



May 8, 2024

New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

**Re: Remediation Work Plan Addendum  
Merchant CTB  
Incident Numbers nAPP2330461091  
Lea County, New Mexico**

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Matador Production Company (Matador), has prepared this *Remediation Work Plan Addendum* (RWPA) to document assessment and soil sampling activities performed at the Merchant Central Tank Battery (CTB) (Site) in Unit L, Section 35, Township 21 South, Range 33 East, in Lea County, New Mexico (Figure 1). The purpose of the Site assessment and soil sampling activities was to address impacted and waste-containing soil resulting from a facility fire at the Site. Matador is submitting this RWPA, describing analytical results from soil sampling activities associated with Incident Number nAPP2330461091 and proposing additional assessment, soil sampling, and excavation activities at the Site prior to submitting a *Closure Request*.

On November 16, 2023, Talon/LPE personnel were onsite to conduct an initial site assessment and to perform delineation sampling activities. Talon/LPE submitted a Remediation Work Plan (RWP) on March 1, 2024, to the New Mexico Oil Conservation Division (NMOCD); however, the RWP was denied for the following reasons:

*Remediation plan denied. Inadequate vertical and horizontal delineation. Horizontal delineation must meet the requirements of the reclamation standards 19.15.29.13 NMAC (600 mg/kg Cl, 100 mg/kg TPH, 50 mg/kg BTEX, 10 mg/kg benzene) for the upper 4 feet of the impacted area. Continue to horizontally delineate the release, in order to determine the edge of the release. S-15 and S-21 need to be vertically delineated below the Table 1 Closure Criteria. The Figure showing planned excavation areas needs updated to include S-21, as contaminants there exceed Table 1 Closure Criteria. In that same Figure, S-15 shows a planned 6' excavation, however the report states it "will be excavated down to 4 and a half (4.5) feet bgs." Which is correct? A variance request needs to be included with your remediation plan resubmittal for sampling at a frequency other than every 200 square feet. Resubmit plan to the OCD by May 14, 2024.*

This RWPA addressed NMOCD's concerns regarding horizontal and vertical delineation sampling per the New Mexico Administrative Code's (NMAC's) reclamation standard of Title 19, Chapter 15, Part 29, Section 13 (19.15.29.13) and respectfully requests a confirmation soil sampling variance on a frequency of one composite sample for every 400 square feet from the floor of the excavation and at a frequency of every 200 square feet from the sidewalls of the excavation.

## SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Lea County, New Mexico (32.44185°, -103.54746°) and is associated with oil and gas exploration and production operations on Private Land.

On October 31, 2023, a facility fire resulted in the release of over 25 barrels (bbls) of crude oil and produced water onto the caliche pad. This release impacted areas on-pad and off-pad; released fluids were not recovered. Matador reported the release to the NMOCD on a Release Notification Form C-141 (Form C-141) on November 6, 2023 (Appendix A). The release was assigned Incident Number nAPP2330461091.

## SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess applicability of Table I, Closure Criteria for Soils Impacted by a Release, of 19.15.29.12 NMAC. Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization, see Appendix A. Potential Site receptors are identified on Figure 1.

The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well CP-1887 POD 1, located approximately 0.48 miles east of the Site. The well had a reported depth to groundwater greater than 103 feet below ground surface (bgs) and a total depth of 103 feet bgs. All wells used for depth to groundwater determination are presented in Figure 1. The referenced well record is included in Appendix B.

The closest continuously flowing or significant watercourse to the Site is a freshwater pond, located approximately 0.69 miles southwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified in Figure 1.

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

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

The reclamation requirement will be applied to the top 4 feet in the impacted area off-pad per 19.15.29.13 NMAC.

## SITE ASSESSMENT ACTIVITIES

Beginning on November 16, 2023, Talon/LPE personnel were onsite to evaluate the release extent based on information provided on the Form C-141 and visual observations. Discrete soil samples were collected via hand auger from 22 sample locations: Five sample locations off-pad (S-1 through S-5) and 17 sample locations on-pad (S-6 through S-22). Four boreholes were advanced directly beneath the tank battery containment on-pad (TB-1 through TB-4) to a depth of 4 feet bgs in sample locations

TB-1 through TB-3 and to 2 feet bgs in TB-4. Sample locations S-1 through S-5 all exceeded the reclamation requirement for off-pad areas impacted by a release and would require additional vertical delineation; however, sample location S-2 was vertically delineated at 2 feet bgs. Seven sample locations on-pad (S-8, S-12, S-15, and S-18 through S-21) and one sample location beneath the containment liner (TB-4) were not fully delineated in accordance with the reclamation requirement. Two borehole sample locations (S-15 and S-21) exceed the Site Closure Criteria at 1-foot bgs.

On March 29, 2024, and April 1, 2024, Ensolum personnel were onsite to continue vertical delineation sampling and to advance the sample locations S-1, S-3, S-4, S-5, S-12, S-15, and S-18 through S-21 vertically via backhoe. Five horizontal delineation soil samples (SS01 through SS05) were collected from around the release extent at ground surface. Vertical delineation sample location TB-4 could not be advanced further with a backhoe due to the proximity of the sample location to tank battery equipment. The delineation soil samples were field screened for TPH using a PetroFLAG<sup>®</sup> soil analyzer system and chloride using Mohr method titration. The release extent and delineation soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was collected, and a photographic log is included in Appendix C.

On May 1, 2024, Ensolum personnel returned to the Site to collect two additional lateral delineation soil samples (SS06 and SS07) at ground surface and to advance vertical delineation sample locations S-8 and S-11 to 4.5 feet and 5 feet, bgs respectively. Field screening results and observations for the boreholes were logged on lithologic/soil sampling logs, which are included in Appendix D.

All soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Envirotech Analytical Laboratory (Envirotech) in Farmington, New Mexico, for analysis of the following chemicals of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH- GRO, TPH- DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

## LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for delineation soil samples S-18, S-19 2 ft and S-21 @ 2 ft, S-20 @ 3 ft, S-1 @ 4 ft, S-8@ 4.5', S-11, S-12, and S-15 @ 5 ft, S-3@ 6 ft, S-4 @11', bgs were all in compliance with the reclamation standard and with the Site Closure Criteria. Laboratory analytical results from horizontal delineation samples (SS01 through SS07) were all in compliance with the reclamation standard at ground surface. Vertical delineation soil samples TB-4 was in compliance with the Site Closure Criteria however chloride concentrations exceeded the reclamation requirement at 2 feet bgs. Laboratory analytical results for delineation soil samples are summarized in Tables 1 through 3 and the complete laboratory analytical reports are included in Appendix E.

## PROPOSED REMEDIATION WORK PLAN ADDENDUM

The results of the delineation soil sampling suggest soil containing elevated concentrations of chloride exist in the off-pad area south of the caliche pad, which measures approximately 16,862 square feet in size. The off-pad area would be excavated in accordance with the reclamation requirement or to a depth of 4 feet bgs. The impacted area on-pad measures approximately 114,810 square feet with concentrations of TPH exceeding the Site Closure Criteria in sample locations S-15 and S-21. The area on-pad would require a surface scrape and an excavation in sample locations S-15 to a depth of 5 feet bgs and 2 feet bgs in sample location S-21. Based on delineation soil sampling completed beneath the tank battery containment, all COC were in compliance with the Site Closure Criteria at 1-foot bgs; however, surface equipment will need to be moved in order to complete vertical delineation sampling in accordance with the reclamation requirement at a depth greater than 2 feet bgs in the vicinity of sample

location TB-4. Matador proposes excavation of the impacted soil and Ensolum estimates approximately 6,383 cubic yards of soil will be excavated from the impacted areas. In

Matador proposes to complete the following remediation activities:

- Complete vertical delineation near sample location TB-4 to the strictest Closure Criteria per NMOCD Table 1.
- Excavation of impacted soil on the south side of the caliche pad to a depth of 4 feet bgs. Excavation will proceed laterally until sidewall samples confirm all COC concentrations are compliant with the reclamation standard set forth in 19.15.29.13 NMAC. The estimated excavation extent is shown on Figure 3.
- A surface scrape of the impacted area on-pad to a depth of 0.5 feet bgs or until field screening of soil indicates the floor of the excavation will be in compliance with the Closure Criteria.
- Confirmation samples will be collected at a variance frequency of every 400 square feet from the floor of the excavation and at a frequency of every 200 square feet from the sidewalls of the excavation. Based on the areal extent of the two excavation areas, the variance request will be equally protective of human health, the environment, and groundwater since depth to ground water is reasonably estimated to be greater than 100 feet bgs, there are no other sensitive receptors in the vicinity of the Site, and impacted and waste-containing soil has been adequately delineated to demonstrate compliance with an expanded frequency of confirmation sampling.
- An estimated 6,383 cubic yards of impacted soil will be excavated. The excavated soil will be transferred a New Mexico approved landfill facility for disposal.
- The excavation will be backfilled and recontoured to match pre-existing conditions.

Matador will complete the proposed soil sampling activities within 90 days of the date of approval of this Work Plan by the NMOCD.

If you have any questions or comments, please contact Ms. Ashley Giovengo at (575) 988-0055 or [agiovengo@ensolum.com](mailto:agiovengo@ensolum.com).

Sincerely,  
**Ensolum, LLC**



Ashley Giovengo  
Senior Scientist



Daniel R. Moir, PG (licensed in WY & TX)  
Senior Managing Geologist







Appendices:

Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations
Figure 3	Proposed Excavation Extent
Table 1	Soil Sample Analytical Results (Delineation Soil Samples - Off-Pad)
Table 2	Soil Sample Analytical Results (Delineation Soil Samples - On-Pad)
Table 3	Soil Sample Analytical Results (Delineation Soil Samples - Tank Battery Containment)
Appendix A	Form C-141
Appendix B	Well Log and Record
Appendix C	Photographic Log
Appendix D	Lithologic Soil Sampling Logs
Appendix E	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix F	NMOCD Correspondence






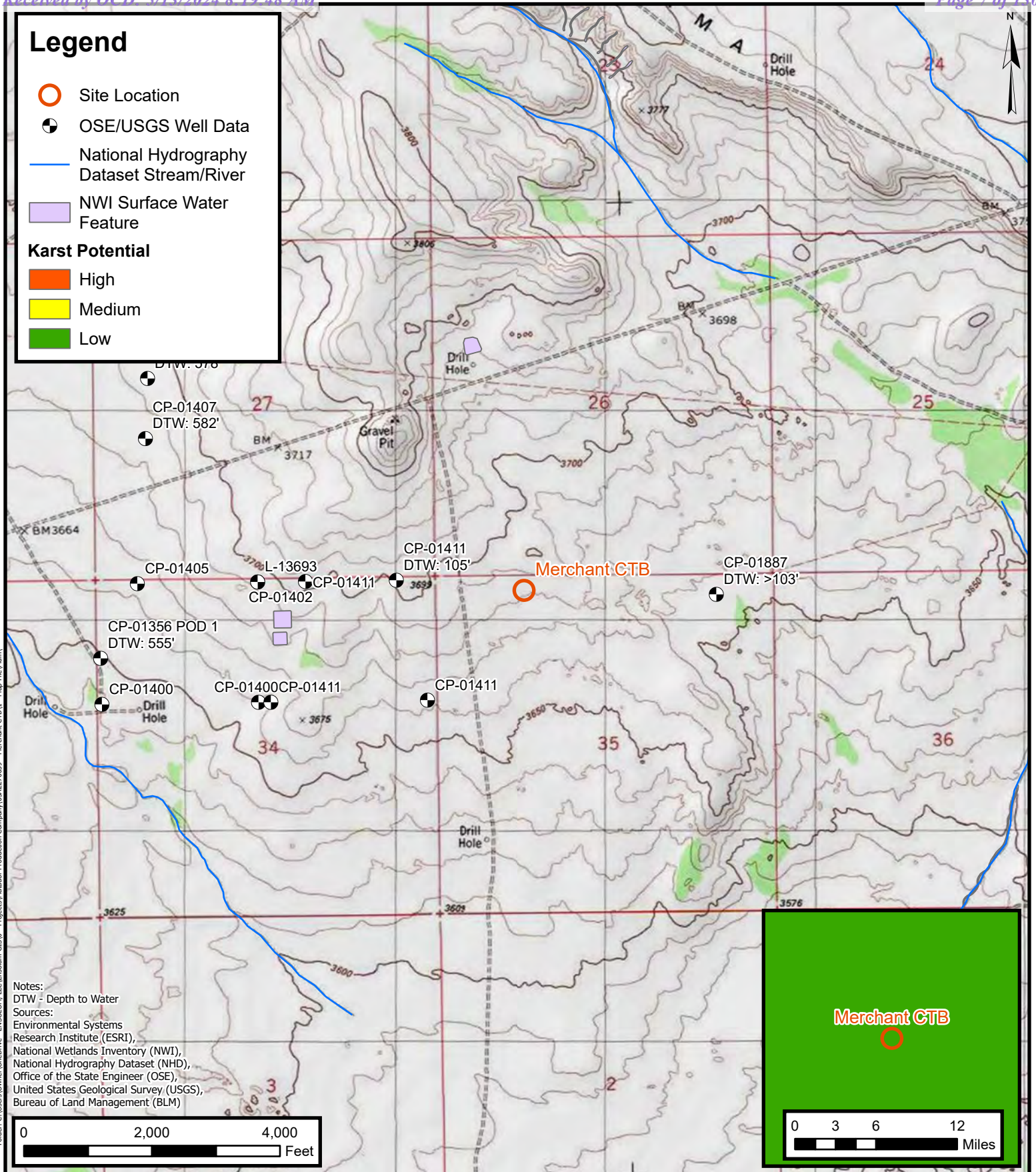
FIGURES

# Legend

-  Site Location
-  OSE/USGS Well Data
-  National Hydrography Dataset Stream/River
-  NWI Surface Water Feature

## Karst Potential

-  High
-  Medium
-  Low



## Site Receptor Map

Matador Production Company  
Merchant CTB  
Incident Number: nAPP2330461091  
Unit L, Section 35, T 21S, R 33E  
Lea County, New Mexico

