: The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

Exploratory	Pollution Control and/or Recovery		
Exploratory Include a description o any proposed pump test, if applicable. Monitoring: Include the reason for the monitoring well, and, The duration of the planned monitoring.	 ☐ Include a plan for pollution (action recovery: frequency) ☐ Include a plan for pollution (control/recovery, that includes the following: ☐ A description of the need for the pollution control or recovery operation. ☐ The estimated maximum period of time for completion of the operation. ☐ The annual diversion amount. ☐ The annual consumptive use amount. ☐ The maximum amount of water to be diverted and injected for the duration of the operation. ☐ The method and place of discharge. ☐ The method of measurement of water produced and discharged 	Construction De-Watering: Include a description of the proposed dewatering operation, The estimated duration of the operation, The maximum amount of water to be diverted, A description of the need for the dewatering operation, and, A description of how the diverted water will be disposed of. Geo-Thermal: Include a description of the geothermal heat exchange project, The amount of water to be diverted and re-injected for the project, The time frame for constructing the geothermal heat exchange project, The duration of the project. Preliminary surveys, design data, and additional	Mine De-Watering: Include a plan for pollution control/recovery, that includes the following: A description of the need for mine dewatering. The estimated maximum period of time for completion of the operation. The source(s) of the water to be diverted. The geohydrologic characteristics of the aquifer(s). The maximum amount of water to be diverted per annum. The maximum amount of water to be diverted for the duration of the operation. The quality of the water. The method of measurement of water diverted. The recharge of water to the aquifer. Description of the estimated area of hydrologic effect of the project. An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. A description of the methods employed to estimate effects on surface water rights and underground water rights. Information on existing wells, rivers,
	which the pollution plume control or recovery well is to be located.	information shall be included to provide all essential facts	springs, and wetlands within the area of hydrologic effect.
I, We (name of a	AC	relating to the request. KNOWLEDGEMENT みてモ	
affirm that the fo	Pri	nt Name(s)	
Applicant Signa	regoing statements are true to the best of (r		STATE ROSW
(Applicant Signature	

	supplicant orginature	6	0	ulu.
	ACTION OF THE STATE ENGINEER		3	NGIN
provided it is not exercised to the detriment Mexico nor detrimental to the public welfare	of any others having existing rights, and is not of and further subject to the <u>attached</u> conditions of	approval.	AM II: AM	NEER OFFICE
P.E.	ay or2014,	for the State Engineer,		
Signature <u>Title:</u> Distance II Manager Print	Print Andy Mor	rley		
	FOR OSE INTERNAL USE File Number: RA- 12204	Application for Permit, Trn Number: 559110	Form wr-	.07

NEW MEXICO STATE ENGINEER OFFICE PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL

- 1A Depth of the well shall not exceed the thickness of the valley fill.
- 4 No water shall be appropriated and beneficially used under this permit.
- 7 The Permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.
- B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with Section 72-12-12 New Mexico Statutes Annotated.
- C Driller's well record must be filed with the State Engineer within 20 days after the well is drilled or driven. Well record forms will be provided by the State Engineer upon request.
- C2 No water shall be diverted from this well except for testing purposes which shall not exceed ten (10) cumulative days, and well shall be plugged or capped on or before, unless a permit to use water from this well is acquired from the Office of the State Engineer.
- P The well shall be constructed, maintained, and operated to prevent inter-aquifer exchange of water and to prevent loss of hydraulic head between geologic zones.
- LOG The Point of Diversion RA 12204 POD1 must be completed and the Well Log filed on or before 12/31/2015.

Trn Desc: RA 12204 POD1

File	Number:	RA	12204	
Trn	Number:	559	9063	

page: 1

NEW MEXICO STATE ENGINEER OFFICE PERMIT TO EXPLORE

ACTION OF STATE ENGINEER

Notice of Intention Rcvd:Date Rcvd. Corrected:Formal Application Rcvd: 12/09/2014Pub. of Notice Ordered:Date Returned - Correction:Affidavit of Pub. Filed:

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific conditions listed previously.

Witness my hand and seal this 09 day of Dec A.D., 2014

____, State Engineer Tom Blaine, maly By: NDY MORLEY

Trn Desc: RA 12204 POD1

File Number: RA 12204 Trn Number: 559063

page: 2

Received by OCD: 10/23/2023 11:35:44 AM

Tom Blaine, P.E. State Engineer



Roswell Office 1900 WEST SECOND STREET ROSWELL, NM 88201

STATE OF NEW MEXICO OFFICE OF THE STATE ENGINEER

Trn Nbr: 559063 File Nbr: RA 12204

Dec. 09, 2014

IRENE WHITE WHITE DRILLING COMPANY CONOCO PHILLIPS PO BOX 906 CLYDE, TX 79510

Greetings:

Enclosed is your copy of the above numbered permit that has been approved subject to the conditions set forth on the approval page. In accordance with the conditions of approval, the well can only be tested for 10 cumulative days, and the well is to be plugged on or before 12/31/2015, unless a permit to use the water is acquired from this office.

A Well Record & Log (OSE Form wr-20) shall be filed in this office within twenty (20) days after completion of drilling, but no later than 12/31/2015.

Appropriate forms can be downloaded from the OSE website www.ose.state.nm.us or will be mailed upon request.

Sincerely, Lisa Fresquez (575) 622-6521

Enclosure

explore

Received by OCD: 10/23/2023 11:35:44 AM

能就是一些我们和爱知识的正义。他身份不

Locator Tool Report

General Information:

Application ID:29

Date: 12-09-2014

Time: 09:45:42

WR File Number: RA-12204-POD1 Purpose: POINT OF DIVERSION

Applicant First Name: WHITE DRILLING Applicant Last Name: IRENE M WHITE

> GW Basin: ROSWELL ARTESIAN County: LEA

Critical Management Area Name(s): NONE Special Condition Area Name(s): NONE Land Grant Name: NON GRANT

PLSS Description (New Mexico Principal Meridian):

SW 1/4 of SW 1/4 of NW 1/4 of SE 1/4 of Section 28, Township 17S, Range 32E.

Coordinate System Details:

Geographic Coordinates:

Latitude:	32 Degrees	48 Minutes	9.2 Seconds	Ν
Longitude:	103 Degrees	46 Minutes	16.3 Seconds	W

Universal Transverse Mercator Zone: 13N

NAD 1983(92) (Meters)	N: 3,630,068	E: 615,049
NAD 1983(92) (Survey Feet)	N: 11,909,647	E: 2,017,874
NAD 1927 (Meters)	N: 3,629,864	E: 615,099
NAD 1927 (Survey Feet)	N: 11,908,980	E: 2,018,037

State Plane Coordinate System Zone: New Mexico East

NAD 1983(92) (Meters)	N: 199,999	E: 217,646
NAD 1983(92) (Survey Feet)	N: 656,163	E: 714,062
NAD 1927 (Meters)	N: 199,979	E: 205,095
NAD 1927 (Survey Feet)	N: 656,099	E: 672,883

Page 1 of 2

:1

NEW MEXICO OFFICE OF STATE ENGINEER

Locator Tool Report





 WR File Number: RA-12204-POD1 Scale: 1:22,396

 Northing/Easting: UTM83(92) (Meter):

 N: 3,630,068

 E: 615,049

 Northing/Easting: SPCS83(92) (Feet):

 N: 656,163

 E: 714,062

 GW Basin: Roswell Artesian

Page 2 of 2

Print Date: 12/09/2014

2014 DEC - 3

AM 11: 0



PO Box 2948 | Hobbs, NM 88241 | Phone 575.393.2967

October 30th, 2014

Dr. Tomáš Oberding, PhD Environmental Specialist – New Mexico Oil Conservation Division Energy, Minerals and Natural Resources Department 1625 N. French Dr. Hobbs, NM 88240

> RE: Corrective Action Plan ConocoPhillips MCA Well #357 (1RP-3025) UL/M sec. 28 T17S R32E API No. 3002525849

Dr. Oberding:

ConocoPhillips (CoP) has retained Rice Environmental Consulting and Safety (RECS) to address potential environmental concerns at the above-referenced site.

Background and Previous Work

The site is located approximately 3.7 miles south of Maljamar, New Mexico. The initial C-141 states that the release is located in UL/M; however, GPS mapping shows that the release is located in UL/J&K sec. 28 T17S R32E. NM OSE and USGS records indicate that groundwater will likely be encountered at a depth of approximately 65 +/- feet.

On December 17th, 2013, CoP discovered a release from a 2 inch flow line. The line degraded due to corrosion and released 24 barrels of produced water over 5,602 square feet of pasture land. None of this fluid was recovered. NMOCD and BLM were notified of the release on December 10th, 2013, and an initial C-141 was approved by NMOCD on August 18th, 2014 (Appendix A).

RECS personnel were on site beginning on January 7th, 2014. The wet material from the release, for a total of 324 cubic yards, was scraped up and sent to a NMOCD approved facility for disposal. The release area was sampled, first by hand augur and then by backhoe. Based on the sampling data from these events, it was evident that the release had moved deeper through the vadose zone than these two sampling techniques could assess. Therefore, three soil bores were installed at the site on June 18th and 19th, 2014 (Figure 1). The soil bores were advanced to the depth of 65 ft bgs, and soil samples from each bore were taken at regular intervals. The samples were field tested for chlorides and organic vapors, and representative samples were taken to a commercial laboratory for analysis (Appendix B). At 65 ft bgs, all three bores showed elevated laboratory chloride readings, Gasoline Range Organics (GRO), Diesel Range Organics (DRO) and BTEX readings of non-detect, except in SB-3, where there DRO reading was 11.4 mg/kg.

Corrective Action Plan

Based on the soil bore installation data, it is evident that chlorides may have infiltrated the vadose zone to groundwater. Therefore, the site will need a vadose zone remediation phase and a groundwater remedy phase. In order to remediate the vadose zone, the release area will be excavated to 4 ft bgs. At the base of the excavation, a 20-mil reinforced poly liner will be installed and properly seated.

All excavated soil will be taken to a NMOCD approved facility for disposal, and clean soil will be imported to the site to serve as backfill. A sample of this imported soil will be taken to a commercial laboratory to confirm that the chloride value is below regulatory standards. The site will be backfilled with the imported soil and contoured to the surrounding location. The site will then be seeded with a blend of native vegetation.

Once the excavation is completed, a near-source monitor well (MW-1) will be installed downgradient from the site (Figure 2). The monitor well will be installed per EPA and NMOCD standards. The monitor well will be sampled quarterly and once appropriate groundwater analysis data has been obtained, a remedy for groundwater will be proposed to NMOCD. Additional monitoring wells may be required to fully delineate groundwater quality.

RECS appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 393-2967 or me if you have any questions or wish to discuss the site.

Sincerely,

JC.W.

Lara Weinheimer Project Scientist RECS (575) 441-0431

Attachments:

Figure 1 – Soil Bore Installation Figure 2 – Proposed MW Installation Appendix A – Initial C-141 Appendix B – Soil Bore Installation Documentation Appendix C – Photo Documentation 2014 DEC -3 AM 11: 1

From:	Hughes, Solomon
To:	Kyle Norman
Cc:	Oberding, Tomas, EMNRD; Wright, Justin K; Hack Conder; Lara Weinheimer; Laura Flores; Sarah Edwards; Catherine Ursanic
Subject: Date:	Re: COP MCA Well #357 (2) CAP Thursday, October 30, 2014 4:23:31 PM

Mr. Norman,

This plan is approved as written.

Bests, Sol

Sol Hughes

Environmental Protection Division Bureau of Land Management 620 E. Greene St Carlsbad, NM

Office: 575.234.5951 Cell: 575.499.3378

On Thu, Oct 30, 2014 at 3:45 PM, Hughes, Solomon <<u>shughes@blm.gov</u>> wrote: Message received.

Thanks, Sol

Sol Hughes

Environmental Protection Division Bureau of Land Management 620 E. Greene St Carlsbad, NM

Office: 575.234.5951 Cell: 575.499.3378

On Thu, Oct 30, 2014 at 1:57 PM, Kyle Norman <<u>knorman@rice-ecs.com</u>> wrote:

Gentlemen, attached is the Corrective Action Plan for the CoP MCA Well 357 (2). If you have any questions, please let us know. Otherwise, we await your approval.

Thanks!

Kyle Norman

Project Lead

419 W. Cain

SIA 2014 DEC -3 AM 11: 03 SWELL NEW MEX

From:	Oberding, Tomas, EMNRD
To:	Kyle Norman; "Hughes, Solomon"
Cc:	"Wright, Justin K"; "Hack Conder"; "Lara Weinheimer"; "Laura Flores"; "Sarah Edwards"; "Catherine Ursanic" RE: COP MCA Well #357 (2) CAP
Subject:	RE: COP MCA Well #357 (2) CAP
Date:	Friday, October 31, 2014 8:45:11 AM

Aloha Mr. Norman et al,

Thank you for providing this CAP.

Based on the sample results- OCD gives conditional approval for the removal of soils as written. However, further actions must be approved through Santa Fe (with continued agreement form the BLM).

I will forward this to the groundwater specialists and shall provide an updated approval of conditions when I know more information.

Mahalo for your patience, and if there are any questions, please don't hesitate to ask. -Doc

Tomáš 'Doc' Oberding, PhD Senior Environmental Specialist – New Mexico Oil Conservation Division Energy, Minerals and Natural Resources Department 1625 N. French Dr. Hobbs, NM 88240 (O): (575) 393-6161 ext 111 (C): 575-370-3180 (F): (575) 393-0720 E-Mail: tomas.oberding@state.nm.us Website: http://www.emnrd.state.nm.us/ocd/

2014 DEC -3 AM 11: 03

From: Kyle Norman [mailto:knorman@rice-ecs.com]
Sent: Thursday, October 30, 2014 1:58 PM
To: Oberding, Tomas, EMNRD; 'Hughes, Solomon'
Cc: 'Wright, Justin K'; 'Hack Conder'; 'Lara Weinheimer'; 'Laura Flores'; 'Sarah Edwards'; 'Catherine Ursanic'
Subject: COP MCA Well #357 (2) CAP

Gentlemen, attached is the Corrective Action Plan for the CoP MCA Well 357 (2). If you have any questions, please let us know. Otherwise, we await your approval. Thanks!