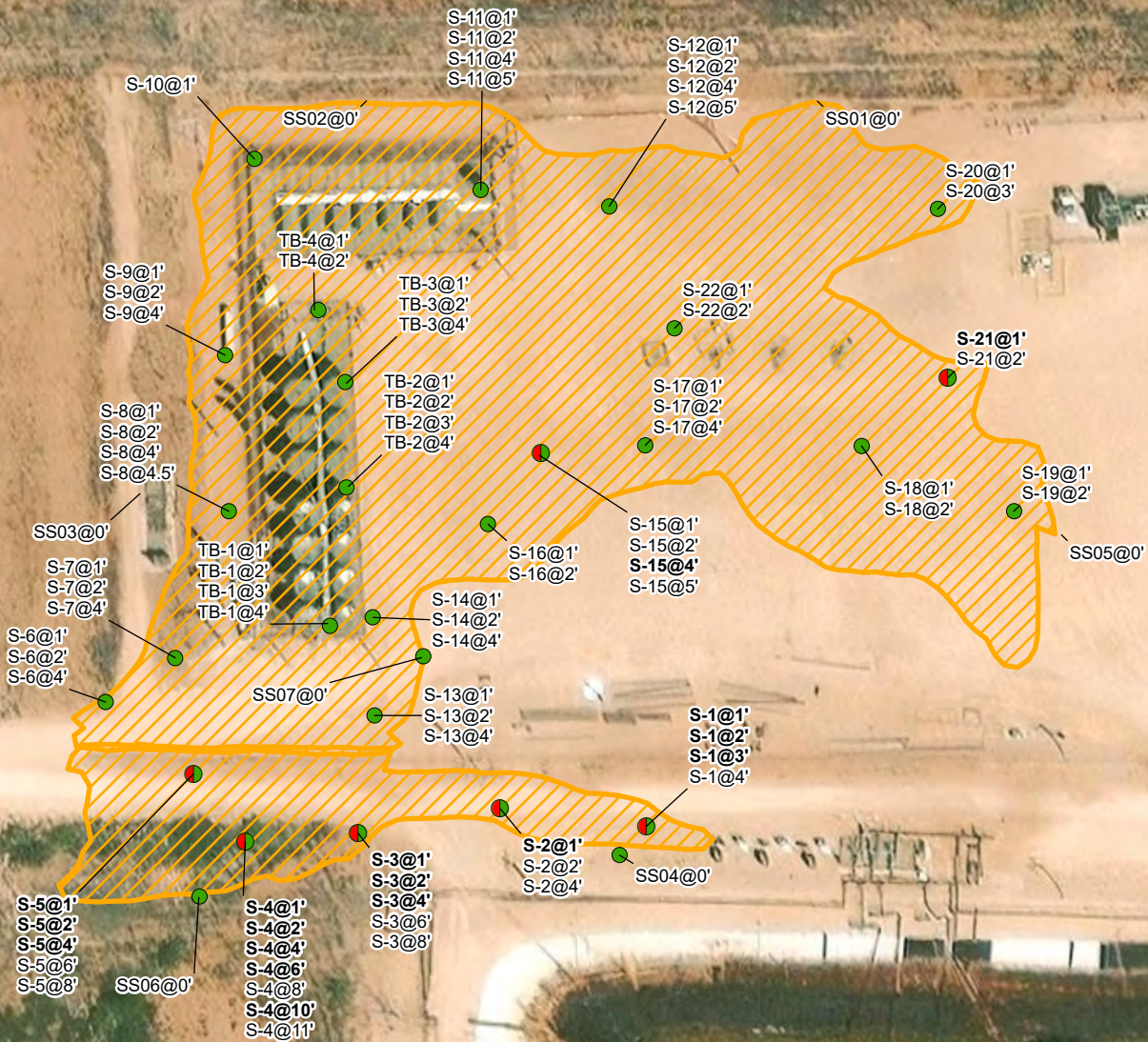
**FIGURE**

**1**



## Legend

- Delineation Soil Sample in Compliance with Closure Criteria
- Delineation Soil Sample with Concentrations Previously Exceeding Closure Criteria
- Release Extent



Notes:  
 Sample ID @ Depth Below Ground Surface.  
 Samples in bold indicate sample exceeded applicable closure criteria.

0 25 50 100 150 200  
 Feet

Sources: Environmental Systems Research Institute (ESRI)

## Delineation Soil Sample Locations

Matador Production Company  
 Merchant CTB  
 Incident Number: nAPP2330461091  
 Unit L, Section 35, T 21S, R 33E  
 Lea County, New Mexico





FIGURE

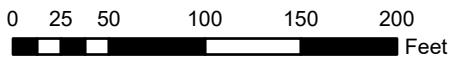
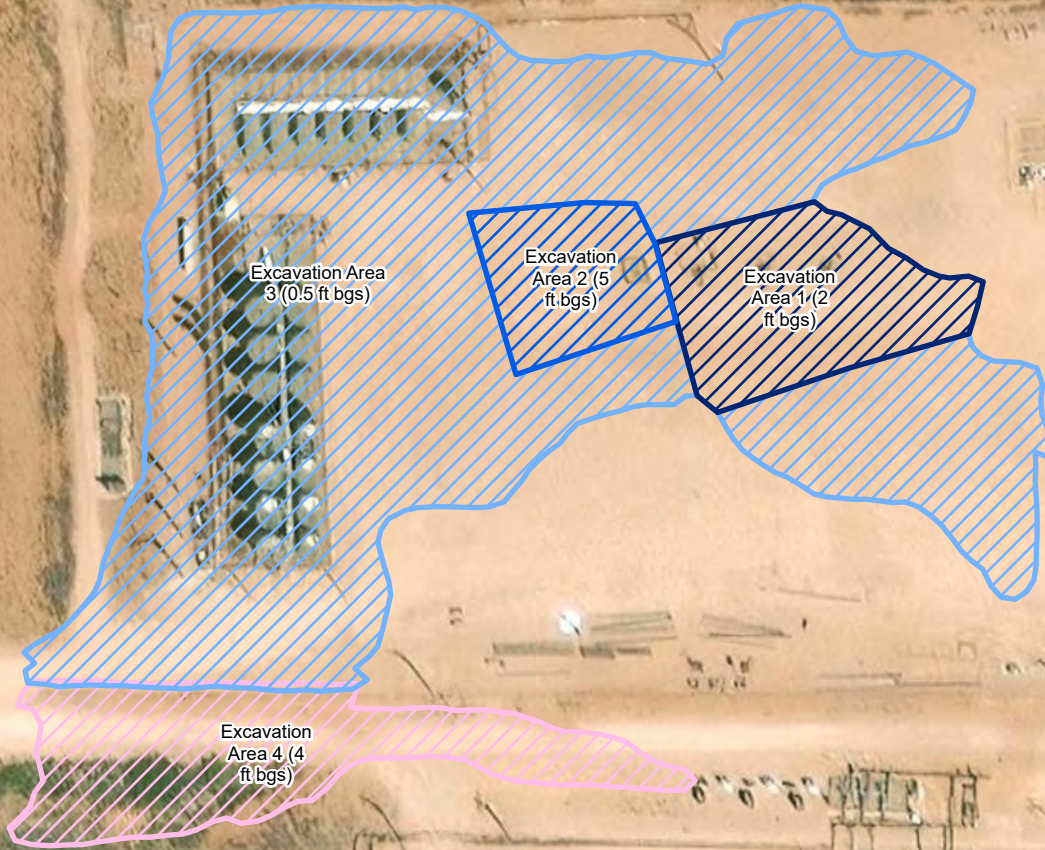
2





**Legend**

-  Excavation Area 1 (2 ft bgs) (11,382 Sq Ft)
-  Excavation Area 2 (5 ft bgs) (6,758 Sq Ft)
-  Excavation Area 3 (0.5 ft bgs) (96,691 Sq Ft)
-  Excavation Area 4 (4 ft bgs) (16,862 Sq Ft)



Sources: Environmental Systems Research Institute (ESRI)



## Proposed Excavation Extent

Matador Production Company  
Merchant CTB  
Incident Number: nAPP2330461091  
Unit L, Section 35, T 21S, R 33E  
Lea County, New Mexico

**FIGURE**

**3**





TABLES



**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
 Merchant CTB  
 Matador Production Company  
 Lea County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table I Closure Criteria (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>1,000</b>	<b>2,500</b>	<b>20,000</b>
<b>Delineation Soil Samples (Off-Pad)</b>										
S-1	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	9,010
S-1	11/16/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	8,860
S-1	11/16/2023	3	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	8,100
S-1	4/1/2024	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	22.6
S-2	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	1,360
S-2	11/16/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	<20.0
S-2	11/16/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	<20.0
S-3	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	9,010
S-3	11/16/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	4,500
S-3	11/16/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	6,090
S-3	3/29/2024	6	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	247
S-3	3/29/2024	8	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	285
S-4	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	7,630
S-4	11/16/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	8,960
S-4	11/16/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	3,470
S-4	3/29/2024	6	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	1,150
S-4	3/29/2024	8	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	552
S-4	3/29/2024	10	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	1,560
S-4	3/29/2024	11	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	361
S-5	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	6,820
S-5	11/16/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	4,220
S-5	11/16/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	6,940
S-5	3/29/2024	6	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	260
S-5	3/29/2024	8	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	166



**TABLE 2**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
 Merchant CTB  
 Matador Production Company  
 Lea County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table I Closure Criteria (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>1,000</b>	<b>2,500</b>	<b>20,000</b>
<b>Delineation Soil Samples (On-Pad)</b>										
S-6	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	2,940
S-6	11/16/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	879
S-6	11/16/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	26.3
S-7	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	1,850
S-7	11/16/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	2370
S-7	11/16/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	<20.0
S-8	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	1,530
S-8	11/16/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	2,710
S-8	11/16/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	1,500
S-8	5/1/2024	4.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	53.9
S-9	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	190
S-9	11/16/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	37.6
S-9	11/16/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	172
S-10	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	58.6
S-11	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	2,470
S-11	11/16/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	214
S-11	11/16/2023	4	<0.0250	<0.0250	53.9	94.3	<50.0	148.2	148.2	409
S-11	5/1/2024	5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	48.3
S-12	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	1,170
S-12	11/16/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	1,240
S-12	11/16/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	1,040
S-12	4/1/2024	5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	147
S-13	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	70.3
S-13	11/16/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	<20.0
S-13	11/16/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	61.8
S-14	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	69.0
S-14	11/16/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	<20.0
S-14	11/16/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	39.0
S-15	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	29.9
S-15	11/16/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	195
S-15	11/16/2023	4	<0.0250	<0.0250	1,590	3,870	<50.0	<b>5,460</b>	<b>5,460</b>	5,480
S-15	3/29/2024	5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	38



**TABLE 2 - CONT'D**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
 Merchant CTB  
 Matador Production Company  
 Lea County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table I Closure Criteria (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>1,000</b>	<b>2,500</b>	<b>20,000</b>
<b>Delineation Soil Samples (On-Pad)</b>										
S-16	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	958
S-16	11/16/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	58.3
S-17	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	45.1
S-17	11/16/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	63.7
S-17	11/16/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	65.9
S-18	11/16/2023	1	<0.0250	<0.0250	<20.0	35.7	<50.0	35.7	35.7	15,500
S-18	4/1/2024	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	<20.0
S-19	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	6,850
S-19	4/1/2024	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	121
S-20	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	12,500
S-20	4/1/2024	3	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	25.2
S-21	11/16/2023	1	<0.0250	<0.0250	<20.0	3,100	<50.0	<b>3,100</b>	<b>3,100</b>	3,500
S-21	4/1/2024	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	<20.0
S-22	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	239
S-22	11/16/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	146



**TABLE 3**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
 Merchant CTB  
 Matador Production Company  
 Lea County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table I Closure Criteria (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>1,000</b>	<b>2,500</b>	<b>20,000</b>
<b>Delineation Soil Samples (Tank Battery Containment)</b>										
TB-1	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	747
TB-1	11/16/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	116
TB-1	11/16/2023	3	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	<20.0
TB-1	11/16/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	<20.0
TB-2	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	191
TB-2	11/16/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	1,870
TB-2	11/16/2023	3	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	25.5
TB-2	11/16/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	35.1
TB-3	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	2,260
TB-3	11/16/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	3,260
TB-3	11/16/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	530
TB-4	11/16/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	10,600
TB-4	11/16/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	921
<b>Delineation Soil Samples (Laterals)</b>										
SS01	4/1/2024	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	<20.0
SS02	4/1/2024	0	<0.0250	<0.0250	<20.0	25.3	<50.0	25.3	25.3	129
SS03	4/1/2024	0	<0.0250	<0.0250	<20.0	45.9	<50.0	45.9	45.9	69.4
SS04	4/1/2024	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	130
SS05	4/1/2024	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	197
SS06	5/1/2024	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	31.4
SS07	5/1/2024	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	24.3

**Notes:**

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

Grey text represents samples that have been excavated

&lt;": Laboratory Analytical result is less than reporting limit

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

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

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes





APPENDIX A

Form C-141

---

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

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

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

Incident ID	NAPP2330461091
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	Matador Resources	OGRID	228937
Contact Name	Clinton Talley	Contact Telephone	337-319-8398
Contact email	clinton.talley@matadorresources.com	Incident # (assigned by OCD)	NAPP2330461091
Contact mailing address	5347 N. 26th Street 2nd Floor, Artesia, NM 88210		

Location of Release Source

Latitude 32.44185 Longitude -103.54746  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Merchant CTB	Site Type	Fire
Date Release Discovered	10/31/23	API# (if applicable)	

Unit Letter	Section	Township	Range	County
L	35	21S	33E	Lea

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

Nature and Volume of Release

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

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

Cause of Release
Fire on location.

## Initial Response

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

Released to Imaging: 5/13/2024 10:43:33 AM



## APPENDIX B

### Well Log and Record

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# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD1 (TW-1)		WELL TAG ID NO. n/a		OSE FILE NO(S). CP-1887			
	WELL OWNER NAME(S) Advanced Energy Partners				PHONE (OPTIONAL) 832.672.4700			
	WELL OWNER MAILING ADDRESS 11490 Westheimer Rd. Suite 950				CITY Houston	STATE TX	ZIP 77077	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 26	SECONDS 29.53 N	• ACCURACY REQUIRED: ONE TENTH OF A SECOND • DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NE NE NE Sec. 35 T21S R33E								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 10/07/2021	DRILLING ENDED 10/07/2021	DEPTH OF COMPLETED WELL (FT) temporary well material		BORE HOLE DEPTH (FT) 103	DEPTH WATER FIRST ENCOUNTERED (FT) n/a		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) n/a		
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger							
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	103	±6.5	Boring- HSA	-	-	-	-
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO.	CP-1887	POD NO.	1	TRN NO.	703459
LOCATION	21S.33E.35.222			WELL TAG ID NO.	—

PAGE 1 OF 2




4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	19	19	Sand, Fine-grained, poorly graded, with Caliche, Tannish White	Y ✓ N	
	19	29	10	Sand, Fine-grained, poorly graded, Brown	Y ✓ N	
	29	103	74	Sand, Fine-grained, Poorly graded, with clay, Reddish Brown	Y ✓ N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00	

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION: Temporary well materials removed and the soil boring backfilled using drill cuttings from total depth to ten feet below ground surface, then hydrated bentonite chips from ten feet below ground surface to surface.	
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Carmelo Trevino, Cameron Pruitt	

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:	
	 Jackie D. Atkins SIGNATURE OF DRILLER / PRINT SIGNEE NAME	10/27/2021 DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 06/30/2017)

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



## APPENDIX C

### Photographic Log

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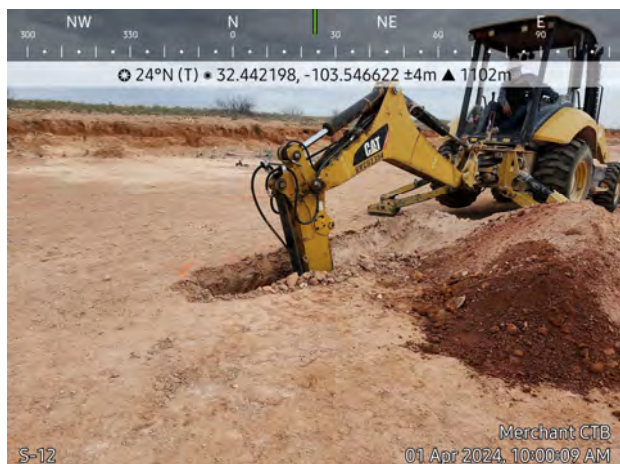


# Photographic Log

Matador Production Company

Merchant CTB

Incident Number: nAPP2330461091



Photograph 1 Date: 04/01/2024  
Description: Delineation Potholing  
View: Northeast



Photograph 2 Date: 04/01/2024  
Description: Delineation Potholing  
View: East



Photograph 3 Date: 04/01/2024  
Description: Delineation Potholing  
View: Southwest



Photograph 4 Date: 04/01/2024  
Description: Delineation Potholing  
View: West



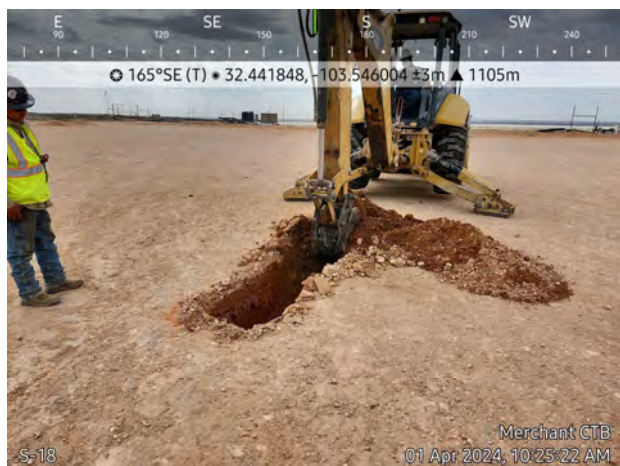


# Photographic Log

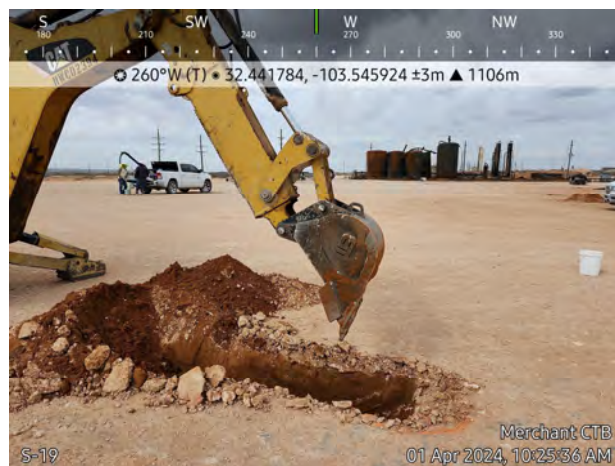
Matador Production Company

Merchant CTB

Incident Number: nAPP2330461091



Photograph 5 Date: 04/01/2024  
Description: Delineation Potholing  
View: South



Photograph 6 Date: 04/01/2024  
Description: Delineation Potholing  
View: West



Photograph 7 Date: 04/01/2024  
Description: Delineation Potholing  
View: South



Photograph 8 Date: 04/01/2024  
Description: Delineation Sampling  
View: North



# Photographic Log

Matador Production Company

Merchant CTB

Incident Number: nAPP2330461091



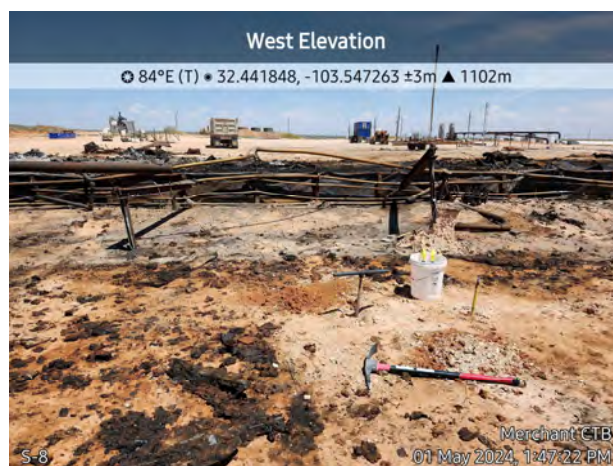
Photograph 9  
Date: 04/01/2024  
Description: Delineation Sampling  
View: North



Photograph 10  
Date: 04/01/2024  
Description: Delineation Sampling  
View: East



Photograph 11  
Date: 04/01/2024  
Description: Delineation Sampling  
View: Northeast



Photograph 12  
Date: 04/01/2024  
Description: Delineation Sampling  
View: West








## APPENDIX D


### Lithologic Soil Sampling Logs


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								Sample Name: S-1		Date: 04/1/2024	
								Site Name: Mercahnt CTB			
								Incident Number: nAPP2330461091			
								Job Number: 03A2270039			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: Chad Hamilton		Method: Hydrovac	
Coordinates: 32.44128, -103.54655								Hole Diameter: 10"		Total Depth: 4'	
Comments: Field screening conducted with HACH Chloride Test Strips and PetroFLAG for chloride and TPH, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.											
Moisture Content	Chloride (ppm)	TPH (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D			Y	S 1	0	0	SM	Silty Sand: Very loose, tan to light brown, dry, non-plastic, noncohesive, uniform, sharp			
			N	S-1	1	1	SW-SC	Sand w/ trc Clay: Red to med brown, med to fine grn sz, non-plastic, noncohesive, massive, uniform, sharp			
			N	S-1	2	2					
			N	S-1	3	3					
	ND	6	N	S-1	4	4	SC	Sandy Clay w/ sm Gravel: Red to dark brown, mostly fine to med grn sz w/ sm small gravel, dry, low plasticity, cohesive, massive, non-uniform, sharp			
Total Depth @ 4 ft bgs.											


								Sample Name: S-3		Date: 04/1/2024					
								Site Name: Mercahnt CTB							
								Incident Number: nAPP2330461091							
								Job Number: 03A2270039							
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: Chad Hamilton		Method: Backhoe					
Coordinates: 32.44128, -103.54707								Hole Diameter: 2'		Total Depth: 9'					
Comments: Field screening conducted with HACH Chloride Test Strips and PetroFLAG for chloride and TPH, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.															
Moisture Content	Chloride (ppm)	TPH (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions							
D			Y			0	SM	Silty Sand: Very loose, tan to light brown, dry, non-plastic, noncohesive, uniform, sharp							
M						1	SW-SC	Sand w/ trc Clay: Red to med brown, med to fine grn sz, non-plastic, noncohesive, massive, uniform, sharp							
M					2										
M					3										
M					4										
D	2,106		N	S-3	5	5	CCHE	Caliche Rock: lightly cemented caliche, med to coarse grn sz w/ trc small gravel, dry, non-plastic, noncohesive, massive, non-uniform, sharp							
D	280		N	S-3	6	6									
D	784		N	S-3	7	7									
D	316	33	N	S-3	8	8									
D	520		N	S-3	9	9									
Total Depth 9 ft bgs.															

								Sample Name: S-4		Date: 04/1/2024					
								Site Name: Mercahnt CTB							
								Incident Number: nAPP2330461091							
								Job Number: 03A2270039							
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: Chad Hamilton		Method: Backhoe					
Coordinates: 32.44127, -103.54727								Hole Diameter: 2'		Total Depth: 11'					
Comments: Field screening conducted with HACH Chloride Test Strips and PetroFLAG for chloride and TPH, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.															
Moisture Content	Chloride (ppm)	TPH (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions							
D			Y			0	SM	Silty Sand: Very loose, tan to light brown, dry, non-plastic, noncohesive, uniform, sharp							
						1	SW-SC	Sand w/ trc Clay: Red to med brown, med to fine grn sz, non-plastic, noncohesive, massive, uniform, sharp							
					2										
					3										
					4										
D	1,025		N	S-4	5	5	CCHE	Caliche Rock: lightly cemented caliche, med to coarse grn sz w/ trc small gravel, dry, non-plastic, noncohesive, massive, non-uniform, sharp							
D	862		N	S-4	6	6									
D	ND		N	S-4	7	7									
D	644		N	S-4	8	8									
D	319		N	S-4	9	9									
D	1,842		N	S-4	10	10									
D	465	61	N	S-4	11	11									
Total Depth @ 11 ft bgs.															


								Sample Name: S-5		Date: 03/29/2024					
								Site Name: Mercahnt CTB							
								Incident Number: nAPP2330461091							
								Job Number: 03A2270039							
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: Chad Hamilton		Method: Backhoe					
Coordinates: 32.44137, -103.54736								Hole Diameter: 2'		Total Depth: 9'					
Comments: Field screening conducted with HACH Chloride Test Strips and PetroFLAG for chloride and TPH, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.															
Moisture Content	Chloride (ppm)	TPH (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions							
D			Y			0	SM	Silty Sand: Very loose, tan to light brown, dry, non-plastic, noncohesive, uniform, sharp							
						1	SW-SC	Sand w/ trc Clay: Red to med brown, non-plastic, noncohesive, massive, uniform, sharp							
					2										
					3										
					4										
D	ND		N	S-5	5	5	CCHE	Caliche Rock: lightly cemented caliche, med to coarse grn sz w/ trc small gravel, dry, non-plastic, noncohesive, massive, non-uniform, sharp							
D	280		N	S-5	6	6									
D	862		N	S-5	7	7									
D	ND	49	N	S-5	8	8									
D	ND		N	S-5	9	9									
Total Depth @ 9 ft bgs.															


								Sample Name: S-8		Date: 5/1/2024	
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Site Name: Mercahnt CTB			
								Incident Number: nAPP2330461091			
								Job Number: 03A2270039			
Coordinates: 32.441769, -103.547296								Logged By: Chad Hamilton		Method: Hand Auger	
Hole Diameter: 3"								Total Depth: 4.5'			
Comments: Field screening conducted with HACH Chloride Test Strips and PetroFLAG for chloride and TPH, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.											
Moisture Content	Chloride (ppm)	TPH (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D			Y	S-8	0	0	SM	Silty Sand: Very loose, tan to light brown, dry, non-plastic, noncohesive, uniform, sharp			
M			N	S-8	1	1	SW-SC	Sand w/ trc Clay: Red to med brown, med to fine grn sz, non-plastic, noncohesive, massive, uniform, sharp			
M			N	S-8	2	2					
M			N	S-8	3	3					
M			N	S-8	4	4	SC	Sandy Clay w/ sm Gravel: Red to dark brown, mostly fine to med grn sz w/ sm small gravel, dry, low plasticity, cohesive, massive, non-uniform, sharp			
M	169		N	S-8	4.5	4.5					
Total Depth @ 4.5 ft bgs.											


								Sample Name: S-11		Date: 5/1/2024	
								Site Name: Merchant CTB			
								Incident Number: nAPP2330461091			
								Job Number: 03A2270039			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: Chad Hamilton		Method: Hand Auger	
Coordinates: 32.442247, -103.546842								Hole Diameter: 3"		Total Depth: 6'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D				S-11	0	0	CCHE	Caliche Pad			
D				S-11	1	1	SW-SC	Sand w/ trc Clay: Red to med brown, med to fine grn sz, non-plastic, noncohesive, massive, uniform, sharp			
D				S-11	2	2					
D				S-11	3	3					
D				S-11	4	4	CCHE	Caliche Layer			
D	42			S-11	5	5	SC	Blocky Clay: Red to med brown, fine to very fine grn sz, plastic, cohesive, massive, uniform, sharp			
D	ND			S-11	6	6					
Total Depth @ 6 ft bgs.											


								Sample Name: S-12		Date: 04/1/2024	
								Site Name: Mercahnt CTB			
								Incident Number: nAPP2330461091			
								Job Number: 03A2270039			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: Chad Hamilton		Method: Backhoe	
Coordinates: 32.44221, -103.54661								Hole Diameter: 2'		Total Depth: 5'	
Comments: Field screening conducted with HACH Chloride Test Strips and PetroFLAG for chloride and TPH, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.											
Moisture Content	Chloride (ppm)	TPH (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D			Y			0	CCHE	Caliche Pad			
						1	SW-SC	Sand w/ trc Clay: Red to med brown, non-plastic, noncohesive, massive, uniform, sharp			
					2						
					3						
					4						
M	<162	14	N	S-12	5	5					
Total Depth @ 5 ft bgs											




								Sample Name: S-15		Date: 04/1/2024					
								Site Name: Mercahnt CTB							
								Incident Number: nAPP2330461091							
								Job Number: 03A2270039							
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: Chad Hamilton		Method: Backhoe					
Coordinates: 32.44184, -103.54673								Hole Diameter: 2'		Total Depth: 6'					
Comments: Field screening conducted with HACH Chloride Test Strips and PetroFLAG for chloride and TPH, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.															
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions							
D			Y			0	CCHE	Caliche Pad							
						1	SW-SC	Caliche Rock: lightly cemented caliche, med to coarse grn sz w/ trc small gravel, dry, non-plastic, noncohesive, massive, non-uniform, sharp							
					2										
					3										
					4										
D	ND	27	N	S-15	5	5	CCHE	Caliche Rock: lightly cemented caliche, med to coarse grn sz w/ trc small gravel, dry, non-plastic, noncohesive, massive, non-uniform, sharp							
D	ND		N	S-15	6	6									
Total Depth @ 6 ft bgs.															

								Sample Name: S-18		Date: 04/1/2024					
								Site Name: Mercahnt CTB							
								Incident Number: nAPP2330461091							
								Job Number: 03A2270039							
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: Chad Hamilton		Method: Backhoe					
Coordinates: 32.44185, -103.54616								Hole Diameter: 2'		Total Depth: 2'					
Comments: Field screening conducted with HACH Chloride Test Strips and PetroFLAG for chloride and TPH, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.															
Moisture Content	Chloride (ppm)	TPH (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions							
D			Y			0	CCHE	Caliche Pad							
						1	SW-SC	Sand w/ trc Clay: Red to med brown, med to fine grn sz, non-plastic, noncohesive, massive, uniform, sharp							
M	ND	16	N	S-18	2	2									
Total Depth @ 2 ft bgs.															