Kyle Norman Project Lead 419 W. Cain Hobbs NM 88240 Cell # (575)942-8542 Fax # (575)393-0293



APPENDIX B

Photographic Log

Released to Imaging: 2/13/2024 2:26:32 PM







APPENDIX C

Lithologic Soil Sampling Logs













APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation



September 08, 2023

AIMEE COLE ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD, NM 88220

RE: MCA 301

Enclosed are the results of analyses for samples received by the laboratory on 09/06/23 13:56.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	ľY	
Received:	09/06/2023		Sampling Date:	09/06/2023
Reported:	09/08/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos
Project Location:	32.8037000 -103.76	586000		

Sample ID: SW 01 @ 0-4' (H234818-01)

BTEX 8021B	mg/	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	09/07/2023	ND	2.00	99.9	2.00	0.798	
Toluene*	<0.050	0.050	09/07/2023	ND	1.99	99.4	2.00	6.58	
Ethylbenzene*	<0.050	0.050	09/07/2023	ND	2.09	105	2.00	0.404	
Total Xylenes*	<0.150	0.150	09/07/2023	ND	6.18	103	6.00	1.90	
Total BTEX	<0.300	0.300	09/07/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	115 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/07/2023	ND	432	108	400	3.64	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/07/2023	ND	184	92.1	200	0.382	
DRO >C10-C28*	<10.0	10.0	09/07/2023	ND	178	89.0	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	09/07/2023	ND					
Surrogate: 1-Chlorooctane	99.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	113 9	% 49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HV CARLSBAD NM, 88220 Fax To:	VY	
Received:	09/06/2023		Sampling Date:	09/06/2023
Reported:	09/08/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos
Project Location:	32.8037000 -103.76	586000		

Sample ID: SW 02 @ 0-4' (H234818-02)

BTEX 8021B	mg/	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/07/2023	ND	2.00	99.9	2.00	0.798	
Toluene*	<0.050	0.050	09/07/2023	ND	1.99	99.4	2.00	6.58	
Ethylbenzene*	<0.050	0.050	09/07/2023	ND	2.09	105	2.00	0.404	
Total Xylenes*	<0.150	0.150	09/07/2023	ND	6.18	103	6.00	1.90	
Total BTEX	<0.300	0.300	09/07/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	113 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/07/2023	ND	432	108	400	3.64	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/07/2023	ND	184	92.1	200	0.382	
DRO >C10-C28*	<10.0	10.0	09/07/2023	ND	178	89.0	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	09/07/2023	ND					
Surrogate: 1-Chlorooctane	100	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	111 9	% 49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/06/2023		Sampling Date:	09/06/2023
Reported:	09/08/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos
Project Location:	32.8037000 -103.76	586000		

Sample ID: SW 03 @ 0-4' (H234818-03)

BTEX 8021B	mg/	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/07/2023	ND	2.00	99.9	2.00	0.798	
Toluene*	<0.050	0.050	09/07/2023	ND	1.99	99.4	2.00	6.58	
Ethylbenzene*	<0.050	0.050	09/07/2023	ND	2.09	105	2.00	0.404	
Total Xylenes*	<0.150	0.150	09/07/2023	ND	6.18	103	6.00	1.90	
Total BTEX	<0.300	0.300	09/07/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	112 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	09/07/2023	ND	432	108	400	3.64	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/07/2023	ND	184	92.1	200	0.382	
DRO >C10-C28*	<10.0	10.0	09/07/2023	ND	178	89.0	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	09/07/2023	ND					
Surrogate: 1-Chlorooctane	104 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	115 9	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/06/2023		Sampling Date:	09/06/2023
Reported:	09/08/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos
Project Location:	32.8037000 -103.76	586000		

Sample ID: SW 04 @ 0-4' (H234818-04)

BTEX 8021B	mg/	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/07/2023	ND	2.00	99.9	2.00	0.798	
Toluene*	<0.050	0.050	09/07/2023	ND	1.99	99.4	2.00	6.58	
Ethylbenzene*	<0.050	0.050	09/07/2023	ND	2.09	105	2.00	0.404	
Total Xylenes*	<0.150	0.150	09/07/2023	ND	6.18	103	6.00	1.90	
Total BTEX	<0.300	0.300	09/07/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	114 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	09/07/2023	ND	432	108	400	3.64	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/07/2023	ND	184	92.1	200	0.382	
DRO >C10-C28*	<10.0	10.0	09/07/2023	ND	178	89.0	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	09/07/2023	ND					
Surrogate: 1-Chlorooctane	93.2	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	105 9	% 49.1-14							

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	٧Y	
Received:	09/06/2023		Sampling Date:	09/06/2023
Reported:	09/08/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos
Project Location:	32.8037000 -103.76	586000		

Sample ID: SW 05 @ 0-4' (H234818-05)

BTEX 8021B	mg/	'kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/07/2023	ND	2.00	99.9	2.00	0.798	
Toluene*	<0.050	0.050	09/07/2023	ND	1.99	99.4	2.00	6.58	
Ethylbenzene*	<0.050	0.050	09/07/2023	ND	2.09	105	2.00	0.404	
Total Xylenes*	<0.150	0.150	09/07/2023	ND	6.18	103	6.00	1.90	
Total BTEX	<0.300	0.300	09/07/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	114 %	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/07/2023	ND	432	108	400	3.64	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/07/2023	ND	184	92.1	200	0.382	
DRO >C10-C28*	<10.0	10.0	09/07/2023	ND	178	89.0	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	09/07/2023	ND					
Surrogate: 1-Chlorooctane	98.4	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	110 9	49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager


	A1 3: C	NSOLUM IMEE COLE 122 NATIONAL PARKS HW ARLSBAD NM, 88220 ax To:	Y	
Received:	09/06/2023		Sampling Date:	09/06/2023
Reported:	09/08/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos
Project Location:	32.8037000 -103.76860	000		

Sample ID: FS 01 @ 4' (H234818-06)

BTEX 8021B	mg/	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/07/2023	ND	2.00	99.9	2.00	0.798	
Toluene*	<0.050	0.050	09/07/2023	ND	1.99	99.4	2.00	6.58	
Ethylbenzene*	<0.050	0.050	09/07/2023	ND	2.09	105	2.00	0.404	
Total Xylenes*	<0.150	0.150	09/07/2023	ND	6.18	103	6.00	1.90	
Total BTEX	<0.300	0.300	09/07/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	111 9	% 71.5-13	24						
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	09/07/2023	ND	432	108	400	3.64	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/07/2023	ND	184	92.1	200	0.382	
DRO >C10-C28*	<10.0	10.0	09/07/2023	ND	178	89.0	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	09/07/2023	ND					
Surrogate: 1-Chlorooctane	102	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	114 9	% 49.1-14							

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	ſY	
Received:	09/06/2023		Sampling Date:	09/06/2023
Reported:	09/08/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos
Project Location:	32.8037000 -103.76	86000		

Sample ID: FS 02 @ 4' (H234818-07)

BTEX 8021B	mg/	'kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/07/2023	ND	2.00	99.9	2.00	0.798	
Toluene*	<0.050	0.050	09/07/2023	ND	1.99	99.4	2.00	6.58	
Ethylbenzene*	<0.050	0.050	09/07/2023	ND	2.09	105	2.00	0.404	
Total Xylenes*	<0.150	0.150	09/07/2023	ND	6.18	103	6.00	1.90	
Total BTEX	<0.300	0.300	09/07/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	111 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	'kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	752	16.0	09/07/2023	ND	432	108	400	3.64	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/07/2023	ND	184	92.1	200	0.382	
DRO >C10-C28*	<10.0	10.0	09/07/2023	ND	178	89.0	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	09/07/2023	ND					
Surrogate: 1-Chlorooctane	96.5	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	107 9	% 49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	A1 3: C	NSOLUM IMEE COLE 122 NATIONAL PARKS HW ARLSBAD NM, 88220 ax To:	Y	
Received:	09/06/2023		Sampling Date:	09/06/2023
Reported:	09/08/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos
Project Location:	32.8037000 -103.76860	000		

Sample ID: FS 03 @ 4' (H234818-08)

BTEX 8021B	mg/	′kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	09/07/2023	ND	2.00	99.9	2.00	0.798	
Toluene*	<0.050	0.050	09/07/2023	ND	1.99	99.4	2.00	6.58	
Ethylbenzene*	<0.050	0.050	09/07/2023	ND	2.09	105	2.00	0.404	
Total Xylenes*	<0.150	0.150	09/07/2023	ND	6.18	103	6.00	1.90	
Total BTEX	<0.300	0.300	09/07/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	115 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3080	16.0	09/07/2023	ND	432	108	400	3.64	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/07/2023	ND	184	92.1	200	0.382	
DRO >C10-C28*	<10.0	10.0	09/07/2023	ND	178	89.0	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	09/07/2023	ND					
Surrogate: 1-Chlorooctane	91.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	101 9	% 49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	A1 3: C	NSOLUM IMEE COLE 122 NATIONAL PARKS HW ARLSBAD NM, 88220 ax To:	Y	
Received:	09/06/2023		Sampling Date:	09/06/2023
Reported:	09/08/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos
Project Location:	32.8037000 -103.76860	000		

Sample ID: FS 04 @ 4' (H234818-09)

BTEX 8021B	mg/	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/07/2023	ND	2.00	99.9	2.00	0.798	
Toluene*	<0.050	0.050	09/07/2023	ND	1.99	99.4	2.00	6.58	
Ethylbenzene*	<0.050	0.050	09/07/2023	ND	2.09	105	2.00	0.404	
Total Xylenes*	<0.150	0.150	09/07/2023	ND	6.18	103	6.00	1.90	
Total BTEX	<0.300	0.300	09/07/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	114 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1760	16.0	09/07/2023	ND	432	108	400	3.64	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/07/2023	ND	184	92.1	200	0.382	
DRO >C10-C28*	<10.0	10.0	09/07/2023	ND	178	89.0	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	09/07/2023	ND					
Surrogate: 1-Chlorooctane	85.3	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	93.0	% 49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/06/2023		Sampling Date:	09/06/2023
Reported:	09/08/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos
Project Location:	32.8037000 -103.768	36000		

Sample ID: FS 05 @ 4' (H234818-10)

BTEX 8021B	mg/	′kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/07/2023	ND	2.00	99.9	2.00	0.798	
Toluene*	<0.050	0.050	09/07/2023	ND	1.99	99.4	2.00	6.58	
Ethylbenzene*	<0.050	0.050	09/07/2023	ND	2.09	105	2.00	0.404	
Total Xylenes*	<0.150	0.150	09/07/2023	ND	6.18	103	6.00	1.90	
Total BTEX	<0.300	0.300	09/07/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	113 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1100	16.0	09/07/2023	ND	432	108	400	3.64	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/07/2023	ND	184	92.1	200	0.382	
DRO >C10-C28*	<10.0	10.0	09/07/2023	ND	178	89.0	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	09/07/2023	ND					
Surrogate: 1-Chlorooctane	91.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	99.9	% 49.1-14	8						

Cardinal Laboratories

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	A1 3: C	NSOLUM IMEE COLE 122 NATIONAL PARKS HW ARLSBAD NM, 88220 ax To:	Y	
Received:	09/06/2023		Sampling Date:	09/06/2023
Reported:	09/08/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos
Project Location:	32.8037000 -103.76860	000		

Sample ID: FS 06 @ 4' (H234818-11)

BTEX 8021B	mg/	′kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/07/2023	ND	2.00	99.9	2.00	0.798	
Toluene*	<0.050	0.050	09/07/2023	ND	1.99	99.4	2.00	6.58	
Ethylbenzene*	<0.050	0.050	09/07/2023	ND	2.09	105	2.00	0.404	
Total Xylenes*	<0.150	0.150	09/07/2023	ND	6.18	103	6.00	1.90	
Total BTEX	<0.300	0.300	09/07/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	116 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	09/07/2023	ND	432	108	400	3.64	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/07/2023	ND	184	92.1	200	0.382	
DRO >C10-C28*	<10.0	10.0	09/07/2023	ND	178	89.0	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	09/07/2023	ND					
Surrogate: 1-Chlorooctane	94.3	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	104 9	% 49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/06/2023		Sampling Date:	09/06/2023
Reported:	09/08/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos
Project Location:	32.8037000 -103.768	36000		

Sample ID: FS 07 @ 4' (H234818-12)

BTEX 8021B	mg/	'kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/07/2023	ND	2.00	99.9	2.00	0.798	
Toluene*	<0.050	0.050	09/07/2023	ND	1.99	99.4	2.00	6.58	
Ethylbenzene*	<0.050	0.050	09/07/2023	ND	2.09	105	2.00	0.404	
Total Xylenes*	<0.150	0.150	09/07/2023	ND	6.18	103	6.00	1.90	
Total BTEX	<0.300	0.300	09/07/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID		% 71.5-13	4						
Chloride, SM4500Cl-B	ride, SM4500Cl-B mg/kg			d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5840	16.0	09/07/2023	ND	432	108	400	3.64	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/07/2023	ND	184	92.1	200	0.382	
DRO >C10-C28*	<10.0	10.0	09/07/2023	ND	178	89.0	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	09/07/2023	ND					
Surrogate: 1-Chlorooctane	99.3	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	111 9	% 49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Received by OCD: 10/23/2023 11:35:44 AM

dinallabsnm.com	hanges to celev.keene@car	ba	t Car
	Rus Thermometer ID #140 Correction Factor 0°C		Sampler - UPS - Bus - Other: Corrected Temp. °C
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ase provide Email address:	All Result: Verbal Result: Yes All Results are emailed. Please provide Email address:	A Received By:	Date:
		including without limitation, business interruptions, loss of use, or loss of profits incurred by nder by Cardinal, regardless of whether size. "Aim is based upon any of the above stated	service. In or event snall Cational be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits affitia. In successors arising out of or related to the performance of services hereunder by Catrinal, regardless of whether str., which is based upon any of the ab
	unt paid by the client for the iys after completion of the applicable	amo 30 da	analyses. All claims including those for negligence and any other cause whatsoever
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	SAMPLING	MATRIX PRESERV.	HOR LAB USE ONLY
		DWUGGA Fax #:	Sampler Name: Juli currer Foulu
		103.7(66(6000) Phone #:	Project Location: (82, 3087000, -
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		Project Owner: Mauterich City:	Project #: 080205107 La Project
		Address:	Phone #: 120-864-7816 Fax #:
		VM zip: 099720 Attn:	City: CANSback State:
		Company:	Address: SIZZ Wat Pour he
		P.O. #: A.A.	Project Manager: Aimul Well
ANALYSIS REQUEST		BILL TO	Company Name: CANSO/WM, LLC
		M 88240 393-2476	101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476
CITAIN-OF-COSTODT AND ANALTSIS REQUEST		Ies	Laboratories
			CARUIN

Page 81 of 185

Page 15 of 16

Delivered By: (Circle One) O Sampler - UPS - Bus - Other: Co	Relinquished By:	analyses. All claims including those for negligence and any other cause servige. In no event shall Cardinal be liable for incidental or consequent affigies or successors arising out of or related to the performance of s. Relineruic hood Rev.	PLEASE NOTE: Liability and Damages, Cardinal's liability and c		h mined V.	1- 15060 4		Lab I.D. Sample I.D.	HJ348B	Sampler Name: AMAMAN	Project Location: [37, 40670	Project Name: MCA 301	Project #: 1602057076	Phone #: 720 - 364 - 73 1	city: Contobard	Address: 8/22 Wath PI	Project Manager: AWALL US	Company Name: MSOlum	- 5	Labora	CARD
Observed Temp. °C 4.1 °C Sample Condition Corrected Temp. °C Pres Yes t Cardinal cannot accept verbal change	Time: 13:156 Received By:	whatsoever shall be deemed waived unless made in v al damages, including without limitation, business inter "cys hereupder by Cardinal, regardless of whether su	client's exclusive remerky for any claim axision whether based in contrast or tod a				# CONT GROUM WASTE SOIL DIL SLUDG DTHER	8 OR (C)(TAINERS NDWATE WATER E	R	Fax	000, -103, 7690,000) Pho	State:	Project Owner: City:		State: WM Zip: 88220 Attn:	arts Huny con	P.O.	1 LLC	101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476	acories	DINAL
Temp. °C Sample Condition CHECKED BY: Turnaround Time: Standard Back Temp. °C Cool Intact (Initials) Thermometer ID #140 Correction Factor 0°C Correction Factor 0°C	UNSD	pplicable				× 9/6/25 1150 ×		BT	PRESERV. SAMPLING			ate: Zip:	y:	Address:	л:	Company:	# A.A.	BILL TO			
Standard Bacteria (only) Sample Condition Standard Cool Intact Observed Temp. °C Ves Ves No No Corrected Temp. °C	un , 100 Add' Phone #: ase provide Email address: Un , 1000 Add Comatowa (NSb) Wn.								Sno									ANALYSIS REQUEST		CTENTIN-OF-COSTODT AND ANALTSIS REQUEST	

Received by OCD: 10/23/2023 11:35:44 AM 10

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September 13, 2023

AIMEE COLE

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: MCA 301

Enclosed are the results of analyses for samples received by the laboratory on 09/08/23 15:09.