								Sample Name: S-19		Date: 04/1/2024	
								Site Name: Mercahnt CTB			
								Incident Number: nAPP2330461091			
								Job Number: 03A2270039			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: Chad Hamilton		Method: Backhoe	
Coordinates: 32.44175, -103.54590								Hole Diameter: 2'		Total Depth: 2'	
Comments: Field screening conducted with HACH Chloride Test Strips and PetroFLAG for chloride and TPH, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.											
Moisture Content	Chloride (ppm)	TPH (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D			Y			0	CCHE	Caliche Pad			
						1	SW-SC	Sand w/ trc Clay: Red to med brown, med to fine grn sz, non-plastic, noncohesive, massive, uniform, sharp			
M	ND	14	N	S-19	2	2					
Total Depth @ 2 ft bgs											

								Sample Name: S-20		Date: 04/1/2024	
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Site Name: Mercahnt CTB			
								Incident Number: nAPP2330461091			
								Job Number: 03A2270039			
Coordinates: 32.44220, -103.54602								Logged By: Chad Hamilton		Method: Hydrovac	
								Hole Diameter: 10"		Total Depth: 3'	
Comments: Field screening conducted with HACH Chloride Test Strips and PetroFLAG for chloride and TPH, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.											
Moisture Content	Chloride (ppm)	TPH (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D			Y		0	0	CCHE	Caliche Pad			
					1	1	SC	Sandy Clay w/ sm Gravel: Red to dark brown, mostly fine to med grn sz w/ sm small gravel, dry, low plasticity, cohesive, massive, non-uniform, sharp			
					2	2					
	ND		N	S-20	3	3					
Total Depth @ 3 ft bgs.											

								Sample Name: S-21		Date: 04/1/2024	
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Site Name: Mercahnt CTB			
								Incident Number: nAPP2330461091			
								Job Number: 03A2270039			
Coordinates: 32.44195, -103.54601								Logged By: Chad Hamilton		Method: Hydrovac	
								Hole Diameter: 10"		Total Depth: 3'	
Comments: Field screening conducted with HACH Chloride Test Strips and PetroFLAG for chloride and TPH, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.											
Moisture Content	Chloride (ppm)	TPH (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D			Y	S-21	0	0	CCHE	Caliche Pad			
	ND	15	N	S-21	2	2	SC	Sandy Clay w/ sm Gravel: Red to dark brown, mostly fine to med grn sz w/ sm small gravel, dry, low plasticity, cohesive, massive, non-uniform, sharp			
	ND		N	S-21	3	3					
Total Depth @ 3 ft bgs.											

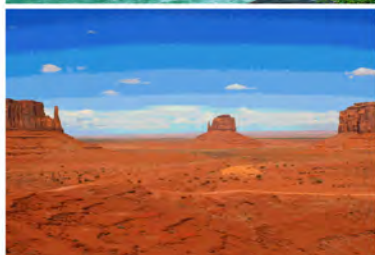


## APPENDIX E

### Laboratory Analytical Reports & Chain-of-Custody Documentation

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Report to:  
Ashley Giovengo



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Matador Resources, LLC.

Project Name: Merchant CTB

Work Order: E404011

Job Number: 23003-C-0001

Received: 4/2/2024

Revision: 2

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
4/9/24

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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

Date Reported: 4/9/24

Ashley Giovengo  
5400 LBJ Freeway, Suite 1500  
Dallas, TX 75240



Project Name: Merchant CTB  
Workorder: E404011  
Date Received: 4/2/2024 9:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 4/2/2024 9:00:00AM, under the Project Name: Merchant CTB.

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

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

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

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

Respectfully,

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



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Sample Summary

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported: 04/09/24 14:36
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
S-3 -6'	E404011-01A	Soil	03/29/24	04/02/24	Glass Jar, 2 oz.
S-3 -8'	E404011-02A	Soil	03/29/24	04/02/24	Glass Jar, 2 oz.
S-4 -6'	E404011-03A	Soil	03/29/24	04/02/24	Glass Jar, 2 oz.
S-4 -8'	E404011-04A	Soil	03/29/24	04/02/24	Glass Jar, 2 oz.
S-4 -10'	E404011-05A	Soil	03/29/24	04/02/24	Glass Jar, 2 oz.
S-4 -11'	E404011-06A	Soil	03/29/24	04/02/24	Glass Jar, 2 oz.
S-5 -6'	E404011-07A	Soil	03/29/24	04/02/24	Glass Jar, 2 oz.
S-5 -8'	E404011-08A	Soil	03/29/24	04/02/24	Glass Jar, 2 oz.
S-5 -9'	E404011-09A	Soil	03/29/24	04/02/24	Glass Jar, 2 oz.
S-15 -5'	E404011-10A	Soil	03/29/24	04/02/24	Glass Jar, 2 oz.
S-15 -6'	E404011-11A	Soil	03/29/24	04/02/24	Glass Jar, 2 oz.



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported: 4/9/2024 2:36:01PM
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S-3 -6'  
E404011-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2414029	
Benzene	ND	0.0250	1	04/02/24	04/05/24	
Ethylbenzene	ND	0.0250	1	04/02/24	04/05/24	
Toluene	ND	0.0250	1	04/02/24	04/05/24	
o-Xylene	ND	0.0250	1	04/02/24	04/05/24	
p,m-Xylene	ND	0.0500	1	04/02/24	04/05/24	
Total Xylenes	ND	0.0250	1	04/02/24	04/05/24	
Surrogate: Bromofluorobenzene		109 %	70-130	04/02/24	04/05/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	04/02/24	04/05/24	
Surrogate: Toluene-d8		101 %	70-130	04/02/24	04/05/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2414029	
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/02/24	04/05/24	
Surrogate: Bromofluorobenzene		109 %	70-130	04/02/24	04/05/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	04/02/24	04/05/24	
Surrogate: Toluene-d8		101 %	70-130	04/02/24	04/05/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2414055	
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		116 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2414031	
Chloride	247	20.0	1	04/02/24	04/02/24	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported: 4/9/2024 2:36:01PM
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S-3 -8'

E404011-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414029
Benzene	ND	0.0250	1	04/02/24	04/05/24	
Ethylbenzene	ND	0.0250	1	04/02/24	04/05/24	
Toluene	ND	0.0250	1	04/02/24	04/05/24	
o-Xylene	ND	0.0250	1	04/02/24	04/05/24	
p,m-Xylene	ND	0.0500	1	04/02/24	04/05/24	
Total Xylenes	ND	0.0250	1	04/02/24	04/05/24	
Surrogate: Bromofluorobenzene		104 %	70-130	04/02/24	04/05/24	
Surrogate: 1,2-Dichloroethane-d4		97.5 %	70-130	04/02/24	04/05/24	
Surrogate: Toluene-d8		104 %	70-130	04/02/24	04/05/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414029
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/02/24	04/05/24	
Surrogate: Bromofluorobenzene		104 %	70-130	04/02/24	04/05/24	
Surrogate: 1,2-Dichloroethane-d4		97.5 %	70-130	04/02/24	04/05/24	
Surrogate: Toluene-d8		104 %	70-130	04/02/24	04/05/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2414055
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		120 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2414031
Chloride	285	20.0	1	04/02/24	04/02/24	





Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported: 4/9/2024 2:36:01PM
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S-4 -6'

E404011-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>		mg/kg	mg/kg	Analyst: RKS		Batch: 2414029
Benzene	ND	0.0250	1	04/02/24	04/06/24	
Ethylbenzene	ND	0.0250	1	04/02/24	04/06/24	
Toluene	ND	0.0250	1	04/02/24	04/06/24	
o-Xylene	ND	0.0250	1	04/02/24	04/06/24	
p,m-Xylene	ND	0.0500	1	04/02/24	04/06/24	
Total Xylenes	ND	0.0250	1	04/02/24	04/06/24	
Surrogate: Bromofluorobenzene		105 %	70-130	04/02/24	04/06/24	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130	04/02/24	04/06/24	
Surrogate: Toluene-d8		102 %	70-130	04/02/24	04/06/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>		mg/kg	mg/kg	Analyst: RKS		Batch: 2414029
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/02/24	04/06/24	
Surrogate: Bromofluorobenzene		105 %	70-130	04/02/24	04/06/24	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130	04/02/24	04/06/24	
Surrogate: Toluene-d8		102 %	70-130	04/02/24	04/06/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>		mg/kg	mg/kg	Analyst: NV		Batch: 2414055
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		117 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>		mg/kg	mg/kg	Analyst: DT		Batch: 2414031
Chloride	1150	20.0	1	04/02/24	04/02/24	



## Sample Data

Matador Resources, LLC.  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Merchant CTB  
Project Number: 23003-C-0001  
Project Manager: Ashley Giovengo

**Reported:**  
4/9/2024 2:36:01PM

S-4 -8'

E404011-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414029
Benzene	ND	0.0250	1	04/02/24	04/06/24	
Ethylbenzene	ND	0.0250	1	04/02/24	04/06/24	
Toluene	ND	0.0250	1	04/02/24	04/06/24	
o-Xylene	ND	0.0250	1	04/02/24	04/06/24	
p,m-Xylene	ND	0.0500	1	04/02/24	04/06/24	
Total Xylenes	ND	0.0250	1	04/02/24	04/06/24	
Surrogate: Bromofluorobenzene		107 %	70-130	04/02/24	04/06/24	
Surrogate: 1,2-Dichloroethane-d4		99.7 %	70-130	04/02/24	04/06/24	
Surrogate: Toluene-d8		103 %	70-130	04/02/24	04/06/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414029
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/02/24	04/06/24	
Surrogate: Bromofluorobenzene		107 %	70-130	04/02/24	04/06/24	
Surrogate: 1,2-Dichloroethane-d4		99.7 %	70-130	04/02/24	04/06/24	
Surrogate: Toluene-d8		103 %	70-130	04/02/24	04/06/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2414055
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		113 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2414031
Chloride	552	20.0	1	04/02/24	04/02/24	



## Sample Data

Matador Resources, LLC.  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Merchant CTB  
Project Number: 23003-C-0001  
Project Manager: Ashley Giovengo

**Reported:**  
4/9/2024 2:36:01PM

S-4 -10'

E404011-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414029
Benzene	ND	0.0250	1	04/02/24	04/06/24	
Ethylbenzene	ND	0.0250	1	04/02/24	04/06/24	
Toluene	ND	0.0250	1	04/02/24	04/06/24	
o-Xylene	ND	0.0250	1	04/02/24	04/06/24	
p,m-Xylene	ND	0.0500	1	04/02/24	04/06/24	
Total Xylenes	ND	0.0250	1	04/02/24	04/06/24	
Surrogate: Bromofluorobenzene		109 %	70-130	04/02/24	04/06/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	04/02/24	04/06/24	
Surrogate: Toluene-d8		105 %	70-130	04/02/24	04/06/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414029
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/02/24	04/06/24	
Surrogate: Bromofluorobenzene		109 %	70-130	04/02/24	04/06/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	04/02/24	04/06/24	
Surrogate: Toluene-d8		105 %	70-130	04/02/24	04/06/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2414055
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		114 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2414031
Chloride	1560	20.0	1	04/02/24	04/02/24	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported: 4/9/2024 2:36:01PM
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S-4 -11'

E404011-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414029
Benzene	ND	0.0250	1	04/02/24	04/06/24	
Ethylbenzene	ND	0.0250	1	04/02/24	04/06/24	
Toluene	ND	0.0250	1	04/02/24	04/06/24	
o-Xylene	ND	0.0250	1	04/02/24	04/06/24	
p,m-Xylene	ND	0.0500	1	04/02/24	04/06/24	
Total Xylenes	ND	0.0250	1	04/02/24	04/06/24	
Surrogate: Bromofluorobenzene		104 %	70-130	04/02/24	04/06/24	
Surrogate: 1,2-Dichloroethane-d4		96.6 %	70-130	04/02/24	04/06/24	
Surrogate: Toluene-d8		104 %	70-130	04/02/24	04/06/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414029
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/02/24	04/06/24	
Surrogate: Bromofluorobenzene		104 %	70-130	04/02/24	04/06/24	
Surrogate: 1,2-Dichloroethane-d4		96.6 %	70-130	04/02/24	04/06/24	
Surrogate: Toluene-d8		104 %	70-130	04/02/24	04/06/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2414055
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		120 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2414031
Chloride	361	20.0	1	04/02/24	04/02/24	





Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported: 4/9/2024 2:36:01PM
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S-5 -6'

E404011-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414029
Benzene	ND	0.0250	1	04/02/24	04/06/24	
Ethylbenzene	ND	0.0250	1	04/02/24	04/06/24	
Toluene	ND	0.0250	1	04/02/24	04/06/24	
o-Xylene	ND	0.0250	1	04/02/24	04/06/24	
p,m-Xylene	ND	0.0500	1	04/02/24	04/06/24	
Total Xylenes	ND	0.0250	1	04/02/24	04/06/24	
Surrogate: Bromofluorobenzene		105 %	70-130	04/02/24	04/06/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	04/02/24	04/06/24	
Surrogate: Toluene-d8		104 %	70-130	04/02/24	04/06/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414029
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/02/24	04/06/24	
Surrogate: Bromofluorobenzene		105 %	70-130	04/02/24	04/06/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	04/02/24	04/06/24	
Surrogate: Toluene-d8		104 %	70-130	04/02/24	04/06/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2414055
Diesel Range Organics (C10-C28)	27.2	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		120 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2414031
Chloride	260	20.0	1	04/02/24	04/02/24	



## Sample Data

Matador Resources, LLC.  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Merchant CTB  
Project Number: 23003-C-0001  
Project Manager: Ashley Giovengo

**Reported:**  
4/9/2024 2:36:01PM

S-5 -8'

E404011-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414029
Benzene	ND	0.0250	1	04/02/24	04/05/24	
Ethylbenzene	ND	0.0250	1	04/02/24	04/05/24	
Toluene	ND	0.0250	1	04/02/24	04/05/24	
o-Xylene	ND	0.0250	1	04/02/24	04/05/24	
p,m-Xylene	ND	0.0500	1	04/02/24	04/05/24	
Total Xylenes	ND	0.0250	1	04/02/24	04/05/24	
Surrogate: Bromofluorobenzene		102 %	70-130	04/02/24	04/05/24	
Surrogate: 1,2-Dichloroethane-d4		97.9 %	70-130	04/02/24	04/05/24	
Surrogate: Toluene-d8		98.8 %	70-130	04/02/24	04/05/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414029
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/02/24	04/05/24	
Surrogate: Bromofluorobenzene		102 %	70-130	04/02/24	04/05/24	
Surrogate: 1,2-Dichloroethane-d4		97.9 %	70-130	04/02/24	04/05/24	
Surrogate: Toluene-d8		98.8 %	70-130	04/02/24	04/05/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2414055
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		121 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2414031
Chloride	166	20.0	1	04/02/24	04/02/24	



## Sample Data

Matador Resources, LLC.  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Merchant CTB  
Project Number: 23003-C-0001  
Project Manager: Ashley Giovengo

**Reported:**  
4/9/2024 2:36:01PM

S-5 -9'

E404011-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2414029	
Benzene	ND	0.0250	1	04/02/24	04/06/24	
Ethylbenzene	ND	0.0250	1	04/02/24	04/06/24	
Toluene	ND	0.0250	1	04/02/24	04/06/24	
o-Xylene	ND	0.0250	1	04/02/24	04/06/24	
p,m-Xylene	ND	0.0500	1	04/02/24	04/06/24	
Total Xylenes	ND	0.0250	1	04/02/24	04/06/24	
Surrogate: Bromofluorobenzene	102 %	70-130		04/02/24	04/06/24	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		04/02/24	04/06/24	
Surrogate: Toluene-d8	102 %	70-130		04/02/24	04/06/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2414029	
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/02/24	04/06/24	
Surrogate: Bromofluorobenzene	102 %	70-130		04/02/24	04/06/24	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		04/02/24	04/06/24	
Surrogate: Toluene-d8	102 %	70-130		04/02/24	04/06/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2414055	
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane	117 %	50-200		04/04/24	04/05/24	



## Sample Data

Matador Resources, LLC.  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Merchant CTB  
Project Number: 23003-C-0001  
Project Manager: Ashley Giovengo

**Reported:**  
4/9/2024 2:36:01PM

S-15 -5'

E404011-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414029
Benzene	ND	0.0250	1	04/02/24	04/06/24	
Ethylbenzene	ND	0.0250	1	04/02/24	04/06/24	
Toluene	ND	0.0250	1	04/02/24	04/06/24	
o-Xylene	ND	0.0250	1	04/02/24	04/06/24	
p,m-Xylene	ND	0.0500	1	04/02/24	04/06/24	
Total Xylenes	ND	0.0250	1	04/02/24	04/06/24	
Surrogate: Bromofluorobenzene		103 %	70-130	04/02/24	04/06/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	04/02/24	04/06/24	
Surrogate: Toluene-d8		103 %	70-130	04/02/24	04/06/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414029
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/02/24	04/06/24	
Surrogate: Bromofluorobenzene		103 %	70-130	04/02/24	04/06/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	04/02/24	04/06/24	
Surrogate: Toluene-d8		103 %	70-130	04/02/24	04/06/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2414055
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		117 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2414031
Chloride	38.0	20.0	1	04/02/24	04/02/24	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported: 4/9/2024 2:36:01PM
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S-15 -6'

E404011-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2414029	
Benzene	ND	0.0250	1	04/02/24	04/06/24	
Ethylbenzene	ND	0.0250	1	04/02/24	04/06/24	
Toluene	ND	0.0250	1	04/02/24	04/06/24	
o-Xylene	ND	0.0250	1	04/02/24	04/06/24	
p,m-Xylene	ND	0.0500	1	04/02/24	04/06/24	
Total Xylenes	ND	0.0250	1	04/02/24	04/06/24	
Surrogate: Bromofluorobenzene	105 %	70-130		04/02/24	04/06/24	
Surrogate: 1,2-Dichloroethane-d4	96.9 %	70-130		04/02/24	04/06/24	
Surrogate: Toluene-d8	104 %	70-130		04/02/24	04/06/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2414029	
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/02/24	04/06/24	
Surrogate: Bromofluorobenzene	105 %	70-130		04/02/24	04/06/24	
Surrogate: 1,2-Dichloroethane-d4	96.9 %	70-130		04/02/24	04/06/24	
Surrogate: Toluene-d8	104 %	70-130		04/02/24	04/06/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2414055	
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane	119 %	50-200		04/04/24	04/05/24	





QC Summary Data

Matador Resources, LLC.	Project Name:	Merchant CTB	Reported:  4/9/2024 2:36:01PM
5400 LBJ Freeway, Suite 1500	Project Number:	23003-C-0001	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2414029-BLK1) Prepared: 04/02/24 Analyzed: 04/05/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.515		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.507		0.500		101	70-130			
Surrogate: Toluene-d8	0.503		0.500		101	70-130			

LCS (2414029-BS1) Prepared: 04/02/24 Analyzed: 04/05/24

Benzene	2.55	0.0250	2.50		102	70-130			
Ethylbenzene	2.47	0.0250	2.50		98.8	70-130			
Toluene	2.38	0.0250	2.50		95.3	70-130			
o-Xylene	2.29	0.0250	2.50		91.5	70-130			
p,m-Xylene	4.55	0.0500	5.00		91.0	70-130			
Total Xylenes	6.84	0.0250	7.50		91.2	70-130			
Surrogate: Bromofluorobenzene	0.489		0.500		97.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.474		0.500		94.7	70-130			
Surrogate: Toluene-d8	0.496		0.500		99.2	70-130			

Matrix Spike (2414029-MS1) Source: E404011-08 Prepared: 04/02/24 Analyzed: 04/05/24

Benzene	2.46	0.0250	2.50	ND	98.6	48-131			
Ethylbenzene	2.38	0.0250	2.50	ND	95.2	45-135			
Toluene	2.30	0.0250	2.50	ND	92.1	48-130			
o-Xylene	2.25	0.0250	2.50	ND	90.2	43-135			
p,m-Xylene	4.49	0.0500	5.00	ND	89.8	43-135			
Total Xylenes	6.74	0.0250	7.50	ND	89.9	43-135			
Surrogate: Bromofluorobenzene	0.500		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.499		0.500		99.7	70-130			
Surrogate: Toluene-d8	0.504		0.500		101	70-130			

Matrix Spike Dup (2414029-MSD1) Source: E404011-08 Prepared: 04/02/24 Analyzed: 04/05/24

Benzene	2.46	0.0250	2.50	ND	98.2	48-131	0.346	23	
Ethylbenzene	2.37	0.0250	2.50	ND	94.9	45-135	0.400	27	
Toluene	2.31	0.0250	2.50	ND	92.2	48-130	0.174	24	
o-Xylene	2.33	0.0250	2.50	ND	93.1	43-135	3.21	27	
p,m-Xylene	4.62	0.0500	5.00	ND	92.3	43-135	2.75	27	
Total Xylenes	6.94	0.0250	7.50	ND	92.6	43-135	2.90	27	
Surrogate: Bromofluorobenzene	0.492		0.500		98.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.477		0.500		95.3	70-130			
Surrogate: Toluene-d8	0.501		0.500		100	70-130			



QC Summary Data

Matador Resources, LLC.	Project Name:	Merchant CTB	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-C-0001	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	4/9/2024 2:36:01PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2414029-BLK1) Prepared: 04/02/24 Analyzed: 04/05/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.515		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.507		0.500		101	70-130			
Surrogate: Toluene-d8	0.503		0.500		101	70-130			

LCS (2414029-BS2) Prepared: 04/02/24 Analyzed: 04/05/24

Gasoline Range Organics (C6-C10)	51.0	20.0	50.0		102	70-130			
Surrogate: Bromofluorobenzene	0.515		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.496		0.500		99.2	70-130			
Surrogate: Toluene-d8	0.504		0.500		101	70-130			

Matrix Spike (2414029-MS2) Source: E404011-08 Prepared: 04/02/24 Analyzed: 04/05/24

Gasoline Range Organics (C6-C10)	50.0	20.0	50.0	ND	100	70-130			
Surrogate: Bromofluorobenzene	0.530		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.492		0.500		98.4	70-130			
Surrogate: Toluene-d8	0.502		0.500		100	70-130			

Matrix Spike Dup (2414029-MSD2) Source: E404011-08 Prepared: 04/02/24 Analyzed: 04/05/24

Gasoline Range Organics (C6-C10)	52.1	20.0	50.0	ND	104	70-130	3.96	20	
Surrogate: Bromofluorobenzene	0.525		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.8	70-130			
Surrogate: Toluene-d8	0.515		0.500		103	70-130			



QC Summary Data

Matador Resources, LLC.	Project Name:	Merchant CTB	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-C-0001	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	4/9/2024 2:36:01PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2414055-BLK1) Prepared: 04/04/24 Analyzed: 04/05/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	59.3		50.0		119	50-200			

LCS (2414055-BS1) Prepared: 04/04/24 Analyzed: 04/05/24

Diesel Range Organics (C10-C28)	315	25.0	250		126	38-132			
Surrogate: n-Nonane	61.7		50.0		123	50-200			

Matrix Spike (2414055-MS1) Source: E404011-03 Prepared: 04/04/24 Analyzed: 04/05/24

Diesel Range Organics (C10-C28)	313	25.0	250	ND	125	38-132			
Surrogate: n-Nonane	60.6		50.0		121	50-200			

Matrix Spike Dup (2414055-MSD1) Source: E404011-03 Prepared: 04/04/24 Analyzed: 04/05/24

Diesel Range Organics (C10-C28)	316	25.0	250	ND	126	38-132	1.10	20	
Surrogate: n-Nonane	57.8		50.0		116	50-200			



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported:  4/9/2024 2:36:01PM
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Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2414031-BLK1)					Prepared: 04/02/24 Analyzed: 04/02/24				
Chloride	ND	20.0							
LCS (2414031-BS1)					Prepared: 04/02/24 Analyzed: 04/02/24				
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2414031-MS1)					Source: E404003-01		Prepared: 04/02/24 Analyzed: 04/02/24		
Chloride	251	20.0	250	ND	100	80-120			
Matrix Spike Dup (2414031-MSD1)					Source: E404003-01		Prepared: 04/02/24 Analyzed: 04/02/24		
Chloride	253	20.0	250	ND	101	80-120	0.599	20	

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



Definitions and Notes

Matador Resources, LLC.	Project Name:	Merchant CTB	
5400 LBJ Freeway, Suite 1500	Project Number:	23003-C-0001	Reported:
Dallas TX, 75240	Project Manager:	Ashley Giovengo	04/09/24 14:36

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite
- DNR Did not react with the addition of acid or base.

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

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



Client: Matador Production Company	<b>Bill To</b> Attention: Ensolum LLC Address: on file City, State, Zip: Phone: 575-988-0055 Email: agiovengo@ensolum.com	<b>Lab Use Only</b>				<b>TAT</b>				<b>EPA Program</b>				
Project: Merchant CTB		Lab WO#	Job Number			1D	2D	3D	Standard	CWA	SDWA			
Project Manager: Ashley Giovengo		E 404011	23003-0001						X					
Address: 3122 National Parks Hwy		<b>Analysis and Method</b>												
City, State, Zip: Carlsbad NM, 88220		TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TCEQ TPH	BGDOC NM	GDOC TX	State				
Phone: 575-988-0055											NM	CO	UT	AZ
Email: agiovengo@ensolum.com	RCRA													
Report due by:	Remarks													

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TCEQ TPH	BGDOC NM	GDOC TX	Remarks
12:22	3/29/2024	S	1	S-3 - 6'	1							X		
12:26	3/29/2024	S	1	S-3 - 8'	2							X		
11:36	3/29/2024	S	1	S-4 - 6'	3							X		
11:50	3/29/2024	S	1	S-4 - 8'	4							X		
12:08	3/29/2024	S	1	S-4 - 10'	5							X		
13:15	3/29/2024	S	1	S-4 - 11'	6							X		
9:48	3/29/2024	S	1	S-5 - 6'	7							X		
9:53	3/29/2024	S	1	S-5 - 8'	8							X		
11:08	3/29/2024	S	1	S-5 - 9'	9							X		Test only if S-5 - 8' does not pass 100 TPH and 600 Chlorides
14:07	3/29/2024	S	1	S-15 - 5'	10							X		

**Additional Instructions:** Please CC: cburton@ensolum.com, agiovengo@ensolum.com, chamilton@ensolum.com, iestrella@ensolum.com

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.						Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 5 °C on subsequent days.					
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Lab Use Only			
		4/10/24	4:12p			4-1-24	1130	Received on ice: 0 / N			
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	T1 T2 T3			
		4-1-24	1800			4-1-24	1715				
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	AVG Temp °C			
		4-1-24	2230			4/2/24	0900	4			
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other						Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA					

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



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## Envirotech Analytical Laboratory

Printed: 4/2/2024 2:13:14PM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Matador Resources, LLC.	Date Received:	04/02/24 09:00	Work Order ID:	E404011
Phone:	(972) 371-5200	Date Logged In:	04/02/24 10:12	Logged In By:	Angelina Pineda
Email:	agiovngo@ensolum.com	Due Date:	04/08/24 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

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

Carrier: CourierComments/Resolution

Remarks on samples 9 & 11 on COC states: Test only if Sample 8 & 10 does not pass 100 TPH and 600 chlorides. By client.

Sample Turn Around Time (TAT)

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

Sample Cooler

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

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

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

Sample Container

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

Field Label

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

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

Report to:

Ashley Giovengo



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Matador Resources, LLC.

Project Name: Merchant CTB

Work Order: E404012

Job Number: 23003-C-0001

Received: 4/3/2024

Revision: 2

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
4/15/24

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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

Date Reported: 4/15/24

Ashley Giovengo  
5400 LBJ Freeway, Suite 1500  
Dallas, TX 75240



Project Name: Merchant CTB  
Workorder: E404012  
Date Received: 4/3/2024 8:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 4/3/2024 8:00:00AM, under the Project Name: Merchant CTB.

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

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

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

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

Respectfully,

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

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

Field Offices:

**Southern New Mexico Area**

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[mgonzales@envirotech-inc.com](mailto:mgonzales@envirotech-inc.com)



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Sample Summary

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported: 04/15/24 15:45
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS01 -0'	E404012-01A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.
SS02 -0'	E404012-02A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.
SS03 -0'	E404012-03A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.
SS04 -0'	E404012-04A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.
SS05 -0'	E404012-05A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.
S -1-4'	E404012-06A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.
S-12 -5'	E404012-07A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.
S-18 -2'	E404012-08A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.
S-19 -2'	E404012-09A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.
S-20 -3'	E404012-10A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.
S-21 -2'	E404012-11A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.





Case Narrative:

Project Name: Merchant CTB

Workorder: E404012

Date Received: 04-03-2024

The client requested the following sample(s) to be re-extracted and re-analyzed:

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Analysis</u>
SS03-0'	E404012-03	Nonhalogenated Organics by EPA 8015- DRO/ORO

The analytical test results summarized in this revised report represent this re-extraction and re-analysis.