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

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

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

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

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

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

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: MCA 301 Project Number: 03D2057076 Project Manager: AIMEE COLE Fax To:	
--	--	--

FS 18 @ 4' H234886-01 So	oil 0		
		8-Sep-23 10:35	08-Sep-23 15:09
FS 19 @ 4' H234886-02 So	oil 0	8-Sep-23 10:40	08-Sep-23 15:09
FS 20 @ 4' H234886-03 Sc	oil 0	8-Sep-23 13:10	08-Sep-23 15:09
FS 21 @ 4' H234886-04 Sc	oil 0	8-Sep-23 13:15	08-Sep-23 15:09
FS 22 @ 4' H234886-05 Sc	oil 0	8-Sep-23 13:20	08-Sep-23 15:09
FS 23 @ 4' H234886-06 Sc	oil 0	8-Sep-23 13:25	08-Sep-23 15:09
SW 06 @ 0-4' H234886-07 Sc	oil 0	8-Sep-23 10:55	08-Sep-23 15:09
SW 07 @ 0-4' H234886-08 Sc	oil 0	8-Sep-23 11:00	08-Sep-23 15:09
SW 08 @ 0-4' H234886-09 Sc	oil 0	8-Sep-23 11:05	08-Sep-23 15:09
SW 09 @ 0-4' H234886-10 Sc	oil 0	8-Sep-23 12:10	08-Sep-23 15:09
FS 08 @ 4' H234886-11 Sc	oil 0	8-Sep-23 09:00	08-Sep-23 15:09
FS 09 @ 4' H234886-12 So	oil 0	8-Sep-23 09:03	08-Sep-23 15:09
FS 10 @ 4' H234886-13 Sc	oil 0	8-Sep-23 10:50	08-Sep-23 15:09
FS 11 @ 4' H234886-14 So	oil 0	8-Sep-23 09:10	08-Sep-23 15:09
FS 12 @ 4' H234886-15 Sc	oil 0	8-Sep-23 09:13	08-Sep-23 15:09
FS 13 @ 4' H234886-16 Sc	oil 0	8-Sep-23 09:16	08-Sep-23 15:09
FS 14 @ 4' H234886-17 Sc	oil 0	8-Sep-23 09:19	08-Sep-23 15:09
FS 15 @ 4' H234886-18 Sc	oil 0	8-Sep-23 09:21	08-Sep-23 15:09
FS 16 @ 4' H234886-19 Sc	oil 0	8-Sep-23 10:45	08-Sep-23 15:09
FS 17 @ 4' H234886-20 Sc	oil 0	8-Sep-23 09:48	08-Sep-23 15:09
SW 10 @ 0-4' H234886-21 Sc	oil 0	8-Sep-23 12:15	08-Sep-23 15:09
SW 11 @ 0-4' H234886-22 Sc	oil 0	8-Sep-23 12:20	08-Sep-23 15:09
SW 12 @ 0-4' H234886-23 Sc	oil 0	8-Sep-23 12:25	08-Sep-23 15:09
SW 13 @ 0-4' H234886-24 Sc	oil 0	8-Sep-23 12:30	08-Sep-23 15:09

09/13/23 - Client changed some sample IDs (see COC). This is the revised report and will replace the one sent earlier today, 09/13/23.

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Project Num Project Mana		2057076			1	Reported: 3-Sep-23 16:	39
				18 @ 4' 386-01 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
Inorganic Compounds										
Chloride	8660		16.0	mg/kg	4	3091214	AC	12-Sep-23	4500-Cl-B	
Volatile Organic Compounds by l	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091102	JH	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091102	JH	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091102	JH	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091102	JH	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091102	JH	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			98.6 %	71.5	-134	3091102	JH	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090902	MS	11-Sep-23	8015B	
DRO >C10-C28*	173		10.0	mg/kg	1	3090902	MS	11-Sep-23	8015B	
EXT DRO >C28-C36	126		10.0	mg/kg	1	3090902	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctane			105 %	48.2	-134	3090902	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			134 %	49.1	-148	3090902	MS	11-Sep-23	8015B	

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project:MCA 301ReportedProject Number:03D205707613-Sep-23Project Manager:AIMEE COLEFax To:Fax To:									39		
FS 19 @ 4' H234886-02 (Soil)												
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes		
			Cardina	l Laborat	ories							
<u>Inorganic Compounds</u> Chloride	576		16.0	mg/kg	4	3091214	AC	12-Sep-23	4500-Cl-B			
Volatile Organic Compounds by H	PA Method	8021										
Benzene*	< 0.050		0.050	mg/kg	50	3091102	JH	12-Sep-23	8021B			
Toluene*	< 0.050		0.050	mg/kg	50	3091102	ЈН	12-Sep-23	8021B			
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091102	ЈН	12-Sep-23	8021B			
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091102	ЛН	12-Sep-23	8021B			
Total BTEX	< 0.300		0.300	mg/kg	50	3091102	ЛН	12-Sep-23	8021B			
Surrogate: 4-Bromofluorobenzene (PID)			110 %	71.5	-134	3091102	ЛН	12-Sep-23	8021B			
Petroleum Hydrocarbons by GC l	FID											
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B			
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B			
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B			
Surrogate: 1-Chlorooctane			95.3 %	48.2	-134	3090903	MS	11-Sep-23	8015B			
Surrogate: 1-Chlorooctadecane			96.2 %	49.1	-148	3090903	MS	11-Sep-23	8015B			

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project:MCA 301Reported:Project Number:03D205707613-Sep-23 16:Project Manager:AIMEE COLEFax To:Fax To:									39		
FS 20 @ 4' H234886-03 (Soil)												
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes		
			Cardina	l Laborat	tories							
<u>Inorganic Compounds</u> Chloride	1310		16.0	mg/kg	4	3091214	AC	12-Sep-23	4500-Cl-B			
Volatile Organic Compounds by H	PA Method	8021										
Benzene*	< 0.050		0.050	mg/kg	50	3091102	JH	12-Sep-23	8021B			
Toluene*	< 0.050		0.050	mg/kg	50	3091102	ЈН	12-Sep-23	8021B			
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091102	ЈН	12-Sep-23	8021B			
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091102	ЈН	12-Sep-23	8021B			
Total BTEX	< 0.300		0.300	mg/kg	50	3091102	ЛН	12-Sep-23	8021B			
Surrogate: 4-Bromofluorobenzene (PID)			112 %	71.5	-134	3091102	ЛН	12-Sep-23	8021B			
Petroleum Hydrocarbons by GC l	FID											
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B			
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B			
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B			
Surrogate: 1-Chlorooctane			84.0 %	48.2	-134	3090903	MS	11-Sep-23	8015B			
Surrogate: 1-Chlorooctadecane			84.6 %	49.1	-148	3090903	MS	11-Sep-23	8015B			

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Project Num Project Mana		2057076			1	Reported: 3-Sep-23 16:	39
				21 @ 4' 386-04 (So	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	1520		16.0	mg/kg	4	3091214	AC	12-Sep-23	4500-Cl-B	
Volatile Organic Compounds by H	PA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			116 %	71.5	-134	3091103	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC l	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctane			96.0 %	48.2	-134	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			96.0 %	49.1	-148	3090903	MS	11-Sep-23	8015B	

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Project Num Project Mana		2057076			1	Reported: 3-Sep-23 16:	39
				22 @ 4' 886-05 (So	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	1380		16.0	mg/kg	4	3091214	AC	12-Sep-23	4500-Cl-B	
Volatile Organic Compounds by I	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			114 %	71.5	-134	3091103	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctane			91.3 %	48.2	-134	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			93.5 %	49.1	-148	3090903	MS	11-Sep-23	8015B	

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ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Project Num Project Mana		2057076			1	Reported: 3-Sep-23 16:	39
				23 @ 4' 886-06 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	1310		16.0	mg/kg	4	3091217	AC	12-Sep-23	4500-Cl-B	
Volatile Organic Compounds by H	PA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			115 %	71.5	-134	3091103	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC l	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctane			92.4 %	48.2	-134	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			93.3 %	49.1	-148	3090903	MS	11-Sep-23	8015B	

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ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Project Num Project Mana		2057076			1	Reported: 3-Sep-23 16:	39
				06 @ 0-4 386-07 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	192		16.0	mg/kg	4	3091217	AC	12-Sep-23	4500-Cl-B	
Volatile Organic Compounds by I	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			116 %	71.5	-134	3091103	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
DRO >C10-C28*	55.8		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
EXT DRO >C28-C36	41.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctane			75.7 %	48.2	-134	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			78.2 %	49.1	-148	3090903	MS	11-Sep-23	8015B	

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ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Project Num Project Mana		2057076			1	Reported: 3-Sep-23 16:	39
				07 @ 0-4 386-08 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	192		16.0	mg/kg	4	3091217	AC	12-Sep-23	4500-Cl-B	
Volatile Organic Compounds by H	PA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			115 %	71.5	-134	3091103	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC l	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctane			81.6%	48.2	-134	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			82.5 %	49.1	-148	3090903	MS	11-Sep-23	8015B	

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ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Project Num Project Mana		2057076			1	Reported: 3-Sep-23 16:	39
				08 @ 0-4 886-09 (So						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	144		16.0	mg/kg	4	3091217	AC	12-Sep-23	4500-Cl-B	
Volatile Organic Compounds by H	PA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			112 %	71.5	-134	3091103	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC l	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctane			86.3 %	48.2	-134	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			86.7 %	49.1	-148	3090903	MS	11-Sep-23	8015B	

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ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Project Num Project Mana		2057076			1	Reported: 3-Sep-23 16:	39
				09 @ 0-4 886-10 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	432		16.0	mg/kg	4	3091217	AC	12-Sep-23	4500-Cl-B	
Volatile Organic Compounds by H	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			116 %	71.5	-134	3091103	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctane			84.2 %	48.2	-134	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			85.1 %	49.1	-148	3090903	MS	11-Sep-23	8015B	

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ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Project Num Project Mana Fax		2057076 EE COLE			1	Reported: 3-Sep-23 16:	39
				886-11 (So						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	880		16.0	mg/kg	4	3091217	AC	12-Sep-23	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			114 %	71.5	-134	3091103	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctane			87.5 %	48.2	-134	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			88.7 %	49.1	-148	3090903	MS	11-Sep-23	8015B	

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ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Project Num Project Mana Fax		2057076 EE COLE			1	Reported: 3-Sep-23 16:	39
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories		-			
<u>Inorganic Compounds</u> Chloride	1720		16.0	mg/kg	4	3091217	AC	12-Sep-23	4500-Cl-B	
Volatile Organic Compounds by H	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			111 %	71.5	-134	3091103	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctane			92.9 %	48.2	-134	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			92.6 %	49.1	-148	3090903	MS	11-Sep-23	8015B	

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ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Project Num Project Mana Fax		2057076 EE COLE			1	Reported: 3-Sep-23 16:	39
				10 @ 4 886-13 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
<u>Inorganic Compounds</u> Chloride	1230		16.0	mg/kg	4	3091217	AC	12-Sep-23	4500-Cl-B	
Volatile Organic Compounds by I	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			111 %	71.5	-134	3091103	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctane			87.5 %	48.2	-134	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			88.8 %	49.1	-148	3090903	MS	11-Sep-23	8015B	

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ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Project Num Project Mana Fax		2057076 EE COLE			1	Reported: 3-Sep-23 16:	39
			H2348	886-14 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	18000		16.0	mg/kg	4	3091217	AC	12-Sep-23	4500-Cl-B	
Volatile Organic Compounds by H	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			117 %	71.5	-134	3091103	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctane			80.7 %	48.2	-134	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			81.7 %	49.1	-148	3090903	MS	11-Sep-23	8015B	

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ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Project Num Project Mana Fax	ger: AIM To:	2057076 EE COLE			1	Reported: 3-Sep-23 16:	39
				12 @ 4 886-15 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
<u>Inorganic Compounds</u> Chloride	3000		16.0	mg/kg	4	3091217	AC	12-Sep-23	4500-Cl-B	
Volatile Organic Compounds by I	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			115 %	71.5	-134	3091103	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctane			90.1 %	48.2	-134	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			91.0 %	49.1	-148	3090903	MS	11-Sep-23	8015B	

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: MCA 301 Repo Project Number: 03D2057076 13-Sep- Project Manager: AIMEE COLE Fax To: FS 13 @ 4'									
				15 @ 4 886-16 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
Inorganic Compounds										
Chloride	1490		16.0	mg/kg	4	3091217	AC	12-Sep-23	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			113 %	71.5	-134	3091103	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctane			91.2 %	48.2	-134	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			93.0 %	49.1	-148	3090903	MS	11-Sep-23	8015B	

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220		Reported: 3-Sep-23 16:	39							
				14 @ 4 886-17 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	1520		16.0	mg/kg	4	3091217	AC	12-Sep-23	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			114 %	71.5	-134	3091103	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctane			83.5 %	48.2	-134	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			83.7 %	49.1	-148	3090903	MS	11-Sep-23	8015B	

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220		Project: MCA 301 Reporte Project Number: 03D2057076 13-Sep-23 Project Manager: AIMEE COLE Fax To:									
				15 @ 4 886-18 (Se							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Laborat	tories						
<u>Inorganic Compounds</u> Chloride	6960		16.0	mg/kg	4	3091217	AC	12-Sep-23	4500-Cl-B		
Volatile Organic Compounds by l	EPA Method	8021									
Benzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091103	JH/	12-Sep-23	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	3091103	JH/	12-Sep-23	8021B		
Surrogate: 4-Bromofluorobenzene (PID)			113 %	71.5	-134	3091103	JH/	12-Sep-23	8021B		
Petroleum Hydrocarbons by GC	FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B		
Surrogate: 1-Chlorooctane			91.2 %	48.2	-134	3090903	MS	11-Sep-23	8015B		
Surrogate: 1-Chlorooctadecane			92.5 %	49.1	-148	3090903	MS	11-Sep-23	8015B		

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ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220		Reported: 3-Sep-23 16:	39							
				16 @ 4 886-19 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
<u>Inorganic Compounds</u> Chloride	768		16.0	mg/kg	4	3091217	AC	12-Sep-23	4500-Cl-B	
Volatile Organic Compounds by I	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			114 %	71.5	-134	3091103	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctane			89.5 %	48.2	-134	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			91.3 %	49.1	-148	3090903	MS	11-Sep-23	8015B	

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ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Project Num Project Mana Fax		2057076 EE COLE			1	Reported: 3-Sep-23 16:	39
			H2348	386-20 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	18400		16.0	mg/kg	4	3091217	AC	12-Sep-23	4500-Cl-B	
Volatile Organic Compounds by H	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			116 %	71.5	-134	3091103	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctane			98.1 %	48.2	-134	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			98.8 %	49.1	-148	3090903	MS	11-Sep-23	8015B	

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: MCA 301 Reporte Project Number: 03D2057076 13-Sep-23 Project Manager: AIMEE COLE Fax To:									
				10 @ 0-4 386-21 (So						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds Chloride	80.0		16.0	mg/kg	4	3091217	AC	12-Sep-23	4500-Cl-B	
Volatile Organic Compounds by H		8021	1010	00				1		
Benzene*	< 0.050	0021	0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			115 %	71.5	-134	3091103	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctane			99.6 %	48.2	-134	3090903	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			98.2 %	49.1	-148	3090903	MS	11-Sep-23	8015B	

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project:MCA 301ReportedProject Number:03D205707613-Sep-23Project Manager:AIMEE COLEFax To:Fax To:									
				11 @ 0-4 886-22 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	80.0		16.0	mg/kg	4	3091217	AC	12-Sep-23	4500-Cl-B	
Volatile Organic Compounds by H	PA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			116 %	71.5	-134	3091103	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC l	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090904	MS	11-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090904	MS	11-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090904	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctane			102 %	48.2	-134	3090904	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			110 %	49.1	-148	3090904	MS	11-Sep-23	8015B	