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

Respectfully,

Walter Hinchman



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported: 4/15/2024 3:45:47PM
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SS01 -0'

E404012-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		106 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		102 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		106 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		102 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2414056
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		116 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2414046
Chloride	ND	20.0	1	04/03/24	04/03/24	



## Sample Data

Matador Resources, LLC.  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Merchant CTB  
Project Number: 23003-C-0001  
Project Manager: Ashley Giovengo

**Reported:**  
4/15/2024 3:45:47PM

SS02 -0'

E404012-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		109 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		102 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		109 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		102 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2414056
Diesel Range Organics (C10-C28)	25.3	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		121 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2414046
Chloride	129	20.0	1	04/03/24	04/03/24	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported: 4/15/2024 3:45:47PM
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SS03 -0'

E404012-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		105 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		106 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		105 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		106 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2415076
Diesel Range Organics (C10-C28)	45.9	25.0	1	04/04/24	04/13/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/13/24	
Surrogate: n-Nonane		88.8 %	50-200	04/04/24	04/13/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2414046
Chloride	69.4	20.0	1	04/03/24	04/04/24	



## Sample Data

Matador Resources, LLC.  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Merchant CTB  
Project Number: 23003-C-0001  
Project Manager: Ashley Giovengo

**Reported:**  
4/15/2024 3:45:47PM

SS04 -0'

E404012-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		106 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		97.9 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		103 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		106 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		97.9 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		103 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2414056
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		116 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2414046
Chloride	130	20.0	1	04/03/24	04/04/24	



## Sample Data

Matador Resources, LLC.  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Merchant CTB  
Project Number: 23003-C-0001  
Project Manager: Ashley Giovengo

**Reported:**  
4/15/2024 3:45:47PM

SS05 -0'

E404012-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		104 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		103 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		104 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		103 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2414056
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		114 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2414046
Chloride	197	20.0	1	04/03/24	04/04/24	





## Sample Data

Matador Resources, LLC.  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Merchant CTB  
Project Number: 23003-C-0001  
Project Manager: Ashley Giovengo

**Reported:**  
4/15/2024 3:45:47PM

S -1-4'

E404012-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		108 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		105 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		108 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		105 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2414056
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		109 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2414046
Chloride	22.6	20.0	1	04/03/24	04/04/24	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported: 4/15/2024 3:45:47PM
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S-12 -5'

E404012-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		106 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		97.0 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		101 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		106 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		97.0 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		101 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2414056
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		113 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2414046
Chloride	147	20.0	1	04/03/24	04/04/24	



## Sample Data

Matador Resources, LLC.  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Merchant CTB  
Project Number: 23003-C-0001  
Project Manager: Ashley Giovengo

**Reported:**  
4/15/2024 3:45:47PM

S-18 -2'

E404012-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		106 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		105 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		106 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		105 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2414056
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		112 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2414046
Chloride	ND	20.0	1	04/03/24	04/04/24	



## Sample Data

Matador Resources, LLC.  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Merchant CTB  
Project Number: 23003-C-0001  
Project Manager: Ashley Giovengo

**Reported:**  
4/15/2024 3:45:47PM

S-19 -2'

E404012-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		102 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		102 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		102 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		102 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2414056
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/06/24	
Surrogate: n-Nonane		113 %	50-200	04/04/24	04/06/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2414046
Chloride	121	20.0	1	04/03/24	04/04/24	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported: 4/15/2024 3:45:47PM
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S-20 -3'

E404012-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		111 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		106 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		102 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		111 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		106 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		102 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2414056
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/06/24	
Surrogate: n-Nonane		108 %	50-200	04/04/24	04/06/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2414046
Chloride	25.2	20.0	1	04/03/24	04/04/24	



## Sample Data

Matador Resources, LLC.  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Merchant CTB  
Project Number: 23003-C-0001  
Project Manager: Ashley Giovengo

**Reported:**  
4/15/2024 3:45:47PM

S-21 -2'

E404012-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		104 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		103 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		104 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		103 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2414056
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/06/24	
Surrogate: n-Nonane		111 %	50-200	04/04/24	04/06/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2414046
Chloride	ND	20.0	1	04/03/24	04/04/24	





QC Summary Data

Matador Resources, LLC.	Project Name:	Merchant CTB	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-C-0001	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	4/15/2024 3:45:47PM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

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

Blank (2414040-BLK1)

Prepared: 04/03/24 Analyzed: 04/08/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.523		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.493		0.500		98.5	70-130			
Surrogate: Toluene-d8	0.509		0.500		102	70-130			

LCS (2414040-BS1)

Prepared: 04/03/24 Analyzed: 04/08/24

Benzene	2.63	0.0250	2.50		105	70-130			
Ethylbenzene	2.55	0.0250	2.50		102	70-130			
Toluene	2.46	0.0250	2.50		98.4	70-130			
o-Xylene	2.42	0.0250	2.50		96.8	70-130			
p,m-Xylene	4.84	0.0500	5.00		96.7	70-130			
Total Xylenes	7.26	0.0250	7.50		96.8	70-130			
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.504		0.500		101	70-130			
Surrogate: Toluene-d8	0.497		0.500		99.4	70-130			

Matrix Spike (2414040-MS1)

Source: E404012-02

Prepared: 04/03/24 Analyzed: 04/08/24

Benzene	2.61	0.0250	2.50	ND	104	48-131			
Ethylbenzene	2.53	0.0250	2.50	ND	101	45-135			
Toluene	2.44	0.0250	2.50	ND	97.4	48-130			
o-Xylene	2.49	0.0250	2.50	ND	99.5	43-135			
p,m-Xylene	4.98	0.0500	5.00	ND	99.5	43-135			
Total Xylenes	7.47	0.0250	7.50	ND	99.5	43-135			
Surrogate: Bromofluorobenzene	0.499		0.500		99.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.513		0.500		103	70-130			
Surrogate: Toluene-d8	0.498		0.500		99.5	70-130			

Matrix Spike Dup (2414040-MSD1)

Source: E404012-02

Prepared: 04/03/24 Analyzed: 04/08/24

Benzene	2.67	0.0250	2.50	ND	107	48-131	2.33	23	
Ethylbenzene	2.62	0.0250	2.50	ND	105	45-135	3.85	27	
Toluene	2.52	0.0250	2.50	ND	101	48-130	3.47	24	
o-Xylene	2.51	0.0250	2.50	ND	100	43-135	0.920	27	
p,m-Xylene	5.04	0.0500	5.00	ND	101	43-135	1.31	27	
Total Xylenes	7.55	0.0250	7.50	ND	101	43-135	1.18	27	
Surrogate: Bromofluorobenzene	0.509		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.484		0.500		96.7	70-130			
Surrogate: Toluene-d8	0.502		0.500		100	70-130			



QC Summary Data

Matador Resources, LLC.	Project Name:	Merchant CTB	Reported:  4/15/2024 3:45:47PM
5400 LBJ Freeway, Suite 1500	Project Number:	23003-C-0001	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2414040-BLK1)

Prepared: 04/03/24 Analyzed: 04/08/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.523		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.493		0.500		98.5	70-130			
Surrogate: Toluene-d8	0.509		0.500		102	70-130			

LCS (2414040-BS2)

Prepared: 04/03/24 Analyzed: 04/08/24

Gasoline Range Organics (C6-C10)	54.9	20.0	50.0		110	70-130			
Surrogate: Bromofluorobenzene	0.514		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.492		0.500		98.3	70-130			
Surrogate: Toluene-d8	0.500		0.500		100	70-130			

Matrix Spike (2414040-MS2)

Source: E404012-02

Prepared: 04/03/24 Analyzed: 04/08/24

Gasoline Range Organics (C6-C10)	56.8	20.0	50.0	ND	114	70-130			
Surrogate: Bromofluorobenzene	0.533		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.487		0.500		97.4	70-130			
Surrogate: Toluene-d8	0.516		0.500		103	70-130			

Matrix Spike Dup (2414040-MSD2)

Source: E404012-02

Prepared: 04/03/24 Analyzed: 04/08/24

Gasoline Range Organics (C6-C10)	58.0	20.0	50.0	ND	116	70-130	2.17	20	
Surrogate: Bromofluorobenzene	0.536		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		99.0	70-130			
Surrogate: Toluene-d8	0.519		0.500		104	70-130			



QC Summary Data

Matador Resources, LLC.	Project Name:	Merchant CTB	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-C-0001	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	4/15/2024 3:45:47PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2414056-BLK1)					Prepared: 04/04/24 Analyzed: 04/05/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	56.4		50.0		113	50-200			

LCS (2414056-BS1)					Prepared: 04/04/24 Analyzed: 04/05/24				
Diesel Range Organics (C10-C28)	296	25.0	250		118	38-132			
Surrogate: n-Nonane	61.2		50.0		122	50-200			

Matrix Spike (2414056-MS1)					Source: E404012-03		Prepared: 04/04/24 Analyzed: 04/05/24		
Diesel Range Organics (C10-C28)	341	25.0	250	48.5	117	38-132			
Surrogate: n-Nonane	58.4		50.0		117	50-200			

Matrix Spike Dup (2414056-MSD1)					Source: E404012-03		Prepared: 04/04/24 Analyzed: 04/05/24		
Diesel Range Organics (C10-C28)	332	25.0	250	48.5	113	38-132	2.70	20	
Surrogate: n-Nonane	59.2		50.0		118	50-200			



QC Summary Data

Matador Resources, LLC.	Project Name:	Merchant CTB	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-C-0001	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	4/15/2024 3:45:47PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2415076-BLK1)

Prepared: 04/12/24 Analyzed: 04/13/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	47.4		50.0		94.8	50-200			

LCS (2415076-BS1)

Prepared: 04/12/24 Analyzed: 04/13/24

Diesel Range Organics (C10-C28)	280	25.0	250		112	38-132			
Surrogate: n-Nonane	50.6		50.0		101	50-200			

Matrix Spike (2415076-MS1)

Source: E404100-02

Prepared: 04/12/24 Analyzed: 04/13/24

Diesel Range Organics (C10-C28)	276	25.0	250	ND	110	38-132			
Surrogate: n-Nonane	48.7		50.0		97.4	50-200			

Matrix Spike Dup (2415076-MSD1)

Source: E404100-02

Prepared: 04/12/24 Analyzed: 04/13/24

Diesel Range Organics (C10-C28)	284	25.0	250	ND	114	38-132	2.82	20	
Surrogate: n-Nonane	50.9		50.0		102	50-200			



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported:  4/15/2024 3:45:47PM
---	--	--------------------------------------

Anions by EPA 300.0/9056A

Analyst: JM

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

Blank (2414046-BLK1)					Prepared: 04/03/24 Analyzed: 04/03/24				
Chloride	ND	20.0							
LCS (2414046-BS1)					Prepared: 04/03/24 Analyzed: 04/03/24				
Chloride	248	20.0	250		99.2	90-110			
Matrix Spike (2414046-MS1)					Source: E404012-02		Prepared: 04/03/24 Analyzed: 04/03/24		
Chloride	367	20.0	250	129	95.2	80-120			
Matrix Spike Dup (2414046-MSD1)					Source: E404012-02		Prepared: 04/03/24 Analyzed: 04/03/24		
Chloride	375	20.0	250	129	98.2	80-120	1.98	20	

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



Definitions and Notes

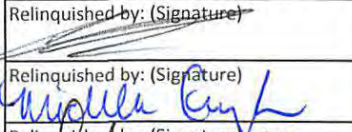
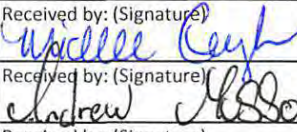
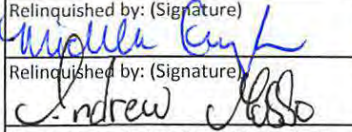
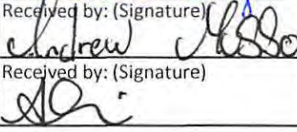
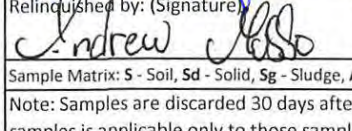
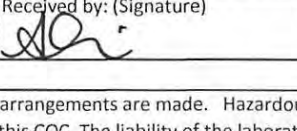
Matador Resources, LLC.	Project Name:	Merchant CTB	
5400 LBJ Freeway, Suite 1500	Project Number:	23003-C-0001	Reported:
Dallas TX, 75240	Project Manager:	Ashley Giovengo	04/15/24 15:45

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite
- DNR Did not react with the addition of acid or base.

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

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



Client: Matador Production Company				Bill To		Lab Use Only				TAT				EPA Program				
Project: Merchant CTB				Attention: Ensolum LLC		Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA			
Project Manager: Ashley Giovenego				Address: on file		E 404012		23003-C-0001					X					
Address: 3122 National Parks Hwy				City, State, Zip:		Analysis and Method										RCRA		
City, State, Zip: Carlsbad NM, 88220				Phone: 575-988-0055		TPH GRO/DRO/ORO by 8015	BTX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TCEQ TPH	BGDOC NM	GDOC TX	State				
Phone: 575-988-0055				Email: agiovenego@ensolum.com										NM	CO	UT	AZ	TX
mail: agiovenego@ensolum.com																		
Report due by:																		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number											Remarks		
11:56	4/1/2024	S	1	SS01 - 0'	1													
10:47	4/1/2024	S	1	SS02 - 0'	2													
10:56	4/1/2024	S	1	SS03 - 0'	3													
11:06	4/1/2024	S	1	SS04 - 0'	4													
11:13	4/1/2024	S	1	SS05 - 0'	5													
10:18	4/1/2024	S	1	S-1 - 4'	6													
9:33	4/1/2024	S	1	S-12 - 5'	7													
10:17	4/1/2024	S	1	S-18 - 2'	8													
10:26	4/1/2024	S	1	S-19 - 2'	9													
8:30	4/1/2024	S	1	S-20 - 3'	10													
Additional Instructions: Please CC: cburton@ensolum.com, agiovenego@ensolum.com, chamilton@ensolum.com, iestrella@ensolum.com																		
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																		
Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.																		
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Lab Use Only										
		04/2/24	1015			4-2-24	1015	Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N										
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	T1										
		4-2-24	1600			4-2-24	1800	T2										
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	T3										
		4-2-24	2400			4/3/24	0800	AVG Temp °C 4										
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other																		
Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA																		
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																		





Page 24 of 27

## Envirotech Analytical Laboratory

Printed: 4/3/2024 9:32:35AM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client: Matador Resources, LLC.  
 Phone: (972) 371-5200  
 Email: agiovngo@ensolum.com

Date Received: 04/03/24 08:00  
 Date Logged In: 04/02/24 16:44  
 Due Date: 04/09/24 17:00 (4 day TAT)

Work Order ID: E404012  
 Logged In By: Alexa Michaels

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

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

Carrier: CourierComments/ResolutionSample Turn Around Time (TAT)

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

Sample Cooler

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

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

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

Sample Container

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

Field Label

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

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.



## Project Information

## Chain of Custody

Page 1 of 2

Client: Matador Production Company				Bill To		Lab Use Only				TAT				EPA Program			
Project: Merchant CTB				Attention: Ensolum LLC		Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA		
Project Manager: Ashley Giovengo				Address: on file		E 404012		23003-C-0001					X				
Address: 3122 National Parks Hwy				City, State, Zip:		Analysis and Method									RCRA		
City, State, Zip: Carlsbad NM, 88220				Phone: 575-988-0055		TPH GRO/DRO/ORO by	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TCEQ TPH	BGDOC NM	TX	State			
Phone: 575-988-0055				Email: agiovengo@ensolum.com		8015								NM	CO		
Email: agiovengo@ensolum.com														UT	AZ		
Report due by:														TX			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number											Remarks	
11:56	4/1/2024	S	1	SS01 - 0'	1												
10:47	4/1/2024	S	1	SS02 - 0'	2												
10:56	4/1/2024	S	1	SS03 - 0'	3											Sample Return/ Reextract per client. 4/13/24	
11:06	4/1/2024	S	1	SS04 - 0'	4												
11:13	4/1/2024	S	1	SS05 - 0'	5												
10:18	4/1/2024	S	1	S-1 - 4'	6												
9:33	4/1/2024	S	1	S-12 - 5'	7												
10:17	4/1/2024	S	1	S-18 - 2'	8												
10:26	4/1/2024	S	1	S-19 - 2'	9												
8:30	4/1/2024	S	1	S-20 - 3'	10												

Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, chamilton@ensolum.com, iestrella@ensolum.com

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

Sampled by: Chad Hamilton, Isreal Estrella, Omar Hamdy

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C 4
<i>Isreal Estrella</i>	4/2/24	1015	<i>Andrew HSSO</i>	4-2-24	1800	
<i>Andrew HSSO</i>	4-2-24	2400	<i>AD</i>	4/3/24	0800	

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

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

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



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Report to:  
Ashley Giovengo



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Matador Resources, LLC.

Project Name: Merchant CTB

Work Order: E404012

Job Number: 23003-C-0001

Received: 4/3/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
4/9/24

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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

Date Reported: 4/9/24

Ashley Giovengo  
5400 LBJ Freeway, Suite 1500  
Dallas, TX 75240



Project Name: Merchant CTB  
Workorder: E404012  
Date Received: 4/3/2024 8:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 4/3/2024 8:00:00AM, under the Project Name: Merchant CTB.

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

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

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

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

Respectfully,

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

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

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

Field Offices:

**Southern New Mexico Area**

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[mgonzales@envirotech-inc.com](mailto:mgonzales@envirotech-inc.com)

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

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Sample Summary

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported: 04/09/24 12:16
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS01 -0'	E404012-01A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.
SS02 -0'	E404012-02A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.
SS03 -0'	E404012-03A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.
SS04 -0'	E404012-04A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.
SS05 -0'	E404012-05A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.
S -1-4'	E404012-06A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.
S-12 -5'	E404012-07A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.
S-18 -2'	E404012-08A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.
S-19 -2'	E404012-09A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.
S-20 -3'	E404012-10A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.
S-21 -2'	E404012-11A	Soil	04/01/24	04/03/24	Glass Jar, 2 oz.



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported: 4/9/2024 12:16:22PM
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SS01 -0'

E404012-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2414040	
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		106 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		102 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2414040	
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		106 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		102 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KM		Batch: 2414056	
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		116 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: JM		Batch: 2414046	
Chloride	ND	20.0	1	04/03/24	04/03/24	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported: 4/9/2024 12:16:22PM
---	--	----------------------------------

SS02 -0'

E404012-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		109 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		102 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		109 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		102 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2414056
Diesel Range Organics (C10-C28)	25.3	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		121 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2414046
Chloride	129	20.0	1	04/03/24	04/03/24	



## Sample Data

Matador Resources, LLC.  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Merchant CTB  
Project Number: 23003-C-0001  
Project Manager: Ashley Giovengo

**Reported:**  
4/9/2024 12:16:22PM

SS03 -0'

E404012-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		105 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		106 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		105 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		106 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2414056
Diesel Range Organics (C10-C28)	48.5	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	55.1	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		115 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2414046
Chloride	69.4	20.0	1	04/03/24	04/04/24	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported: 4/9/2024 12:16:22PM
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SS04 -0'

E404012-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		106 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		97.9 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		103 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		106 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		97.9 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		103 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2414056
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		116 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2414046
Chloride	130	20.0	1	04/03/24	04/04/24	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported: 4/9/2024 12:16:22PM
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SS05 -0'

E404012-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		104 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		103 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		104 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		103 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2414056
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		114 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2414046
Chloride	197	20.0	1	04/03/24	04/04/24	



## Sample Data

Matador Resources, LLC.  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Merchant CTB  
Project Number: 23003-C-0001  
Project Manager: Ashley Giovengo

**Reported:**  
4/9/2024 12:16:22PM

S -1-4'

E404012-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		108 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		105 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		108 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		105 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2414056
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		109 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2414046
Chloride	22.6	20.0	1	04/03/24	04/04/24	





Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported: 4/9/2024 12:16:22PM
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S-12 -5'  
E404012-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		106 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		97.0 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		101 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		106 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		97.0 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		101 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2414056
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		113 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2414046
Chloride	147	20.0	1	04/03/24	04/04/24	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported: 4/9/2024 12:16:22PM
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S-18 -2'  
E404012-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		106 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		105 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		106 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		105 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2414056
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/05/24	
Surrogate: n-Nonane		112 %	50-200	04/04/24	04/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2414046
Chloride	ND	20.0	1	04/03/24	04/04/24	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported: 4/9/2024 12:16:22PM
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S-19 -2'  
E404012-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		102 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		102 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		102 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		102 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2414056
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/06/24	
Surrogate: n-Nonane		113 %	50-200	04/04/24	04/06/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2414046
Chloride	121	20.0	1	04/03/24	04/04/24	



## Sample Data

Matador Resources, LLC.  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Merchant CTB  
Project Number: 23003-C-0001  
Project Manager: Ashley Giovengo

**Reported:**  
4/9/2024 12:16:22PM

S-20 -3'

E404012-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		111 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		106 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		102 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		111 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		106 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		102 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2414056
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/06/24	
Surrogate: n-Nonane		108 %	50-200	04/04/24	04/06/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2414046
Chloride	25.2	20.0	1	04/03/24	04/04/24	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported: 4/9/2024 12:16:22PM
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S-21 -2'

E404012-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Benzene	ND	0.0250	1	04/03/24	04/08/24	
Ethylbenzene	ND	0.0250	1	04/03/24	04/08/24	
Toluene	ND	0.0250	1	04/03/24	04/08/24	
o-Xylene	ND	0.0250	1	04/03/24	04/08/24	
p,m-Xylene	ND	0.0500	1	04/03/24	04/08/24	
Total Xylenes	ND	0.0250	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		104 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		103 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2414040
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/24	04/08/24	
Surrogate: Bromofluorobenzene		104 %	70-130	04/03/24	04/08/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	04/03/24	04/08/24	
Surrogate: Toluene-d8		103 %	70-130	04/03/24	04/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2414056
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/06/24	
Surrogate: n-Nonane		111 %	50-200	04/04/24	04/06/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2414046
Chloride	ND	20.0	1	04/03/24	04/04/24	



QC Summary Data

Matador Resources, LLC.	Project Name:	Merchant CTB	Reported:  4/9/2024 12:16:22PM
5400 LBJ Freeway, Suite 1500	Project Number:	23003-C-0001	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2414040-BLK1) Prepared: 04/03/24 Analyzed: 04/08/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.523		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.493		0.500		98.5	70-130			
Surrogate: Toluene-d8	0.509		0.500		102	70-130			

LCS (2414040-BS1) Prepared: 04/03/24 Analyzed: 04/08/24

Benzene	2.63	0.0250	2.50		105	70-130			
Ethylbenzene	2.55	0.0250	2.50		102	70-130			
Toluene	2.46	0.0250	2.50		98.4	70-130			
o-Xylene	2.42	0.0250	2.50		96.8	70-130			
p,m-Xylene	4.84	0.0500	5.00		96.7	70-130			
Total Xylenes	7.26	0.0250	7.50		96.8	70-130			
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.504		0.500		101	70-130			
Surrogate: Toluene-d8	0.497		0.500		99.4	70-130			

Matrix Spike (2414040-MS1) Source: E404012-02 Prepared: 04/03/24 Analyzed: 04/08/24

Benzene	2.61	0.0250	2.50	ND	104	48-131			
Ethylbenzene	2.53	0.0250	2.50	ND	101	45-135			
Toluene	2.44	0.0250	2.50	ND	97.4	48-130			
o-Xylene	2.49	0.0250	2.50	ND	99.5	43-135			
p,m-Xylene	4.98	0.0500	5.00	ND	99.5	43-135			
Total Xylenes	7.47	0.0250	7.50	ND	99.5	43-135			
Surrogate: Bromofluorobenzene	0.499		0.500		99.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.513		0.500		103	70-130			
Surrogate: Toluene-d8	0.498		0.500		99.5	70-130			

Matrix Spike Dup (2414040-MSD1) Source: E404012-02 Prepared: 04/03/24 Analyzed: 04/08/24

Benzene	2.67	0.0250	2.50	ND	107	48-131	2.33	23	
Ethylbenzene	2.62	0.0250	2.50	ND	105	45-135	3.85	27	
Toluene	2.52	0.0250	2.50	ND	101	48-130	3.47	24	
o-Xylene	2.51	0.0250	2.50	ND	100	43-135	0.920	27	
p,m-Xylene	5.04	0.0500	5.00	ND	101	43-135	1.31	27	
Total Xylenes	7.55	0.0250	7.50	ND	101	43-135	1.18	27	
Surrogate: Bromofluorobenzene	0.509		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.484		0.500		96.7	70-130			
Surrogate: Toluene-d8	0.502		0.500		100	70-130			



QC Summary Data

Matador Resources, LLC.	Project Name:	Merchant CTB	Reported:  4/9/2024 12:16:22PM
5400 LBJ Freeway, Suite 1500	Project Number:	23003-C-0001	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2414040-BLK1) Prepared: 04/03/24 Analyzed: 04/08/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.523		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.493		0.500		98.5	70-130			
Surrogate: Toluene-d8	0.509		0.500		102	70-130			

LCS (2414040-BS2) Prepared: 04/03/24 Analyzed: 04/08/24

Gasoline Range Organics (C6-C10)	54.9	20.0	50.0		110	70-130			
Surrogate: Bromofluorobenzene	0.514		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.492		0.500		98.3	70-130			
Surrogate: Toluene-d8	0.500		0.500		100	70-130			

Matrix Spike (2414040-MS2) Source: E404012-02 Prepared: 04/03/24 Analyzed: 04/08/24

Gasoline Range Organics (C6-C10)	56.8	20.0	50.0	ND	114	70-130			
Surrogate: Bromofluorobenzene	0.533		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.487		0.500		97.4	70-130			
Surrogate: Toluene-d8	0.516		0.500		103	70-130			

Matrix Spike Dup (2414040-MSD2) Source: E404012-02 Prepared: 04/03/24 Analyzed: 04/08/24

Gasoline Range Organics (C6-C10)	58.0	20.0	50.0	ND	116	70-130	2.17	20	
Surrogate: Bromofluorobenzene	0.536		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		99.0	70-130			
Surrogate: Toluene-d8	0.519		0.500		104	70-130			





QC Summary Data

Matador Resources, LLC.	Project Name:	Merchant CTB	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-C-0001	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	4/9/2024 12:16:22PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2414056-BLK1) Prepared: 04/04/24 Analyzed: 04/05/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	56.4		50.0		113	50-200			

LCS (2414056-BS1) Prepared: 04/04/24 Analyzed: 04/05/24

Diesel Range Organics (C10-C28)	296	25.0	250		118	38-132			
Surrogate: n-Nonane	61.2		50.0		122	50-200			

Matrix Spike (2414056-MS1) Source: E404012-03 Prepared: 04/04/24 Analyzed: 04/05/24

Diesel Range Organics (C10-C28)	341	25.0	250	48.5	117	38-132			
Surrogate: n-Nonane	58.4		50.0		117	50-200			

Matrix Spike Dup (2414056-MSD1) Source: E404012-03 Prepared: 04/04/24 Analyzed: 04/05/24

Diesel Range Organics (C10-C28)	332	25.0	250	48.5	113	38-132	2.70	20	
Surrogate: n-Nonane	59.2		50.0		118	50-200			



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-C-0001 Project Manager: Ashley Giovengo	Reported:  4/9/2024 12:16:22PM
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Anions by EPA 300.0/9056A

Analyst: JM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2414046-BLK1)					Prepared: 04/03/24 Analyzed: 04/03/24				
Chloride	ND	20.0							
LCS (2414046-BS1)					Prepared: 04/03/24 Analyzed: 04/03/24				
Chloride	248	20.0	250		99.2	90-110			
Matrix Spike (2414046-MS1)					Source: E404012-02		Prepared: 04/03/24 Analyzed: 04/03/24		
Chloride	367	20.0	250	129	95.2	80-120			
Matrix Spike Dup (2414046-MSD1)					Source: E404012-02		Prepared: 04/03/24 Analyzed: 04/03/24		
Chloride	375	20.0	250	129	98.2	80-120	1.98	20	

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



Definitions and Notes

Matador Resources, LLC.	Project Name:	Merchant CTB	
5400 LBJ Freeway, Suite 1500	Project Number:	23003-C-0001	Reported:
Dallas TX, 75240	Project Manager:	Ashley Giovengo	04/09/24 12:16

- ND Analyte NOT DETECTED at or above the reporting limit
  - NR Not Reported
  - RPD Relative Percent Difference
  - DNI Did Not Ignite
  - DNR Did not react with the addition of acid or base.
- Note (1): Methods marked with \*\* are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Client: Matador Production Company				Bill To		Lab Use Only				TAT				EPA Program						
Project: Merchant CTB				Attention: Ensolum LLC		Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA					
Project Manager: Ashley Giovenego				Address: on file		E 404012		23003-C-0001					X							
Address: 3122 National Parks Hwy				City, State, Zip:		Analysis and Method										RCRA				
City, State, Zip: Carlsbad NM, 88220				Phone: 575-988-0055		TPH GRO/DRO/ORO by 8015	BTX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TCEQ TPH	BGDOC NM	GDOC TX	State						
Phone: 575-988-0055				Email: agiovenego@ensolum.com										NM	CO	UT	AZ	TX		
mail: agiovenego@ensolum.com																				
Report due by:																				
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number											Remarks				
11:56	4/1/2024	S	1	SS01 - 0'	1															
10:47	4/1/2024	S	1	SS02 - 0'	2															
10:56	4/1/2024	S	1	SS03 - 0'	3															
11:06	4/1/2024	S	1	SS04 - 0'	4															
11:13	4/1/2024	S	1	SS05 - 0'	5															
10:18	4/1/2024	S	1	S-1 - 4'	6															
9:33	4/1/2024	S	1	S-12 - 5'	7															
10:17	4/1/2024	S	1	S-18 - 2'	8															
10:26	4/1/2024	S	1	S-19 - 2'	9															
8:30	4/1/2024	S	1	S-20 - 3'	10															

Additional Instructions: Please CC: cburton@ensolum.com, agiovenego@ensolum.com, chamilton@ensolum.com, iestrella@ensolum.com

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

Sampled by: Chad Hamilton, Isreal Estrella, Omar Hamdy

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C 4
<i>Isreal Estrella</i>	04/2/24	1015	<i>Andrew HSSO</i>	4-2-24	1015	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<i>Andrew HSSO</i>	4-2-24	1600	<i>Isreal Estrella</i>	4-2-24	1800	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<i>Andrew HSSO</i>	4-2-24	2400	<i>Isreal Estrella</i>	4/3/24	0800	

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

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

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

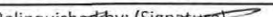







envirotech



[illegible]

**Additional Instructions:** Please CC: [cburton@ensolum.com](mailto:cburton@ensolum.com), [agiovengo@ensolum.com](mailto:agiovengo@ensolum.com), [chamilton@ensolum.com](mailto:chamilton@ensolum.com), [iestrella@ensolum.com](mailto:iestrella@ensolum.com)

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.						Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.							
Sampled by: Chad Hamilton, Isreal Estrella, Omar Hamdy													
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	<div>Lab Use Only</div> <div>Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N</div> <div>T1 _____ T2 _____ T3 _____</div> <div>AVG Temp °C <u>4</u></div>					
		4/2/24	1015			4-2-24	1015						
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time						
		4-2-24	1600			4-2-24	1800						
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time						
		4-2-24	2400			4/3/24	0800						
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____							Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA						
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.													