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: MCA 301 Reported and the second sec									
				12 @ 0 886-23 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
Inorganic Compounds	16.0		16.0	mg/kg	4	3091217	AC	12-Sep-23	4500-Cl-B	
Chloride	16.0		16.0	mg/kg	4	3091217	AC	12-Sep-25	4300-СІ-В	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091103	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			115 %	71.5	-134	3091103	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090904	MS	11-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090904	MS	11-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090904	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctane			107 %	48.2	-134	3090904	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			115 %	49.1	-148	3090904	MS	11-Sep-23	8015B	

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: MCA 301 Reporter Project Number: 03D2057076 13-Sep-23 Project Manager: AIMEE COLE Fax To:									
				13 @ 0-4 886-24 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds Chloride	32.0		16.0	mg/kg	4	3091217	AC	12-Sep-23	4500-Cl-B	
Volatile Organic Compounds by H		8021	10.0		·	505121,		12 Sep 20	1000 01 2	
Benzene*	<0.050	0021	0.050	mg/kg	50	3091113	MS	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091113	MS	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091113	MS	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091113	MS	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091113	MS	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			103 %	71.5	-134	3091113	MS	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC l	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3090904	MS	11-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3090904	MS	11-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3090904	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctane			126 %	48.2	-134	3090904	MS	11-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			138 %	49.1	-148	3090904	MS	11-Sep-23	8015B	

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Inorganic Compounds - Quality Control

		Cardiı	nal Lab	oratories						
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3091214 - 1:4 DI Water										
Blank (3091214-BLK1)				Prepared &	Analyzed:	: 12-Sep-23				
Chloride	ND	16.0	mg/kg							
LCS (3091214-BS1)				Prepared &	analyzed:	: 12-Sep-23				
Chloride	448	16.0	mg/kg	400		112	80-120			
LCS Dup (3091214-BSD1)				Prepared &	z Analyzed:	: 12-Sep-23				
Chloride	432	16.0	mg/kg	400		108	80-120	3.64	20	
Batch 3091217 - 1:4 DI Water										
Blank (3091217-BLK1)				Prepared &	Analyzed:	: 12-Sep-23				
Chloride	ND	16.0	mg/kg							
LCS (3091217-BS1)				Prepared &	analyzed:	: 12-Sep-23				
Chloride	448	16.0	mg/kg	400		112	80-120			
LCS Dup (3091217-BSD1)				Prepared &	k Analyzed:	: 12-Sep-23				
Chloride	448	16.0	mg/kg	400		112	80-120	0.00	20	

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ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220		Project No Project Ma	umber:	MCA 301 03D205707 AIMEE COLI					Reported: Sep-23 16	5:39
	Volatile Organic (•	·	A Method 8 boratories	-	ality Co	ntrol			
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 3091102 - Volatiles										
Blank (3091102-BLK1)				Prepared &	z Analyzed:	11-Sep-23				
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0516		mg/kg	0.0500		103	71.5-134			
LCS (3091102-BS1)				Prepared &	k Analyzed:	11-Sep-23				
Benzene	1.95	0.050	mg/kg	2.00		97.5	82.8-130			
Toluene	2.26	0.050	mg/kg	2.00		113	86-128			
Ethylbenzene	2.29	0.050	mg/kg	2.00		114	85.9-128			
n,p-Xylene	4.58	0.100	mg/kg	4.00		114	89-129			
o-Xylene	2.31	0.050	mg/kg	2.00		115	86.1-125			
Total Xylenes	6.89	0.150	mg/kg	6.00		115	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	0.0543		mg/kg	0.0500		109	71.5-134			
LCS Dup (3091102-BSD1)				Prepared &	Analyzed:	11-Sep-23				
Benzene	1.85	0.050	mg/kg	2.00		92.5	82.8-130	5.18	15.8	
Taluana	2.24	0.050	ma/lra	2.00		112	06 120	1.00	15.0	

Surrogate: 4-Bromofluorobenzene (PID)	0.0560		mg/kg	0.0500	112	71.5-134			
Total Xylenes	6.83	0.150	mg/kg	6.00	114	88.2-128	0.777	16.3	
o-Xylene	2.28	0.050	mg/kg	2.00	114	86.1-125	1.40	16.7	
m,p-Xylene	4.56	0.100	mg/kg	4.00	114	89-129	0.466	16.2	
Ethylbenzene	2.29	0.050	mg/kg	2.00	114	85.9-128	0.0631	16	
Toluene	2.24	0.050	mg/kg	2.00	112	86-128	1.00	15.9	
Benzene	1.65	0.050	mg/kg	2.00	92.3	62.6-150	5.18	13.8	

Batch 3091103 - Volatiles

Blank (3091103-BLK1)			Prepared: 11-Sep-23 Analyzed: 12-Sep-23
Benzene	ND	0.050	mg/kg
Toluene	ND	0.050	mg/kg
Ethylbenzene	ND	0.050	mg/kg
Total Xylenes	ND	0.150	mg/kg

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: MCA 301 Project Number: 03D2057076 Project Manager: AIMEE COLE Fax To:							Reported: 13-Sep-23 16:39			
Vo	atile Organic (-	•	A Method 8(boratories	021 - Qu	ality Co	ntrol				
		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	
Batch 3091103 - Volatiles											
Blank (3091103-BLK1)				Prepared: 11	1-Sep-23 A	nalvzed: 1	2-Sep-23				
Total BTEX	ND	0.300	mg/kg	1	1	,	1				
Surrogate: 4-Bromofluorobenzene (PID)	0.0563		mg/kg	0.0500		113	71.5-134				
LCS (3091103-BS1)				Prepared: 11	1-Sep-23 A	nalvzed: 1	2-Sep-23				
Benzene	1.99	0.050	mg/kg	2.00	1	99.6	82.8-130				
Toluene	1.96	0.050	mg/kg	2.00		98.0	86-128				
Ethylbenzene	2.09	0.050	mg/kg	2.00		105	85.9-128				
m,p-Xylene	4.19	0.100	mg/kg	4.00		105	89-129				
o-Xylene	2.07	0.050	mg/kg	2.00		103	86.1-125				
Total Xylenes	6.25	0.150	mg/kg	6.00		104	88.2-128				
Surrogate: 4-Bromofluorobenzene (PID)	0.0528		mg/kg	0.0500		106	71.5-134				
LCS Dup (3091103-BSD1)				Prepared: 11	1-Sep-23 A	.nalyzed: 1	2-Sep-23				
Benzene	1.98	0.050	mg/kg	2.00		98.8	82.8-130	0.807	15.8		
Toluene	1.95	0.050	mg/kg	2.00		97.3	86-128	0.707	15.9		
Ethylbenzene	2.09	0.050	mg/kg	2.00		104	85.9-128	0.0733	16		
m,p-Xylene	4.18	0.100	mg/kg	4.00		105	89-129	0.0187	16.2		
o-Xylene	2.08	0.050	mg/kg	2.00		104	86.1-125	0.619	16.7		
Total Xylenes	6.27	0.150	mg/kg	6.00		104	88.2-128	0.193	16.3		
Surrogate: 4-Bromofluorobenzene (PID)	0.0531		mg/kg	0.0500		106	71.5-134				
Batch 3091113 - Volatiles											
Blank (3091113-BLK1)				Prepared: 1	1-Sep-23 A	nalyzed: 1	2-Sep-23				
Benzene	ND	0.050	mg/kg								
Toluene	ND	0.050	mg/kg								
Ethylbenzene	ND	0.050	mg/kg								
Total Xylenes	ND	0.150	mg/kg								
Total BTEX	ND	0.300	mg/kg								
Surrogate: 4-Bromofluorobenzene (PID)	0.0518		mg/kg	0.0500		104	71.5-134				

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: Project Number: Project Manager: Fax To:		Reported: 13-Sep-23 16:39
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Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 3091113 - Volatiles										
LCS (3091113-BS1)				Prepared &	Analyzed:	11-Sep-23				
Benzene	2.05	0.050	mg/kg	2.00		102	82.8-130			
Toluene	2.09	0.050	mg/kg	2.00		105	86-128			
Ethylbenzene	2.04	0.050	mg/kg	2.00		102	85.9-128			
m,p-Xylene	4.15	0.100	mg/kg	4.00		104	89-129			
o-Xylene	1.95	0.050	mg/kg	2.00		97.7	86.1-125			
Total Xylenes	6.10	0.150	mg/kg	6.00		102	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	0.0504		mg/kg	0.0500		101	71.5-134			
LCS Dup (3091113-BSD1)				Prepared: 1	1-Sep-23 A	nalyzed: 1	2-Sep-23			
Benzene	2.07	0.050	mg/kg	2.00		103	82.8-130	0.925	15.8	
Toluene	2.09	0.050	mg/kg	2.00		104	86-128	0.262	15.9	
Ethylbenzene	2.07	0.050	mg/kg	2.00		103	85.9-128	1.17	16	
m,p-Xylene	4.20	0.100	mg/kg	4.00		105	89-129	1.21	16.2	
o-Xylene	2.02	0.050	mg/kg	2.00		101	86.1-125	3.44	16.7	
Total Xylenes	6.22	0.150	mg/kg	6.00		104	88.2-128	1.93	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	0.0500		mg/kg	0.0500		100	71.5-134			

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: MCA 301 Project Number: 03D2057076 Project Manager: AIMEE COLE Fax To:							Reported: 13-Sep-23 16:39				
	Petroleum	•	•	GC FID - Q oratories	uality C	ontrol						
					6		N/DEC		DDD			
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes		
Batch 3090902 - General Prep - Organic	28											
Blank (3090902-BLK1)				Prepared: 0	9-Sep-23 A	nalyzed: 1	1-Sep-23					
GRO C6-C10	ND	10.0	mg/kg	*	*	•	*					
DRO >C10-C28	ND	10.0	mg/kg									
EXT DRO >C28-C36	ND	10.0	mg/kg									
Surrogate: 1-Chlorooctane	52.6		mg/kg	50.0		105	48.2-134					
Surrogate: 1-Chlorooctadecane	61.1		mg/kg	50.0		122	49.1-148					
LCS (3090902-BS1)				Prepared: 0	9-Sep-23 A	nalyzed: 1	1-Sep-23					
GRO C6-C10	195	10.0	mg/kg	200		97.5	66.4-123					
DRO >C10-C28	223	10.0	mg/kg	200		112	66.5-118					
Total TPH C6-C28	418	10.0	mg/kg	400		104	77.6-123					
Surrogate: 1-Chlorooctane	56.0		mg/kg	50.0		112	48.2-134					
Surrogate: 1-Chlorooctadecane	61.9		mg/kg	50.0		124	49.1-148					
LCS Dup (3090902-BSD1)				Prepared: 0	9-Sep-23 A	nalyzed: 1	1-Sep-23					
GRO C6-C10	197	10.0	mg/kg	200		98.7	66.4-123	1.24	17.7			
DRO >C10-C28	222	10.0	mg/kg	200		111	66.5-118	0.692	21			
Total TPH C6-C28	419	10.0	mg/kg	400		105	77.6-123	0.214	18.5			
Surrogate: 1-Chlorooctane	55.7		mg/kg	50.0		111	48.2-134					
Surrogate: 1-Chlorooctadecane	61.2		mg/kg	50.0		122	49.1-148					
Batch 3090903 - General Prep - Organic	28											
Blank (3090903-BLK1)				Prepared: 0	9-Sep-23 A	nalyzed: 1	1-Sep-23					
GRO C6-C10	ND	10.0	mg/kg									
DRO >C10-C28	ND	10.0	mg/kg									
EXT DRO >C28-C36	ND	10.0	mg/kg									
Surrogate: 1-Chlorooctane	48.5		mg/kg	50.0		96.9	48.2-134					
Surrogate: 1-Chlorooctadecane	52.2		mg/kg	50.0		104	49.1-148					

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220		Project Nu Project Ma	umber:	MCA 301 03D2057076 AIMEE COLE					Reported: Sep-23 10	5:39
	Petroleum	•	•	GC FID - Q ooratories	uality C	ontrol				
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 3090903 - General Prep - Organics	l									
LCS (3090903-BS1)				Prepared: 09	9-Sep-23 A	nalvzed: 1	1-Sep-23			
GRO C6-C10	205	10.0	mg/kg	200	1 -	102	66.4-123			
DRO >C10-C28	206	10.0	mg/kg	200		103	66.5-118			
Total TPH C6-C28	410	10.0	mg/kg	400		103	77.6-123			
Surrogate: 1-Chlorooctane	52.4		mg/kg	50.0		105	48.2-134			
Surrogate: 1-Chlorooctadecane	57.6		mg/kg	50.0		115	49.1-148			
LCS Dup (3090903-BSD1)				Prepared: 09	9-Sep-23 A	nalyzed: 1	1-Sep-23			
GRO C6-C10	208	10.0	mg/kg	200		104	66.4-123	1.72	17.7	
DRO >C10-C28	214	10.0	mg/kg	200		107	66.5-118	3.69	21	
Fotal TPH C6-C28	422	10.0	mg/kg	400		105	77.6-123	2.71	18.5	
Surrogate: 1-Chlorooctane	52.1		mg/kg	50.0		104	48.2-134			
Surrogate: 1-Chlorooctadecane	58.2		mg/kg	50.0		116	49.1-148			
Batch 3090904 - General Prep - Organics	l									
Blank (3090904-BLK1)				Prepared: 09	9-Sep-23 A	nalyzed: 1	1-Sep-23			
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	44.7		mg/kg	50.0		<i>89.3</i>	48.2-134			
Surrogate: 1-Chlorooctadecane	46.7		mg/kg	50.0		93.5	49.1-148			
LCS (3090904-BS1)				Prepared: 09	9-Sep-23 A	nalyzed: 1	1-Sep-23			
GRO C6-C10	200	10.0	mg/kg	200		100	66.4-123			
DRO >C10-C28	217	10.0	mg/kg	200		109	66.5-118			
Total TPH C6-C28	417	10.0	mg/kg	400		104	77.6-123			
Surrogate: 1-Chlorooctane	46.1		mg/kg	50.0		92.1	48.2-134			
Surrogate: 1-Chlorooctadecane	48.0		mg/kg	50.0		95.9	49.1-148			

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: MC Project Number: 03 Project Manager: AII Fax To:	D2057076	Reported: 13-Sep-23 16:39
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Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3090904 - General Prep - Organics										
LCS Dup (3090904-BSD1)				Prepared: ()9-Sep-23 A	nalyzed: 1	1-Sep-23			
GRO C6-C10	196	10.0	mg/kg	200		98.1	66.4-123	1.86	17.7	
DRO >C10-C28	205	10.0	mg/kg	200		103	66.5-118	5.55	21	
Total TPH C6-C28	402	10.0	mg/kg	400		100	77.6-123	3.76	18.5	
Surrogate: 1-Chlorooctane	48.5		mg/kg	50.0		96.9	48.2-134			
Surrogate: 1-Chlorooctadecane	49.9		mg/kg	50.0		99.9	49.1-148			

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

OTHER: Address: City: State: X ICE / COOL OTHER: X ICE / COOL ICE / COOL	Address: 3122 Nathorul Parks Hay City: Carls bud state: MM zip: 88220 Phone #: 720-364-7365 Fax #: Project Wame: MCA 301 Project Location: 32.86370, -103.76860 Sampler Name: Rohn, Hugs For use use owny Rohn, Hugs For use use owny Sample I.D. Lab I.D. Sample I.D. 1 TS18 Q4' X GIRAB OR (C)OMP. A TS18 Q4' X GIRAB OR (C) # CONTAINERS Soil GROUNDWATER VASTEWATER Soil SLUDGE
BILL TO ANALYSIS REQUEST	Company Name: Ensblurn LLC Project Manager: N.C.
CHAIN-OF CUSTODY AND ANALYSIS REQUEST	101 East Marland, Hobbs, NM 88240

Released to Imaging: 2/13/2024 2:26:32 PM

Received by OCD: 10/23/2023 11:35:44 AM

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ne) Observed Temp. °C Other: Corrected Temp. °C	Date: Time:	Time: 15, 6	Date: A	ages. Cardinal's liability and client's exclusive remedy for e for negligence and any other cause whatsoever shall be be liable for incidental or consequental damages include	FS17 @41	1221 0 4	-	FS13@4	FSIZ Q41	TS= Qui	PSIO @ 4	1500 @ Y	TINA DEL	Sample I.D.	(Konni Huges	2,803.70,-103.		384-7365 Project Owner:	0/ 20	State: N/	Sational Parks Huvy	Himpe Cole	cryolum LLC	101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476	Doratories
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Page 36 of 37

Relinquished By: Delivered By: (Circle One) Sampler - UPS - Bus - Other:	PZUS PZUS PZUS RCA RCA Ro Damages. Car Inter late for neglet	101 East Marlance (575) 393-2326 Company Name: June Device Manager	Labor
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Received by OCD: 10/23/2023 11:35:44 AM

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September 14, 2023

AIMEE COLE ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD, NM 88220

RE: MCA 301

Enclosed are the results of analyses for samples received by the laboratory on 09/12/23 11:33.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/12/2023		Sampling Date:	09/12/2023
Reported:	09/14/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.803	370-103.76860)		

Sample ID: FS 25 @ 4' (H234918-01)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	09/12/2023	ND	1.91	95.6	2.00	2.45	
Toluene*	<0.050	0.050	09/12/2023	ND	1.96	98.1	2.00	1.70	
Ethylbenzene*	<0.050	0.050	09/12/2023	ND	1.99	99.3	2.00	2.88	
Total Xylenes*	<0.150	0.150	09/12/2023	ND	5.86	97.7	6.00	2.99	
Total BTEX	<0.300	0.300	09/12/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	115 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1680	16.0	09/13/2023	ND	432	108	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/12/2023	ND	191	95.5	200	3.61	
DRO >C10-C28*	<10.0	10.0	09/12/2023	ND	202	101	200	1.82	
EXT DRO >C28-C36	<10.0	10.0	09/12/2023	ND					
Surrogate: 1-Chlorooctane	102 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	107 9	% 49.1-14	0						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



MAVERICK (32.80370-103.76860)

		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/12/2023		Sampling Date:	09/12/2023
Reported:	09/14/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Tamara Oldaker

Sample ID: FS 26 @ 4' (H234918-02)

Project Location:

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/12/2023	ND	1.91	95.6	2.00	2.45	
Toluene*	<0.050	0.050	09/12/2023	ND	1.96	98.1	2.00	1.70	
Ethylbenzene*	<0.050	0.050	09/12/2023	ND	1.99	99.3	2.00	2.88	
Total Xylenes*	<0.150	0.150	09/12/2023	ND	5.86	97.7	6.00	2.99	
Total BTEX	<0.300	0.300	09/12/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	117 9	% 71.5-13	24						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2040	16.0	09/13/2023	ND	432	108	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/12/2023	ND	191	95.5	200	3.61	
DRO >C10-C28*	<10.0	10.0	09/12/2023	ND	202	101	200	1.82	
EXT DRO >C28-C36	<10.0	10.0	09/12/2023	ND					
Surrogate: 1-Chlorooctane	80.1	% 48.2-13	24						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:		
Received:	09/12/2023		Sampling Date:	09/12/2023
Reported:	09/14/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.8037	70-103.76860)		

Sample ID: FS 27 @ 4' (H234918-03)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/12/2023	ND	1.91	95.6	2.00	2.45	
Toluene*	<0.050	0.050	09/12/2023	ND	1.96	98.1	2.00	1.70	
Ethylbenzene*	<0.050	0.050	09/12/2023	ND	1.99	99.3	2.00	2.88	
Total Xylenes*	<0.150	0.150	09/12/2023	ND	5.86	97.7	6.00	2.99	
Total BTEX	<0.300	0.300	09/12/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	110	% 71.5-13	4						
Chloride, SM4500Cl-B	mg	/kg	Analyze	Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1740	16.0	09/13/2023	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/12/2023	ND	191	95.5	200	3.61	
DRO >C10-C28*	<10.0	10.0	09/12/2023	ND	202	101	200	1.82	
EXT DRO >C28-C36	<10.0	10.0	09/12/2023	ND					
Surrogate: 1-Chlorooctane	82.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	86.7	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



MAVERICK (32.80370-103.76860)

		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/12/2023		Sampling Date:	09/12/2023
Reported:	09/14/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Tamara Oldaker

Sample ID: FS 28 @ 4' (H234918-04)

Project Location:

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/12/2023	ND	1.91	95.6	2.00	2.45	
Toluene*	<0.050	0.050	09/12/2023	ND	1.96	98.1	2.00	1.70	
Ethylbenzene*	<0.050	0.050	09/12/2023	ND	1.99	99.3	2.00	2.88	
Total Xylenes*	<0.150	0.150	09/12/2023	ND	5.86	97.7	6.00	2.99	
Total BTEX	<0.300	0.300	09/12/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	116 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9120	16.0	09/13/2023	ND	432	108	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/12/2023	ND	191	95.5	200	3.61	
DRO >C10-C28*	<10.0	10.0	09/12/2023	ND	202	101	200	1.82	
EXT DRO >C28-C36	<10.0	10.0	09/12/2023	ND					
Surrogate: 1-Chlorooctane	80.7	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	83.0	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	AIME 3122	OLUM EE COLE 2 NATIONAL PARKS HWY LSBAD NM, 88220 To:		
Received:	09/12/2023		Sampling Date:	09/12/2023
Reported:	09/14/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number: Project Location:	03D2057076 MAVERICK (32.80370-103	3.76860)	Sample Received By:	Tamara Oldaker

Sample ID: SW 14 @ 0-4' (H234918-05)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/12/2023	ND	1.91	95.6	2.00	2.45	
Toluene*	<0.050	0.050	09/12/2023	ND	1.96	98.1	2.00	1.70	
Ethylbenzene*	<0.050	0.050	09/12/2023	ND	1.99	99.3	2.00	2.88	
Total Xylenes*	<0.150	0.150	09/12/2023	ND	5.86	97.7	6.00	2.99	
Total BTEX	<0.300	0.300	09/12/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	115 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	09/13/2023	ND	432	108	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/12/2023	ND	191	95.5	200	3.61	
DRO >C10-C28*	<10.0	10.0	09/12/2023	ND	202	101	200	1.82	
EXT DRO >C28-C36	<10.0	10.0	09/12/2023	ND					
Surrogate: 1-Chlorooctane	81.5	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	83.2	% 49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



MAVERICK (32.80370-103.76860)

		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/12/2023		Sampling Date:	09/12/2023
Reported:	09/14/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Tamara Oldaker

Sample ID: SW 15 @ 0-4' (H234918-06)

Project Location:

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/12/2023	ND	1.91	95.6	2.00	2.45	
Toluene*	<0.050	0.050	09/12/2023	ND	1.96	98.1	2.00	1.70	
Ethylbenzene*	<0.050	0.050	09/12/2023	ND	1.99	99.3	2.00	2.88	
Total Xylenes*	<0.150	0.150	09/12/2023	ND	5.86	97.7	6.00	2.99	
Total BTEX	<0.300	0.300	09/12/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	114 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	09/13/2023	ND	432	108	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/12/2023	ND	191	95.5	200	3.61	
DRO >C10-C28*	<10.0	10.0	09/12/2023	ND	202	101	200	1.82	
EXT DRO >C28-C36	<10.0	10.0	09/12/2023	ND					
Surrogate: 1-Chlorooctane	85.1	% 48.2-13	4						

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Celey D. Keene, Lab Director/Quality Manager



	AIM 312 CAF	SOLUM IEE COLE 22 NATIONAL PARKS HWY RLSBAD NM, 88220 4 To:		
Received:	09/12/2023		Sampling Date:	09/12/2023
Reported:	09/14/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.80370-10	03.76860)		

Sample ID: SW 16 @ 0-4' (H234918-07)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/12/2023	ND	1.91	95.6	2.00	2.45	
Toluene*	<0.050	0.050	09/12/2023	ND	1.96	98.1	2.00	1.70	
Ethylbenzene*	<0.050	0.050	09/12/2023	ND	1.99	99.3	2.00	2.88	
Total Xylenes*	<0.150	0.150	09/12/2023	ND	5.86	97.7	6.00	2.99	
Total BTEX	<0.300	0.300	09/12/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	113 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	09/13/2023	ND	416	104	400	3.77	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/12/2023	ND	191	95.5	200	3.61	
DRO >C10-C28*	<10.0	10.0	09/12/2023	ND	202	101	200	1.82	
EXT DRO >C28-C36	<10.0	10.0	09/12/2023	ND					
Surrogate: 1-Chlorooctane	83.3	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	84.7	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



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

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager

ampler - UPS - Bus - Other: C	elinquished By:	EASE NOTE: Liability and Damages. Cardinat's liability and alives. All claims including those for negligence and any oth roles. In no event shall cardinal be liable for incidental or cor liates or successors arising out of or related to the performan elinnuished By:	Address: 3122 National City: Call Shad Phone #: 700-384-7365 p Project Name: MCP 301 Project Name: MCP 301 Project Location: 32, 80370 - Sampler Name: MCP 301 Foruseuseowr Sample I.D. Lab I.D. Sample I.D. H2 34918 FS 25 @ 1 FS 25 @ 2 FS 25 @ 3 FS 25 @ 4 FS 25 @ 5 Swill @ 4 FS 25 @ 5 Swill @	101 East Marlanc (575) 393-2326 Company Name: Schum Project Manager: Almoce
Observed Temp. °C 47.3 Corrected Temp. °C		client's exclusive remody for a er cause whatsoever shall be rsequential damages, including toe of services hereunder 1, 0 Date; 7, 7, 7, 7	State: NM Zig ax #: D-4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -	101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476 Brochum ULC
Sample Condition Cool Inflact Type Types	Received By:	g whether based in contract or tort, ed unives made in writing and receiv- tion, business interruptions, loss of r diffess of whether such claim is base red By:	GROUNDWATER WASTEWATER Soil OIL SLUDGE	
CHECKED BY: Tu (Initials) The Co	R R	by Cardinal within 30 days effer or loss of profils incurred by cl oon any of the above siated rea	A ICE / COOL OTHER :	BILL TO
Turnaround Time: Thermometer ID #140 Correction Factor 0°C	C B	a client for the pletion of the applical to subsidiaries, or otherwise. bal Result-	TE TIME TIME AMPLING	
Standard 🔛 Rush	Biled. Please provide Email address:		< X CI-	-
Bacteria (only) Sample Condition Cool Intact Observed Temp. °C	"Hadress: "Hadress: "Halconata @ ensolwy			ANALYSIS REQUEST



September 20, 2023

AIMEE COLE ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD, NM 88220

RE: MCA 301

Enclosed are the results of analyses for samples received by the laboratory on 09/15/23 14:32.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Received:	09/15/2023	Sampling Date:	09/14/2023
Reported:	09/20/2023	Sampling Type:	Soil
Project Name:	MCA 301	Sampling Condition:	Cool & Intact
Project Number:	03D2057076	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK (32.80370-103.768	50)	

Sample ID: FS 11 A @ 4.5' (H235009-01)

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	09/18/2023	ND	1.85	92.4	2.00	1.08	
Toluene*	<0.050	0.050	09/18/2023	ND	1.91	95.6	2.00	1.80	
Ethylbenzene*	<0.050	0.050	09/18/2023	ND	1.92	96.2	2.00	0.837	
Total Xylenes*	<0.150	0.150	09/18/2023	ND	5.84	97.4	6.00	0.854	
Total BTEX	<0.300	0.300	09/18/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	115 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5600	16.0	09/18/2023	ND	400	100	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
GRO C6-C10*	<10.0	10.0	09/18/2023	ND	192	95.8	200	1.67	
DRO >C10-C28*	<10.0	10.0	09/18/2023	ND	204	102	200	5.36	
EXT DRO >C28-C36	<10.0	10.0	09/18/2023	ND					
Surrogate: 1-Chlorooctane	91.5	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	95.1	% 49.1-14	0						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	A 3 0	ENSOLUM AIMEE COLE 8122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/15/2023		Sampling Date:	09/14/2023
Reported:	09/20/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK (32.80370-	-103.76860)		

Sample ID: FS 17 A @ 4.5' (H235009-02)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2023	ND	1.85	92.4	2.00	1.08	
Toluene*	<0.050	0.050	09/18/2023	ND	1.91	95.6	2.00	1.80	
Ethylbenzene*	<0.050	0.050	09/18/2023	ND	1.92	96.2	2.00	0.837	
Total Xylenes*	<0.150	0.150	09/18/2023	ND	5.84	97.4	6.00	0.854	
Total BTEX	<0.300	0.300	09/18/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	115 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3120	16.0	09/18/2023	ND	400	100	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/18/2023	ND	192	95.8	200	1.67	
DRO >C10-C28*	<10.0	10.0	09/18/2023	ND	204	102	200	5.36	
EXT DRO >C28-C36	<10.0	10.0	09/18/2023	ND					
Surrogate: 1-Chlorooctane	83.2	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	89.9	% 49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:		
Received:	09/15/2023		Sampling Date:	09/14/2023
Reported:	09/20/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK (32.80370	-103.76860)		

Sample ID: FS 29 @ 4' (H235009-03)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2023	ND	1.85	92.4	2.00	1.08	
Toluene*	<0.050	0.050	09/18/2023	ND	1.91	95.6	2.00	1.80	
Ethylbenzene*	<0.050	0.050	09/18/2023	ND	1.92	96.2	2.00	0.837	
Total Xylenes*	<0.150	0.150	09/18/2023	ND	5.84	97.4	6.00	0.854	
Total BTEX	<0.300	0.300	09/18/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	114 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	09/18/2023	ND	400	100	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/18/2023	ND	192	95.8	200	1.67	
DRO >C10-C28*	<10.0	10.0	09/18/2023	ND	204	102	200	5.36	
EXT DRO >C28-C36	<10.0	10.0	09/18/2023	ND					
Surrogate: 1-Chlorooctane	70.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	73.5	% 49.1-14	0						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:		
Received:	09/15/2023		Sampling Date:	09/14/2023
Reported:	09/20/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK (32.80370	0-103.76860)		

Sample ID: FS 30 @ 4' (H235009-04)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2023	ND	1.85	92.4	2.00	1.08	
Toluene*	<0.050	0.050	09/18/2023	ND	1.91	95.6	2.00	1.80	
Ethylbenzene*	<0.050	0.050	09/18/2023	ND	1.92	96.2	2.00	0.837	
Total Xylenes*	<0.150	0.150	09/18/2023	ND	5.84	97.4	6.00	0.854	
Total BTEX	<0.300	0.300	09/18/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	118 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	09/18/2023	ND	400	100	400	3.92	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/18/2023	ND	192	95.8	200	1.67	
DRO >C10-C28*	<10.0	10.0	09/18/2023	ND	204	102	200	5.36	
EXT DRO >C28-C36	<10.0	10.0	09/18/2023	ND					
Surrogate: 1-Chlorooctane	88.5	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	94.1	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:		
Received:	09/15/2023		Sampling Date:	09/14/2023
Reported:	09/20/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK (32.8037	70-103.76860)		