## Envirotech Analytical Laboratory

Printed: 4/3/2024 9:32:35AM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client: Matador Resources, LLC.  
 Phone: (972) 371-5200  
 Email: agiovngo@ensolum.com

Date Received: 04/03/24 08:00  
 Date Logged In: 04/02/24 16:44  
 Due Date: 04/09/24 17:00 (4 day TAT)

Work Order ID: E404012  
 Logged In By: Alexa Michaels

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

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

Carrier: CourierComments/ResolutionSample Turn Around Time (TAT)

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

Sample Cooler

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

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

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

Sample Container

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

Field Label

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

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

\_\_\_\_\_  
 Date



envirotech Inc.

Report to:

Ashley Giovengo



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Matador Resources, LLC.

Project Name: Merchant CTB

Work Order: E405022

Job Number: 23003-0002

Received: 5/3/2024

Revision: 0

Report Reviewed By:

**Draft**

Walter Hinchman  
Laboratory Director  
5/3/24

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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



Date Reported: 5/3/24

Ashley Giovengo  
5400 LBJ Freeway, Suite 1500  
Dallas, TX 75240



Project Name: Merchant CTB  
Workorder: E405022  
Date Received: 5/3/2024 5:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/3/2024 5:00:00AM, under the Project Name: Merchant CTB.

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

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

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

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

Respectfully,

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

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

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

Field Offices:

**Southern New Mexico Area**

**Lynn Jarboe**  
Laboratory Technical Representative  
Office: 505-421-LABS(5227)  
Cell: 505-320-4759  
[ljjarboe@envirotech-inc.com](mailto:ljjarboe@envirotech-inc.com)

**Michelle Golzaes**  
Client Representative  
Office: 505-421-LABS(5227)  
Cell: 505-947-8222  
[mgonzales@envirotech-inc.com](mailto:mgonzales@envirotech-inc.com)

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

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Sample Summary

Matador Resources, LLC.	Project Name:	Merchant CTB	Reported: 05/03/24 16:48
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS06 -0'	E405022-01A	Soil	05/01/24	05/03/24	Glass Jar, 2 oz.
SS07 -0'	E405022-02A	Soil	05/01/24	05/03/24	Glass Jar, 2 oz.
S-8 - 4.5'	E405022-03A	Soil	05/01/24	05/03/24	Glass Jar, 2 oz.
S-11 -5'	E405022-04A	Soil	05/01/24	05/03/24	Glass Jar, 2 oz.
S-11 -6'	E405022-05A	Soil	05/01/24	05/03/24	Glass Jar, 2 oz.



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 5/3/2024 4:48:11PM
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SS06 -0'

E405022-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: RAS		Batch: 2418115	
Benzene	ND	0.0250	1	05/03/24	05/03/24	
Ethylbenzene	ND	0.0250	1	05/03/24	05/03/24	
Toluene	ND	0.0250	1	05/03/24	05/03/24	
o-Xylene	ND	0.0250	1	05/03/24	05/03/24	
p,m-Xylene	ND	0.0500	1	05/03/24	05/03/24	
Total Xylenes	ND	0.0250	1	05/03/24	05/03/24	
Surrogate: 4-Bromochlorobenzene-PID	95.4 %	70-130		05/03/24	05/03/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: RAS		Batch: 2418115	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/03/24	05/03/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	104 %	70-130		05/03/24	05/03/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KM		Batch: 2418120	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/03/24	05/03/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/03/24	05/03/24	
Surrogate: n-Nonane	103 %	50-200		05/03/24	05/03/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2418123	
Chloride	31.4	20.0	1	05/03/24	05/03/24	



## Sample Data

Matador Resources, LLC.  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Merchant CTB  
Project Number: 23003-0002  
Project Manager: Ashley Giovengo

**Reported:**  
5/3/2024 4:48:11PM

SS07 -0'

E405022-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2418115
Benzene	ND	0.0250	1	05/03/24	05/03/24	
Ethylbenzene	ND	0.0250	1	05/03/24	05/03/24	
Toluene	ND	0.0250	1	05/03/24	05/03/24	
o-Xylene	ND	0.0250	1	05/03/24	05/03/24	
p,m-Xylene	ND	0.0500	1	05/03/24	05/03/24	
Total Xylenes	ND	0.0250	1	05/03/24	05/03/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.3 %	70-130		05/03/24	05/03/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2418115
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/03/24	05/03/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	103 %	70-130		05/03/24	05/03/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2418120
Diesel Range Organics (C10-C28)	ND	25.0	1	05/03/24	05/03/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/03/24	05/03/24	
<i>Surrogate: n-Nonane</i>						
	106 %	50-200		05/03/24	05/03/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2418123
Chloride	24.3	20.0	1	05/03/24	05/03/24	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 5/3/2024 4:48:11PM
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S-8 - 4.5'

E405022-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: RAS		Batch: 2418115	
Benzene	ND	0.0250	1	05/03/24	05/03/24	
Ethylbenzene	ND	0.0250	1	05/03/24	05/03/24	
Toluene	ND	0.0250	1	05/03/24	05/03/24	
o-Xylene	ND	0.0250	1	05/03/24	05/03/24	
p,m-Xylene	ND	0.0500	1	05/03/24	05/03/24	
Total Xylenes	ND	0.0250	1	05/03/24	05/03/24	
Surrogate: 4-Bromochlorobenzene-PID	93.6 %	70-130		05/03/24	05/03/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: RAS		Batch: 2418115	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/03/24	05/03/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	102 %	70-130		05/03/24	05/03/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KM		Batch: 2418120	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/03/24	05/03/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/03/24	05/03/24	
Surrogate: n-Nonane	111 %	50-200		05/03/24	05/03/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2418123	
Chloride	53.9	20.0	1	05/03/24	05/03/24	





Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Merchant CTB Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 5/3/2024 4:48:11PM
---	--	---------------------------------

S-11 -5'  
E405022-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: RAS		Batch: 2418115	
Benzene	ND	0.0250	1	05/03/24	05/03/24	
Ethylbenzene	ND	0.0250	1	05/03/24	05/03/24	
Toluene	ND	0.0250	1	05/03/24	05/03/24	
o-Xylene	ND	0.0250	1	05/03/24	05/03/24	
p,m-Xylene	ND	0.0500	1	05/03/24	05/03/24	
Total Xylenes	ND	0.0250	1	05/03/24	05/03/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.8 %	70-130		05/03/24	05/03/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: RAS		Batch: 2418115	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/03/24	05/03/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	103 %	70-130		05/03/24	05/03/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: KM		Batch: 2418120	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/03/24	05/03/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/03/24	05/03/24	
<i>Surrogate: n-Nonane</i>						
	110 %	50-200		05/03/24	05/03/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: IY		Batch: 2418123	
Chloride	48.3	20.0	1	05/03/24	05/03/24	



Definitions and Notes

Matador Resources, LLC.	Project Name:	Merchant CTB	
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	Reported:
Dallas TX, 75240	Project Manager:	Ashley Giovengo	05/03/24 16:48

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite
- DNR Did not react with the addition of acid or base.

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

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



## Chain of Custody

Page 1 of 1

Received by OCD: 5/13/2024 8:19:48 AM

Page 10 of 11

Page 121 of 130

Client Information				Invoice Information		Lab Use Only		TAT		State							
Client: Matador Production Company				Company: Ensolum LLC		Lab WO#	Job Number	1D	2D	3D	Std						
Project: Merchant CTB				Address: 3122 National Parks Hwy		E 405022	23003-0002	X									
Project Manager: Ashley Giovengo				City, State, Zip: Carlsbad NM, 88220													
Address: 3122 National Parks Hwy				Phone: 575-988-0055													
City, State, Zip: Carlsbad NM, 88220				Email: agiovengo@ensolum.com													
Phone: 575-988-0055				Miscellaneous:													
Email: agiovengo@ensolum.com																	
Sample Information										EPA Program							
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA
15:59	5/1/2024	S	1	SS06 - 0'		1						X					
14:42	5/1/2024	S	1	SS07 - 0'		2						X					
13:18	5/1/2024	S	1	S-8 - 4.5'		3						X					
11:13	5/1/2024	S	1	S-11 - 5'		4						X					
11:33	5/1/2024	S	1	S-11 - 6'		5						X					
Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, chamilton@ensolum.com, iestrella@ensolum.com																	
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																	
Sampled by: _____																	
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.  Lab Use Only Received on ice: <u>Y</u> / N  T1 _____ T2 _____ T3 _____  AVG Temp °C <u>4</u>									
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time										
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time										
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time										
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA _____																	
Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																	



envirotech

## Envirotech Analytical Laboratory

Printed: 5/3/2024 11:04:25AM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Matador Resources, LLC.	Date Received:	05/03/24 05:00	Work Order ID:	E405022
Phone:	(972) 371-5200	Date Logged In:	05/02/24 15:46	Logged In By:	Angelina Pineda
Email:	agiovngo@ensolum.com	Due Date:	05/03/24 17:00 (0 day TAT)		

**Chain of Custody (COC)**

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

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

Carrier: Courier**Comments/Resolution**

For Sample -05 (S-11 -6) : Do not run unless sample -04 (S-11 5) is >100 TPH and 600CL

**Sample Turn Around Time (TAT)**

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

**Sample Cooler**

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

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

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

**Sample Container**

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

**Field Label**

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

**Sample Preservation**

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

**Multiphase Sample Matrix**

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

**Subcontract Laboratory**

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

**Client Instruction**

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

Date



envirotech Inc.



## APPENDIX F

### Email Correspondence

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**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

QUESTIONS  
  
Action 343389

QUESTIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID:
	228937
	Action Number:
	343389
Action Type:	
[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2330461091
Incident Name	NAPP2330461091 MERCHANT CENTRAL TB @ 0
Incident Type	Fire
Incident Status	Remediation Plan Received

Location of Release Source

Please answer all the questions in this group.

Site Name	MERCHANT CENTRAL TB
Date Release Discovered	10/31/2023
Surface Owner	Private

Incident Details

Please answer all the questions in this group.

Incident Type	Fire
Did this release result in a fire or is the result of a fire	Yes
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Cause: Fire   Tank (Any)   Crude Oil   Released: 0 BBL (Unknown Released Amount)   Recovered: 0 BBL   Lost: 0 BBL.
Produced Water Released (bbls) Details	Cause: Fire   Tank (Any)   Produced Water   Released: 0 BBL (Unknown Released Amount)   Recovered: 0 BBL   Lost: 0 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.



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**Santa Fe, NM 87505**

QUESTIONS, Page 2

Action 343389

**QUESTIONS (continued)**

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID:	228937
	Action Number:	343389
	Action Type:	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more; (2) an unauthorized release of a volume that: (a) results in a fire or is the result of a fire.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

**Initial Response**

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

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	False
If all the actions described above have not been undertaken, explain why	Unable to allow anyone to get near facility to work until everything has been cleared by safety.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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.

I hereby agree and sign off to the above statement	Name: Jason Touchet Title: EHS Field Rep Email: jason.touchet@matadorresources.com Date: 05/13/2024
--	--

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**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

QUESTIONS, Page 3

Action 343389

**QUESTIONS (continued)**

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID:	228937
	Action Number:	343389
	Action Type:	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS****Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between ½ and 1 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Between ½ and 1 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

**Remediation Plan**

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

**Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	15500
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	5460
GRO+DRO (EPA SW-846 Method 8015M)	5460
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	12/01/2024
On what date will (or did) the final sampling or liner inspection occur	05/01/2024
On what date will (or was) the remediation complete(d)	12/31/2024
What is the estimated surface area (in square feet) that will be reclaimed	16862
What is the estimated volume (in cubic yards) that will be reclaimed	2498
What is the estimated surface area (in square feet) that will be remediated	114831
What is the estimated volume (in cubic yards) that will be remediated	3885

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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

QUESTIONS, Page 4

Action 343389

**QUESTIONS (continued)**

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID:	228937
	Action Number:	343389
	Action Type:	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Remediation Plan (continued)</b>	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
<b>This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:</b>	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Yes
What is the name of the NMED facility	R360
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
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.	
I hereby agree and sign off to the above statement	Name: Jason Touchet Title: EHS Field Rep Email: jason.touchet@matadorresources.com Date: 05/13/2024
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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Oil Conservation Division  
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Santa Fe, NM 87505

QUESTIONS, Page 5

Action 343389

QUESTIONS (continued)

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 343389
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

**District I**  
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QUESTIONS, Page 6  
  
Action 343389

QUESTIONS (continued)

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 343389
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	{Unavailable.}

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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

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

CONDITIONS  
  
Action 343389

CONDITIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 343389
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
scwells	Remediation plan approved. Variance approved to collect floor samples every 400 square feet from the base of the excavation. Sidewall samples will be collected every 200 square feet. Remediation closure report due to the OCD by 8/11/2024.	5/13/2024