Sample ID: FS 31 @ 4' (H235009-05)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2023	ND	1.85	92.4	2.00	1.08	
Toluene*	<0.050	0.050	09/18/2023	ND	1.91	95.6	2.00	1.80	
Ethylbenzene*	<0.050	0.050	09/18/2023	ND	1.92	96.2	2.00	0.837	
Total Xylenes*	<0.150	0.150	09/18/2023	ND	5.84	97.4	6.00	0.854	
Total BTEX	<0.300	0.300	09/18/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	118 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	656	16.0	09/18/2023	ND	400	100	400	3.92	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/18/2023	ND	192	95.8	200	1.67	
DRO >C10-C28*	<10.0	10.0	09/18/2023	ND	204	102	200	5.36	
EXT DRO >C28-C36	<10.0	10.0	09/18/2023	ND					
Surrogate: 1-Chlorooctane	87.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	91.2	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:		
Received:	09/15/2023		Sampling Date:	09/14/2023
Reported:	09/20/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK (32.8032	70-103.76860)		

Sample ID: FS 32 @ 4' (H235009-06)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2023	ND	1.85	92.4	2.00	1.08	
Toluene*	<0.050	0.050	09/18/2023	ND	1.91	95.6	2.00	1.80	
Ethylbenzene*	<0.050	0.050	09/18/2023	ND	1.92	96.2	2.00	0.837	
Total Xylenes*	<0.150	0.150	09/18/2023	ND	5.84	97.4	6.00	0.854	
Total BTEX	<0.300	0.300	09/18/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	115 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	592	16.0	09/18/2023	ND	400	100	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/18/2023	ND	192	95.8	200	1.67	
DRO >C10-C28*	<10.0	10.0	09/18/2023	ND	204	102	200	5.36	
EXT DRO >C28-C36	<10.0	10.0	09/18/2023	ND					
Surrogate: 1-Chlorooctane	88.9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	93.3	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



MAVERICK (32.80370-103.76860)

		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	AIMEE COLE 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220					
Received:	09/15/2023		Sampling Date:	09/14/2023				
Reported:	09/20/2023		Sampling Type:	Soil				
Project Name:	MCA 301		Sampling Condition:	Cool & Intact				
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos				

Sample ID: FS 33 @ 4' (H235009-07)

Project Location:

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2023	ND	1.85	92.4	2.00	1.08	
Toluene*	<0.050	0.050	09/18/2023	ND	1.91	95.6	2.00	1.80	
Ethylbenzene*	<0.050	0.050	09/18/2023	ND	1.92	96.2	2.00	0.837	
Total Xylenes*	<0.150	0.150	09/18/2023	ND	5.84	97.4	6.00	0.854	
Total BTEX	<0.300	0.300	09/18/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	116 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	672	16.0	09/18/2023	ND	416	104	400	3.77	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/18/2023	ND	192	95.8	200	1.67	
DRO >C10-C28*	<10.0	10.0	09/18/2023	ND	204	102	200	5.36	
EXT DRO >C28-C36	<10.0	10.0	09/18/2023	ND					
Surrogate: 1-Chlorooctane	88.4	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	93.5	% 49.1-14	8						

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*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	A 3 C	NSOLUM IMEE COLE 122 NATIONAL PARKS HWY ARLSBAD NM, 88220 ax To:		
Received:	09/15/2023		Sampling Date:	09/14/2023
Reported:	09/20/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK (32.80370-	103.76860)		

Sample ID: FS 34 @ 4' (H235009-08)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2023	ND	1.94	97.2	2.00	1.00	
Toluene*	<0.050	0.050	09/18/2023	ND	2.00	99.9	2.00	1.83	
Ethylbenzene*	<0.050	0.050	09/18/2023	ND	1.93	96.5	2.00	0.549	
Total Xylenes*	<0.150	0.150	09/18/2023	ND	5.80	96.7	6.00	1.40	
Total BTEX	<0.300	0.300	09/18/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	109 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	09/18/2023	ND	416	104	400	3.77	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/18/2023	ND	192	95.8	200	1.67	
DRO >C10-C28*	<10.0	10.0	09/18/2023	ND	204	102	200	5.36	
EXT DRO >C28-C36	<10.0	10.0	09/18/2023	ND					
Surrogate: 1-Chlorooctane	93.3	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	<i>99.3</i>	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	4 3 0	ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:		
Received:	09/15/2023		Sampling Date:	09/14/2023
Reported:	09/20/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK (32.80370	-103.76860)		

Sample ID: FS 35 @ 4' (H235009-09)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2023	ND	1.94	97.2	2.00	1.00	
Toluene*	<0.050	0.050	09/18/2023	ND	2.00	99.9	2.00	1.83	
Ethylbenzene*	<0.050	0.050	09/18/2023	ND	1.93	96.5	2.00	0.549	
Total Xylenes*	<0.150	0.150	09/18/2023	ND	5.80	96.7	6.00	1.40	
Total BTEX	<0.300	0.300	09/18/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	108 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	09/18/2023	ND	416	104	400	3.77	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/18/2023	ND	192	95.8	200	1.67	
DRO >C10-C28*	<10.0	10.0	09/18/2023	ND	204	102	200	5.36	
EXT DRO >C28-C36	<10.0	10.0	09/18/2023	ND					
Surrogate: 1-Chlorooctane	89.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	94.0	% 49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



MCA 301

03D2057076

MAVERICK (32.80370-103.76860)

Sampling Condition:

Sample Received By:

09/14/2023

Cool & Intact

Dionica Hinojos

Soil

Analytical Results For:

	ENSOLUM	
	AIMEE COLE	
	3122 NATIONAL PARKS HWY	(
	CARLSBAD NM, 88220	
	Fax To:	
09/15/2023		Sampling Date:
09/20/2023		Sampling Type:

Sample	TD:	FS 36	0	4' (H235009-10)	

Received:

Reported:

Project Name:

Project Number:

Project Location:

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	09/18/2023	ND	1.94	97.2	2.00	1.00	
Toluene*	<0.050	0.050	09/18/2023	ND	2.00	99.9	2.00	1.83	
Ethylbenzene*	<0.050	0.050	09/18/2023	ND	1.93	96.5	2.00	0.549	
Total Xylenes*	<0.150	0.150	09/18/2023	ND	5.80	96.7	6.00	1.40	
Total BTEX	<0.300	0.300	09/18/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	110 %	6 71.5-13	4						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	09/18/2023	ND	416	104	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/18/2023	ND	192	95.8	200	1.67	
DRO >C10-C28*	<10.0	10.0	09/18/2023	ND	204	102	200	5.36	
EXT DRO >C28-C36	<10.0	10.0	09/18/2023	ND					
Surrogate: 1-Chlorooctane	87.5 9	48.2-13	4						
		% 49.1-14							

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



MAVERICK (32.80370-103.76860)

		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/15/2023		Sampling Date:	09/14/2023
Reported:	09/20/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos

Sample ID: SS 01 @ 0.5' (H235009-11)

Project Location:

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2023	ND	1.94	97.2	2.00	1.00	
Toluene*	<0.050	0.050	09/18/2023	ND	2.00	99.9	2.00	1.83	
Ethylbenzene*	<0.050	0.050	09/18/2023	ND	1.93	96.5	2.00	0.549	
Total Xylenes*	<0.150	0.150	09/18/2023	ND	5.80	96.7	6.00	1.40	
Total BTEX	<0.300	0.300	09/18/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	108	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/18/2023	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/18/2023	ND	192	95.8	200	1.67	
DRO >C10-C28*	<10.0	10.0	09/18/2023	ND	204	102	200	5.36	
EXT DRO >C28-C36	<10.0	10.0	09/18/2023	ND					
Surrogate: 1-Chlorooctane	68.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	72.8	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



MAVERICK (32.80370-103.76860)

		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/15/2023		Sampling Date:	09/14/2023
Reported:	09/20/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Dionica Hinojos

Sample ID: SS 02 @ 0.5' (H235009-12)

Project Location:

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2023	ND	1.94	97.2	2.00	1.00	
Toluene*	<0.050	0.050	09/18/2023	ND	2.00	99.9	2.00	1.83	
Ethylbenzene*	<0.050	0.050	09/18/2023	ND	1.93	96.5	2.00	0.549	
Total Xylenes*	<0.150	0.150	09/18/2023	ND	5.80	96.7	6.00	1.40	
Total BTEX	<0.300	0.300	09/18/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	106 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/18/2023	ND	416	104	400	3.77	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/18/2023	ND	192	95.8	200	1.67	
DRO >C10-C28*	<10.0	10.0	09/18/2023	ND	204	102	200	5.36	
EXT DRO >C28-C36	<10.0	10.0	09/18/2023	ND					
Surrogate: 1-Chlorooctane	90.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	93.7	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



03D2057076

MAVERICK (32.80370-103.76860)

Dionica Hinojos

Sample Received By:

Analytical Results For:

		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/15/2023		Sampling Date:	09/14/2023
Reported:	09/20/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact

Sample ID: SS 03 @ 0.5' (H235009-13)

Project Number:

Project Location:

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	09/18/2023	ND	1.94	97.2	2.00	1.00	
Toluene*	<0.050	0.050	09/18/2023	ND	2.00	99.9	2.00	1.83	
Ethylbenzene*	<0.050	0.050	09/18/2023	ND	1.93	96.5	2.00	0.549	
Total Xylenes*	<0.150	0.150	09/18/2023	ND	5.80	96.7	6.00	1.40	
Total BTEX	<0.300	0.300	09/18/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	107 5	% 71.5-13	4						
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	09/18/2023	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	09/18/2023	ND	192	95.8	200	1.67	
DRO >C10-C28*	<10.0	10.0	09/18/2023	ND	204	102	200	5.36	
EXT DRO >C28-C36	<10.0	10.0	09/18/2023	ND					
Surrogate: 1-Chlorooctane	91.4	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	96.1	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



03D2057076

MAVERICK (32.80370-103.76860)

Dionica Hinojos

Sample Received By:

Analytical Results For:

		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:						
	09/15/2023		Sampling Date:	09/14/2023				
	09/20/2023		Sampling Type:	Soil				
e:	MCA 301		Sampling Condition:	Cool & Intact				

Sample ID: SS 04 @ 0.5' (H235009-14)

Received:

Reported: Project Name

Project Number:

Project Location:

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2023	ND	1.94	97.2	2.00	1.00	
Toluene*	<0.050	0.050	09/18/2023	ND	2.00	99.9	2.00	1.83	
Ethylbenzene*	<0.050	0.050	09/18/2023	ND	1.93	96.5	2.00	0.549	
Total Xylenes*	<0.150	0.150	09/18/2023	ND	5.80	96.7	6.00	1.40	
Total BTEX	<0.300	0.300	09/18/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	108 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	544	16.0	09/18/2023	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	09/18/2023	ND	192	95.8	200	1.67	
DRO >C10-C28*	<10.0	10.0	09/18/2023	ND	204	102	200	5.36	
EXT DRO >C28-C36	<10.0	10.0	09/18/2023	ND					
Surrogate: 1-Chlorooctane	77.7 % 48.2-13		4						
Surrogate: 1-Chlorooctadecane	81.9	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager


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

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager

Delivered By: (Circle One) Observed Temp. °C Q.92 Sample Condition CHECKED BY: Sampler - UPS - Bus - Other: Corrected Temp. °C Cool Intact (Initials) FORM-000 R 3-4 0711123 Corrected Temp. °C No No NA	Received By: Date: Received By:	July Date: 9/16/23 Received By:	those for negligence and any other cause whatboever shall be dearned waived unless made in writing and reverse two, vanity erring to unity or the standard within final be liable for incidential or consequential damages, including without irritation, business interruptions, loss of use, or loss of profits out of or related to the performance of services beneunder to Craticnal, regardless of whether such claim is based upon any of the about the about the construction of the about t	8 F35 @4	75	F532 @	5 1531 84	FS29 @	FSITA QUSI	FSILA BUSICE # GV SO BLO A LO	UDGE THER : DID/BASE: E / COOL THER :	(C)OMP ERS ATER	MATRIX	Room Hunca	on: 32, 86370, -(1)3, 7, 4/0/ State:	Project Owner: MMM/W	Address	Carlsbud state: NHY Zip: 96720	rul Partus Huua com	Project Manager: A mee ale P.O. #	nd, Hobbs, NM 88240 6 FAX (575) 393-2476	Laboratories
BY: Turnaround Time: Standard Mail Becteria (only) Sample Condition Thermometer ID #140 RUSh Cool Infact Observed Temp. °C Correction Factor 0°C Image: Content of the sector of	REMARKS: Oensolum con; joh longith @ensolum com	Verbai Result: Dives Divoi Add'I Phone #: All Results are emailed. Piezeo provide Email address;	30 drays after completion of the applicable Insurred by client, its subsidiaries, van stated reasons or otherwise	1521	1520			151Z	1510 1			EX	SAMPLING					ce Cale		LA TO ANALYSIS REQUEST		CHAIN-OF CUSTODY AND ANALYSIS REQUEST

EASE NOTE: Liability and Damages, Curdinal's liability and client's sociuster samedy for any claim sizing whether based in nontread and the performance of any other cause whatebear shall be for any other cause whether based in nontread and the performance of any other cause whether shall be initiated by the client for any other cause whether shall be initiated and the performance of any other cause whether based in writing and received by Cardinal which a date for the approximate of any other cause whether based in writing and received by Cardinal which a date for the approximate of any other cause whether based in writing and received by Cardinal which a date for the approximate of any other cause whether based in writing and received by Cardinal which a subclaimate. Illiates or successors arising out of or related to the performance of services between derived. The approximate of the	Sample I.D. Study of Comp. State: NM zip: 36220 State: NM zip: 3	LOFIES Hobbs, NM 88240 AX (575) 393-2476
intract or fort, shell be limited to the amount paid by the client for the rg and received by Cardinal within the amount paid by the client for the lone, loss of use, or loss of profils incurred by client, its subsidiaries, adm is based upon any of the above slated reasons or otherwise. All Results an All Results and All Results and Al	ACID/BASE: ACID/BASE: ACID/BASE: PRESERV ACID/BASE: PRESERV OTHER: Q/IL/C3 ACID/BASE: ACID/BASE: DATE	BILL TO
All by the clear for the ter complication of the applicable clear, its subsidiaries, exercise of cherowise. Verbal Result: Verbal Result: Verbal Result: Provide Email address: All Results are emailed. Pisezes provide Email address: All Results are emailed. Pisezes provide Email address: All Result: Provide Finall address: All R	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	ANALYSIS REQUEST



October 02, 2023

AIMEE COLE

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: MCA 301

Enclosed are the results of analyses for samples received by the laboratory on 09/11/23 14:26.

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

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

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

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

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

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

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



11-Sep-23 11:05

11-Sep-23 12:15

11-Sep-23 14:26

11-Sep-23 14:26

Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220		Project: oject Number: oject Manager: Fax To:		Reported: 02-Oct-23 15:06
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PH 02 @ 5'	H234903-03	Soil	11-Sep-23 10:15	11-Sep-23 14:26
PH 02D @ 9'	H234903-04	Soil	11-Sep-23 11:00	11-Sep-23 14:26
PH 03A @ 6'	H234903-05	Soil	11-Sep-23 10:35	11-Sep-23 14:26

10/02/23 - Client requested removal of samples -01 and -02. This is the revised report and will replace the one sent on 09/14/23.

Soil

Soil

H234903-06

H234903-07

Cardinal Laboratories

PH 03C @ 8'

FS 24 @ 4'

*=Accredited Analyte

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project:MCA 301Reported:Project Number:03D205707602-Oct-23 15:06Project Manager:AIMEE COLEFax To:Fax To:									
				02 @ 5 903-03 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	1120		16.0	mg/kg	4	3091324	AC	13-Sep-23	4500-Cl-B	
Volatile Organic Compounds by 1	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			115 %	71.5	-134	3091205	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3091215	MS	12-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3091215	MS	12-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3091215	MS	12-Sep-23	8015B	
Surrogate: 1-Chlorooctane			95.8 %	48.2	-134	3091215	MS	12-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			106 %	49.1	-148	3091215	MS	12-Sep-23	8015B	

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project:MCA 301Reported:Project Number:03D205707602-Oct-23 15:06Project Manager:AIMEE COLEFax To:Fax To:									
)2D @ 9 903-04 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	32.0		16.0	mg/kg	4	3091324	AC	13-Sep-23	4500-Cl-B	
Volatile Organic Compounds by I	PA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			112 %	71.5	-134	3091205	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3091215	MS	12-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3091215	MS	12-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3091215	MS	12-Sep-23	8015B	
Surrogate: 1-Chlorooctane			106 %	48.2	-134	3091215	MS	12-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			116 %	49.1	-148	3091215	MS	12-Sep-23	8015B	

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project:MCA 301Reported:Project Number:03D205707602-Oct-23 15:06Project Manager:AIMEE COLEFax To:Fax To:									
				03A @ (003-05 (So						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	6400		16.0	mg/kg	4	3091324	AC	13-Sep-23	4500-Cl-B	
Volatile Organic Compounds by H	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			114 %	71.5	-134	3091205	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3091215	MS	12-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3091215	MS	12-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3091215	MS	12-Sep-23	8015B	
Surrogate: 1-Chlorooctane			100 %	48.2	-134	3091215	MS	12-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			112 %	49.1	-148	3091215	MS	12-Sep-23	8015B	

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: MCA 301 Reported: Project Number: 03D2057076 02-Oct-23 15:06 Project Manager: AIMEE COLE Fax To: PH 03C @ 8'									
				903-06 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
<u>Inorganic Compounds</u> Chloride	64.0		16.0	mg/kg	4	3091324	AC	13-Sep-23	4500-Cl-B	
Volatile Organic Compounds by I	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			113 %	71.5	-134	3091205	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3091215	MS	12-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3091215	MS	12-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3091215	MS	12-Sep-23	8015B	
Surrogate: 1-Chlorooctane			107 %	48.2	-134	3091215	MS	12-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			119 %	49.1	-148	3091215	MS	12-Sep-23	8015B	

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project:MCA 301Reported:Project Number:03D205707602-Oct-23 15:06Project Manager:AIMEE COLEFax To:Fax To:									
				24 @ 4 903-07 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
<u>Inorganic Compounds</u> Chloride	1220		16.0	mg/kg	4	3091324	AC	13-Sep-23	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3091205	JH/	12-Sep-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			114 %	71.5	-134	3091205	JH/	12-Sep-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3091215	MS	12-Sep-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3091215	MS	12-Sep-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3091215	MS	12-Sep-23	8015B	
Surrogate: 1-Chlorooctane			104 %	48.2	-134	3091215	MS	12-Sep-23	8015B	
Surrogate: 1-Chlorooctadecane			116 %	49.1	-148	3091215	MS	12-Sep-23	8015B	

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: MCA 301 Project Number: 03D2057076 Project Manager: AIMEE COLE Fax To:	Reported: 02-Oct-23 15:06
	Inorganic Compounds - Quality Control	

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3091324 - 1:4 DI Water										
Blank (3091324-BLK1)				Prepared &	Analyzed:	13-Sep-23				
Chloride	ND	16.0	mg/kg							
LCS (3091324-BS1)				Prepared &	Analyzed:	13-Sep-23				
Chloride	432	16.0	mg/kg	400		108	80-120			
LCS Dup (3091324-BSD1)				Prepared &	Analyzed:	13-Sep-23				
Chloride	432	16.0	mg/kg	400		108	80-120	0.00	20	

Cardinal Laboratories

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Fax To:	ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: MCA 301 Project Number: 03D2057076 Project Manager: AIMEE COLE Fax To:	Reported: 02-Oct-23 15:06
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Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 3091205 - Volatiles										
Blank (3091205-BLK1)				Prepared &	z Analyzed:	12-Sep-23				
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0566		mg/kg	0.0500		113	71.5-134			
LCS (3091205-BS1)				Prepared &	Analyzed:	12-Sep-23				
Benzene	1.92	0.050	mg/kg	2.00		96.2	82.8-130			
Toluene	1.92	0.050	mg/kg	2.00		96.2	86-128			
Ethylbenzene	2.04	0.050	mg/kg	2.00		102	85.9-128			
m,p-Xylene	4.09	0.100	mg/kg	4.00		102	89-129			
o-Xylene	2.02	0.050	mg/kg	2.00		101	86.1-125			
Total Xylenes	6.11	0.150	mg/kg	6.00		102	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	0.0527		mg/kg	0.0500		105	71.5-134			
LCS Dup (3091205-BSD1)				Prepared &	Analyzed:	12-Sep-23				
Benzene	1.91	0.050	mg/kg	2.00		95.7	82.8-130	0.485	15.8	
Toluene	1.92	0.050	mg/kg	2.00		96.0	86-128	0.168	15.9	
Ethylbenzene	2.04	0.050	mg/kg	2.00		102	85.9-128	0.114	16	
m,p-Xylene	4.07	0.100	mg/kg	4.00		102	89-129	0.441	16.2	
o-Xylene	2.00	0.050	mg/kg	2.00		100	86.1-125	0.687	16.7	
Total Xylenes	6.07	0.150	mg/kg	6.00		101	88.2-128	0.522	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	0.0528		mg/kg	0.0500		106	71.5-134			

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: Project Number: Project Manager: Fax To:		Reported: 02-Oct-23 15:06
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Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 3091215 - General Prep - Organics										
Blank (3091215-BLK1)				Prepared &	Analyzed:	12-Sep-23				
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	45.9		mg/kg	50.0		91.8	48.2-134			
Surrogate: 1-Chlorooctadecane	51.7		mg/kg	50.0		103	49.1-148			
LCS (3091215-BS1)				Prepared &	Analyzed:	12-Sep-23				
GRO C6-C10	218	10.0	mg/kg	200		109	66.4-123			
DRO >C10-C28	208	10.0	mg/kg	200		104	66.5-118			
Total TPH C6-C28	426	10.0	mg/kg	400		106	77.6-123			
Surrogate: 1-Chlorooctane	48.2		mg/kg	50.0		96.4	48.2-134			
Surrogate: 1-Chlorooctadecane	57.3		mg/kg	50.0		115	49.1-148			
LCS Dup (3091215-BSD1)				Prepared &	Analyzed:	12-Sep-23				
GRO C6-C10	216	10.0	mg/kg	200		108	66.4-123	0.933	17.7	
DRO >C10-C28	213	10.0	mg/kg	200		106	66.5-118	2.27	21	
Total TPH C6-C28	429	10.0	mg/kg	400		107	77.6-123	0.641	18.5	
Surrogate: 1-Chlorooctane	46.3		mg/kg	50.0		92.5	48.2-134			
Surrogate: 1-Chlorooctadecane	54.5		mg/kg	50.0		109	49.1-148			

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



September 25, 2023

AIMEE COLE ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD, NM 88220

RE: MCA 301

Enclosed are the results of analyses for samples received by the laboratory on 09/22/23 11:15.

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/ga/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Received:	09/22/2023	Sampling Date:	09/22/2023
Reported:	09/25/2023	Sampling Type:	Soil
Project Name:	MCA 301	Sampling Condition:	Cool & Intact
Project Number:	03D2057076	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.80370-103.768	50)	

Sample ID: PH 01 B @ 7' (H235160-01)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/23/2023	ND	1.90	95.1	2.00	3.62	
Toluene*	<0.050	0.050	09/23/2023	ND	1.95	97.3	2.00	4.99	
Ethylbenzene*	<0.050	0.050	09/23/2023	ND	1.94	97.2	2.00	4.52	
Total Xylenes*	<0.150	0.150	09/23/2023	ND	5.89	98.2	6.00	5.15	
Total BTEX	<0.300	0.300	09/23/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	106	% 71.5-13	4						
loride, SM4500Cl-B mg/kg			Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3000	16.0	09/25/2023	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/23/2023	ND	222	111	200	0.390	
DRO >C10-C28*	<10.0	10.0	09/23/2023	ND	216	108	200	1.43	
EXT DRO >C28-C36	<10.0	10.0	09/23/2023	ND					
Surrogate: 1-Chlorooctane	105	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	119 9	% 49.1-14	0						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



MAVERICK (32.80370-103.76860)

		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/22/2023		Sampling Date:	09/22/2023
Reported:	09/25/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Tamara Oldaker

Sample ID: PH 01 F @ 11' (H235160-02)

Project Location:

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/23/2023	ND	1.90	95.1	2.00	3.62	
Toluene*	<0.050	0.050	09/23/2023	ND	1.95	97.3	2.00	4.99	
Ethylbenzene*	<0.050	0.050	09/23/2023	ND	1.94	97.2	2.00	4.52	
Total Xylenes*	<0.150	0.150	09/23/2023	ND	5.89	98.2	6.00	5.15	
Total BTEX	<0.300	0.300	09/23/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	107 5	% 71.5-13	4						
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	09/25/2023	ND	416	104	400	3.77	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/23/2023	ND	222	111	200	0.390	
DRO >C10-C28*	<10.0	10.0	09/23/2023	ND	216	108	200	1.43	
EXT DRO >C28-C36	<10.0	10.0	09/23/2023	ND					
Surrogate: 1-Chlorooctane	97.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	108	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

	Attn: Amee ale	State NM Tim 89220	0.11.1
	Company:	3122 Northmal Perks Hurry Company:	NIZZ Net
	P.O. #	ee Cole	anager: A/M
	BILL IO	Ensolum LLC	Name: Enso
ANAI YSIS REQUEST	DII 1 70	(5/5) 393-2320 FAA (3/3) 393-2710	(5/5) J
		101 East Marland, Hobbs, NM 88240	101 East Ma
CHAIN-OF CUSTODY AND ANALYSIS REQUEST	CHAIN	Laboratories	Labo

Page 163 of 185

Received by	OCD:	10/23/2023	11:35:44 AM	

	(575) 393-2326 FAX (575) 393-2476	BILL TO	ANALYSIS REQUEST	
Project Manager:	Anos Cale			
_		Company:		
Codshind		20 Attn: Almee ale		
le#	120-384-7365 Fax #:	Address:		
030	•	City:		
ime:	301	State: Zip:		
on:	A.	Phone #:		
110.5	Ronn, H.	Fax #:		
FOR LAB USE ONLY		MATRIX PRESERV. SAMPLING		
HZBINIA	ERS			
Lab I.D.	G)RAB OR CONTAINE BROUNDW/ VASTEWAT	SOIL DIL SLUDGE DTHER : ACID/BASE CE / COOL DTHER : DATE	TF	
		22/22/b ×	< X	
12-	PHO120111 01	X X E O	Q935 × X. X	
	4-12-23			
PLEASE NOTE: Liability and Damages. C analyses. All claims including those for ne	PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whethar 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 whatboever shall be deemed waived unlease in witting and received by Cardinal within 30 days after completion of the applicable analyses. All claims including those for negligence and any other cause whatboever shall be deemed waived unlease in witting and received by Cardinal within 30 days after completion of the applicable analyses.	ased in contract or tort, shall be limited to the amount paid by the ade in writing and received by Cardinal within 30 days after compared in writing here of use or horse of motion incurred by client, it	e client for the pletion of the applicable s subsidiaries.	
service. In no event shall Cardinal be liable for incidental affiliates or successors arising out of or related to the per	formance of services hereunder L Cardinal, regardless of	f whether such claim is based upon any of the above stated reasons.	verbal Result: Ves No Add'l Phone #:	
Kelinquished by:	Time; //	inna Ollater	All Results are emailed. Piezse provide Email address.	
Relinquished By:	Date: Received By: Time:	men James		
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 2.8 rer: Corrected Temp. °C	Sample Condition CHECKED BY: Tur Cool Intact (Initials) Ves Yes (Initials) No No Con	Turnaround Time: Standard ⊟ Bacteria (only) Sample Condition Rush A Cool Intact Observed Temp Thermometer ID #140 US by AY □ Yes Yes Correction Factor 0°C US by AY □ No No Corrected Temp	mple Condition Observed Temp. °C Corrected Temp. °C

Released to Imaging: 2/13/2024 2:26:32 PM



October 09, 2023

AIMEE COLE ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD, NM 88220

RE: MCA 301

Enclosed are the results of analyses for samples received by the laboratory on 10/04/23 15:04.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/04/2023		Sampling Date:	10/04/2023
Reported:	10/09/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK (32.80	370-103.76860)		

Sample ID: PH 04 @ 6' (H235405-01)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	10/06/2023	ND	2.20	110	2.00	3.64	
Toluene*	<0.050	0.050	10/06/2023	ND	2.08	104	2.00	3.05	
Ethylbenzene*	<0.050	0.050	10/06/2023	ND	2.12	106	2.00	4.06	
Total Xylenes*	<0.150	0.150	10/06/2023	ND	6.18	103	6.00	3.51	
Total BTEX	<0.300	0.300	10/06/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	113 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2200	16.0	10/06/2023	ND	432	108	400	3.64	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/05/2023	ND	211	106	200	1.77	
DRO >C10-C28*	<10.0	10.0	10/05/2023	ND	228	114	200	1.93	
EXT DRO >C28-C36	<10.0	10.0	10/05/2023	ND					
Surrogate: 1-Chlorooctane	85.8	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	101 9	% 49.1-14	0						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Sampling Condition:

Sample Received By:

Analytical Results For:

	ENSOLUM		
	AIMEE COLE		
	3122 NATIONAL PA	RKS HWY	
	CARLSBAD NM, 882	20	
	Fax To:		
10/04/2023		Sampling Date:	
10/09/2023		Sampling Type:	

	-, - ,
Reported:	10/09/2023
Project Name:	MCA 301
Project Number:	03D2057076
Project Location:	MAVERICK (32.80370-103.76860)

10/04/2023 Soil Cool & Intact Tamara Oldaker

Sample ID: PH 04A @ 8' (H235405-02)

Received:

BTEX 8021B	mg	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/06/2023	ND	2.20	110	2.00	3.64	
Toluene*	<0.050	0.050	10/06/2023	ND	2.08	104	2.00	3.05	
Ethylbenzene*	<0.050	0.050	10/06/2023	ND	2.12	106	2.00	4.06	
Total Xylenes*	<0.150	0.150	10/06/2023	ND	6.18	103	6.00	3.51	
Total BTEX	<0.300	0.300	10/06/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	114	% 71.5-13	4						
Chloride, SM4500CI-B	mg	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	10/06/2023	ND	432	108	400	3.64	
TPH 8015M	mg	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/05/2023	ND	211	106	200	1.77	
DRO >C10-C28*	<10.0	10.0	10/05/2023	ND	228	114	200	1.93	
EXT DRO >C28-C36	<10.0	10.0	10/05/2023	ND					
Surrogate: 1-Chlorooctane	86.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	99.9	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



MAVERICK (32.80370-103.76860)

		ENSOLUM AIMEE COLE 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/04/2023		Sampling Date:	10/04/2023
Reported:	10/09/2023		Sampling Type:	Soil
Project Name:	MCA 301		Sampling Condition:	Cool & Intact
Project Number:	03D2057076		Sample Received By:	Tamara Oldaker

Sample ID: PH 05 @ 6' (H235405-03)

Project Location:

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/06/2023	ND	2.20	110	2.00	3.64	
Toluene*	<0.050	0.050	10/06/2023	ND	2.08	104	2.00	3.05	
Ethylbenzene*	<0.050	0.050	10/06/2023	ND	2.12	106	2.00	4.06	
Total Xylenes*	<0.150	0.150	10/06/2023	ND	6.18	103	6.00	3.51	
Total BTEX	<0.300	0.300	10/06/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	118 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2320	16.0	10/06/2023	ND	432	108	400	3.64	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/05/2023	ND	211	106	200	1.77	
DRO >C10-C28*	<10.0	10.0	10/05/2023	ND	228	114	200	1.93	
EXT DRO >C28-C36	<10.0	10.0	10/05/2023	ND					
Surrogate: 1-Chlorooctane	78.3	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	92.5	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



10/04/2023

Cool & Intact

Tamara Oldaker

Soil

Analytical Results For:

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

Received:	10/04/2023	Sampling Date:
Reported:	10/09/2023	Sampling Type:
Project Name:	MCA 301	Sampling Condition:
Project Number:	03D2057076	Sample Received By:
Project Location:	MAVERICK (32.80370-103.76860)	

Sample ID: PH 05 @ 8' (H235405-04)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/06/2023	ND	2.20	110	2.00	3.64	
Toluene*	<0.050	0.050	10/06/2023	ND	2.08	104	2.00	3.05	
Ethylbenzene*	<0.050	0.050	10/06/2023	ND	2.12	106	2.00	4.06	
Total Xylenes*	<0.150	0.150	10/06/2023	ND	6.18	103	6.00	3.51	
Total BTEX	<0.300	0.300	10/06/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	111 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	10/06/2023	ND	432	108	400	3.64	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/05/2023	ND	211	106	200	1.77	
DRO >C10-C28*	<10.0	10.0	10/05/2023	ND	228	114	200	1.93	
EXT DRO >C28-C36	<10.0	10.0	10/05/2023	ND					
Surrogate: 1-Chlorooctane	75.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	89.0	% 49.1-14	0						

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Celey D. Keene, Lab Director/Quality Manager



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

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

ved by OCD: 10/23/2023 11:35:44 AM			Page 170
PLEAE 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 analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received without limitation, business interruptions, loss of use, or loss of profile and any other related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the able for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profile and used upon any of the able for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profile and used upon any of the able for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profile and used upon any of the able for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profile and used upon any of the able for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profile and used upon any of the able for incidental or consequential damages. All times are used to be able damages. All times are used to be performed by: Relinquished By: Date: Received By: Delivered By: Observed Temp. °C Sample Condition CHECKED Sampler - UPS - Bus - Other: Corrected Temp. °C No No No	A CARA PHOY Sample I.D. A CARA PHOY Sample I.D. A CARA PHOY Sample I.D. CARA PHOY SAMPLE CARA PHOY	: Aimur lolle Sbeud - 1365 Fax #: - 20571076 Project Owner: 10A SUI 10A SUI 10A SUI 10A SUI 10A SUI 10A SUI	101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476 Company Name: CMSA WM , LUC
p. °C H S Sample Condition p. °C H S Sample Condition p. °C N Sample Condition No No No	GROONDWATER WASTEWATER OIL OIL SLUDGE OTHER :	RIX	
ondition CHECKED BY: No CHECKED BY: No		#: A.A. pany: :: ress: ress: : : : : : : : : : : : : : : : : : :	BILL TO
traid by the client for the after completion of the applicable by client, its subsidiaries, dreasons or otherwise. All: Results are emailed. F All: Results are emailed. F All OLA OLA OLA SU REMARKS: OLA SU Turnaround Time: Thermometer ID #140 Correction Factor 0°C .	1040 X BTEX X TOH	SAMPLING	
a ermedy for any claim arising whether based in contract or tort, shall be limited to the amount pad by the client for the applicable one waived unless made in whom and necelived by Cardinal which 30 days after completion of the applicable hereunder by Cardinal, negardless of whether such claim is based upon any of the aborys-reg reasons or otherwise. ages, including without limitation, business interruptions, loss of use, or loss of ports incurred by clarinal which 30 days after completion of the applicable hereunder by Cardinal, negardless of whether such claim is based upon any of the aborys-reg reasons or otherwise. hereunder by Cardinal, negardless of whether such claim is based upon any of the aborys-reg reasons or otherwise. hereunder by Cardinal, negardless of whether such claim is based upon any of the aborys-reg reasons or otherwise. hereunder by Cardinal, negardless of whether such claim is based upon any of the aborys-reg reasons or otherwise. AddTI Phony AddTI Phony <	<	ricles	ANALYS

dard U.WWW 2 No Add'l Phone #: provide Email address: ANALYSIS REQUEST \Box Bacteria (only) Sample Condition Cool Intact Observed Temp. °C || Yes || Yes || No || No Corrected Temp. °C PIN4 COM .) ensolum.com .

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APPENDIX E

NMOCD Notifications

Released to Imaging: 2/13/2024 2:26:32 PM



APPENDIX F Final C-141

Released to Imaging: 2/13/2024 2:26:32 PM

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	NAPP2307558601
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Maverick Permian, LLC	OGRID 331199	
Contact Name Bryce Wagoner	Contact Telephone 928-241-1862	
Contact email Bryce.Wagoner@mavresources.com	Incident # (assigned by OCD) NAPP2307558601	
Contact mailing address 1410 NW County Road, Hobbs, NM 88240		

Location of Release Source

Latitude 32.80370

Longitude -103.76860

(NAD 83 in decimal degrees to 5 decimal places)

Site Name MCA 301	Site Type
Date Release Discovered 2/23/2023	API# (if applicable) 30-025-24226

Unit Letter	Section	Township	Range	County
J	28	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)

Volume Released (bbls)	Volume Recovered (bbls)
Volume Released (bbls) 6.9	Volume Recovered (bbls) 0 bbls
Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No
Volume Released (bbls)	Volume Recovered (bbls)
Volume Released (Mcf)	Volume Recovered (Mcf)
Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
al corrosion caused a casing leak to develop on a s ad (POR) into the southern pasture. The released o ed and the impacted area has been secured.	•
	Volume Released (bbls) 6.9 Is the concentration of dissolved chloride in the produced water >10,000 mg/l? Volume Released (bbls) Volume Released (bbls) Volume/Weight Released (provide units) al corrosion caused a casing leak to develop on a sad (POR) into the southern pasture. The released or pasture.

Page	2
1 age	-

Oil Conservation Division

Incident ID	NAPP2307558601
District RP	
Facility ID	
Application ID	

Was this a major release as defined by	If YES, for what reason(s) does the responsible party consider this a major release?
19.15.29.7(A) NMAC?	
🗌 Yes 🕅 No	
If YES, was immediate no	otice 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

 \boxtimes The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

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

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

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

Printed Name: Bryce Wagoner	Title: Permian HSE Specialist II
Signature: email: Bryce.Wagover@mavresources.com	Date: <u>3/16/2023</u> Telephone: <u>928-241-1862</u>
OCD Only	
Received by: Jocelyn Harimon	Date:03/20/2023

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

			Subsurf	ace Fluids				
	Depth (in.)	Saturation (%) *10% in consolidated sediments after rain to 50% in sand with no precipitation	Oil-Water Ratio (%)	Area (ft ²)	Volume (bbl.)	Estimated Volume in Subsurface (bbl.)	Volume of Oil in Subsurface (bbl.)	Volume of Water in Subsurface (bbl.)
Rectangle A	0.3	0.30	0.00	355.0	1.3	0.4	0.00	0.4
Rectangle B	0.5	0.30	0.00	175.0	1.3	0.4	0.00	0.4
Rectangle C	1.0	0.30	0.00	480.0	7.1	2.1	0.00	2.1
Rectangle D	0.5	0.30	0.00	745.0	5.5	1.7	0.00	1.7
Rectangle E	0.3	0.30	0.00	655.0	2.4	0.7	0.00	0.7
Rectangle F	0.3	0.30	0.00	1205.0	4.5	1.3	0.00	1.3
Rectangle G	0.1	0.30	0.00	315.0	0.3	0.1	0.00	0.1
Rectangle H	0.0	0.30	0.00	1000.0	0.5	0.1	0.00	0.1
Rectangle I				0.0	0.0	0.0	0.00	0.0
Rectangle J				0.0	0.0	0.0	0.00	0.0
Total Volume (bbls): 6.87 0.00 6.87								

ASE VOLUME (bbls): 6.9

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

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

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

CONDITIONS

Operator:	OGRID:
Maverick Permian LLC	331199
1111 Bagby Street Suite 1600	Action Number:
Houston, TX 77002	198120
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By		Condition Date
jharimon	None	3/20/2023

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Action 198120

.

Received by OCD: 10/23/2023 11:35:44 AM Form C-141 State of New Mexico

Page 3

Oil Conservation Division

	Page 177 of 18
Incident ID	NAPP2307558601
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- \boxtimes Depth to water determination
- Determination of water sources and significant watercourses within ¹/₂-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

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

Received by OCD: 10	<i>Acceived by OCD: 10/23/2023 11:35:44 AM</i> Form C-141 State of New Mexico			Page 178 of 185
		Oil Conservation Division		NAPP2307558601
Page 4	Oil Conservation Division			
			Facility ID	
			Application ID	
regulations all operator public health or the en- failed to adequately in addition, OCD accepta and/or regulations. Printed Name:E Signature:	N	otifications and perform co e OCD does not relieve the areat to groundwater, surface	rrective actions for relea operator of liability sho ce water, human health iance with any other fed Specialist	ases which may endanger ould their operations have or the environment. In
OCD Only				
Received by:		Date:		

Page 6

Oil Conservation Division

Incident ID	NAPP2307558601
District RP	
Facility ID	
Application ID	

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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.

A sealed site and sampling diagram as described in 19.15.29.11 NMAC M hotographs 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 final sampling) M Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling) M 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 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: Prive Wagoner Title:	<u>Closure Report Attachment Checklist</u>: Each of the following items	must be included in the closure report.	
must be notified 2 days prior to liner inspection) Intervention of the environment of the environmen	A scaled site and sampling diagram as described in 19.15.29.11 NMAC		
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 Signature: Date: 10/12/2023 email: Bryce Wagoner@mavresources.com Telephone: 928-241-1862 OCD Only Received by: Date:			
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 Signature: 10/12/2023 email: Bryce Wagoner@mavresources.com Telephone: 928-241-1862 OCD Onty Received by: Date: Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediates. Closure Approved by: Date: Date:	Laboratory analyses of final sampling (Note: appropriate ODC Dis	trict office must be notified 2 days prior to final sampling)	
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Received by:	and regulations all operators are required to report and/or file certain rele may endanger public health or the environment. The acceptance of a C- should their operations have failed to adequately investigate and remedia human health or the environment. In addition, OCD acceptance of a C-1 compliance with any other federal, state, or local laws and/or regulations restore, reclaim, and re-vegetate the impacted surface area to the conditio accordance with 19.15.29.13 NMAC including notification to the OCD w Printed Name: Bryce Wagoner Signature:	 ase notifications and perform corrective actions for releases which 141 report by the OCD does not relieve the operator of liability ate contamination that pose a threat to groundwater, surface water, 41 report does not relieve the operator of responsibility for a. The responsible party acknowledges they must substantially ons that existed prior to the release or their final land use in when reclamation and re-vegetation are complete. Title: Permian HSE Specialist Date: 10/12/2023 	
Received by:			
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by: Date:	OCD Only		
remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by: Date:	Received by:	Date:	
	remediate contamination that poses a threat to groundwater, surface water	, human health, or the environment nor does not relieve the responsible	
Printed Name: Title:	Closure Approved by:	Date:	
	Printed Name:	Title:	

From:	Aimee Cole
То:	"ocd.enviro@state.nm.us"
Subject:	Maverick - Sampling Notification (Week of 8/28/2023)
Date:	Wednesday, August 23, 2023 12:48:00 PM
Attachments:	image001.png
	image002.png
	image003.png
	image004.png

Maverick Permian, LLC plans to complete sampling activities at the following sites the week of August 28, 2023.

- MCA 409 Flowline/ NAPP2318846991
 - Sampling Dates: 8/28/2023 8/29/2023
- ABO 3 Battery / nAPP2314448299
 - Sampling Dates: 8/28/2023 8/29/2023
- Grayburg Eumont Strawn Battery / NAPP2302036818
 Sampling Dates: 8/28/2023
- MCA 95 / NAPP2306757137
 - Sampling Dates: 8/28/2023 9/1/2023
- MCA 301 / NAPP2307558601
 - Sampling Dates: 8/31/2023 9/1/2023

Thank you,



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

From:	Wells, Shelly, EMNRD
To:	Aimee Cole
Cc:	Bratcher, Michael, EMNRD; Velez, Nelson, EMNRD
Subject:	RE: [EXTERNAL] Maverick - Sampling Notification (Week of 9/4/2023)
Date:	Wednesday, August 30, 2023 2:02:54 PM
Attachments:	image001.png
	image002.png
	image003.png
	image004.png

****EXTERNAL EMAIL****

Good afternoon Aimee,

The OCD has received your notification. When reporting sampling at multiple locations it is required to provide the date and time for each location. Include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thank you,

Shelly

Shelly Wells * Environmental Specialist-Advanced Environmental Bureau EMNRD-Oil Conservation Division 1220 S. St. Francis Drive|Santa Fe, NM 87505 (505)469-7520<u>|Shelly.Wells@emnrd.nm.gov</u> http://www.emnrd.state.nm.us/OCD/

From: Aimee Cole <acole@ensolum.com>
Sent: Wednesday, August 30, 2023 2:28 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Subject: [EXTERNAL] Maverick - Sampling Notification (Week of 9/4/2023)

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

Maverick Permian, LLC plans to complete sampling activities at the following sites the week of September 4, 2023.

- MCA 409 Flowline/ NAPP2318846991
 - Sampling Date: 9/5/2023
- ABO 3 Battery / nAPP2314448299
 - Sampling Date: 9/5/2023

- Grayburg Eumont Strawn Battery / NAPP2302036818
 - Sampling Date: 9/6/2023
- MCA 301 / NAPP2307558601
 - Sampling Dates: 9/5/2023 9/8/2023

Thank you,



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

From: To: Cc: Subject: Date: Attachments:	Buchanan, Michael, EMNRD Aimee Cole; Enviro, OCD, EMNRD Bratcher, Michael, EMNRD; Velez, Nelson, EMNRD RE: [EXTERNAL] Maverick - Sampling Notification (Week of 9/11/2023) Wednesday, September 6, 2023 3:53:29 PM image001.png image002.png image003.png
	image003.png image004.png

You don't often get email from michael.buchanan@emnrd.nm.gov. Learn why this is important

[**EXTERNAL EMAIL**]

Hi Aimee,

The OCD has received your notification. Include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thank you,

From: Aimee Cole <acole@ensolum.com>
Sent: Wednesday, September 6, 2023 2:32 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Subject: [EXTERNAL] Maverick - Sampling Notification (Week of 9/11/2023)

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

Maverick Permian, LLC plans to complete sampling activities at the following sites the week of September 11, 2023.

- MCA 301 / NAPP2307558601
 - Sampling Dates: 9/11/2023 9/12/2023
- MCA 95 / NAPP2306757137
 - Sampling Dates: 9/12/2023 9/15/2023

Thank you,

Aimee Cole





Senior Managing Scientist 720-384-7365 Ensolum, LLC

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

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

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

CONDITIONS

Operator: Maverick Permian LLC	OGRID: 331199
1000 Main Street, Suite 2900 Houston, TX 77002	Action Number: 278346
	Action Type:
	[C-141] Release Corrective Action (C-141)
CONDITIONS	

Created By Condition Condition Date scwells 2/13/2024 None

CONDITIONS

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Action 278346