

CARMONA RESOURCES



## SITE INFORMATION

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**Closure Report  
Cypress 2, 4 TB  
Eddy County, New Mexico  
Incident ID: nAPP2413458189  
Unit L Sec 09 T23S R27E  
32.314455°, -104.202669°**

**Crude Oil  
Point of Release: Separator 2H  
Release Date: 5/13/24  
Volume Released: 11 Barrels of Crude Oil  
Volume Recovered: 11 Barrels of Crude Oil**

**CARMONA RESOURCES**

**Prepared for:  
Marathon Oil Corporation  
990 Town and Country Blvd,  
Houston, Texas 77024**



**Prepared by:  
Carmona Resources, LLC  
310 West Wall Street  
Suite 500  
Midland, Texas 79701**

310 West Wall Street, Suite 500  
Midland TX, 79701  
432.813.1992



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July 17, 2024

Mike Bratcher  
District Supervisor  
Oil Conservation Division, District 2  
811 S. First Street  
Artesia, New Mexico 88210

**Re:** **Closure Report**  
**Cypress 2, 4 TB**  
**Marathon Oil Corporation**  
**Incident ID: nAPP2413458189**  
**Site Location: Unit L, S09, T23S, R27E**  
**(Lat 32.314455°, Long -104.202669°)**  
**Eddy County, New Mexico**

Mr. Bratcher:

On behalf of Marathon Oil Company, Carmona Resources, LLC has prepared this letter to document site activities for the Cypress 2, 4 TB. The site is located at 32.314455°, -104.202669° within Unit L, S09, T23S, R27E, in Eddy County, New Mexico (Figures 1 and 2).

### **1.0 Site Information and Background**

Based on the Notice of Release form obtained from the New Mexico Oil Conservation Division (NMOCD), the release was discovered on May 13, 2024, caused by a gasket failure on separator 2H that caused oil to spray inside and outside the secondary containment. The incident resulted in the release of nine-point-five (9.5) barrels of crude oil inside the secondary containment and one-point-five (1.5) barrels of crude oil outside the secondary containment, with eleven (11) barrels recovered in total. Refer to Figure 3. The Notice of Release form is attached in Appendix C.

### **2.0 Site Characterization and Groundwater**

The site is located within a medium karst area. Based on a review of the New Mexico Office of State Engineers and USGS databases, there is one known water source within a 0.50-mile radius of the location. The nearest identified well is located approximately 0.24 miles northeast of the site in S09, T23S, R27E, and was drilled in 2017. The well has a reported depth to groundwater of 150' below ground surface (ft bgs). A copy of the associated Summary report is attached in Appendix D.

### **3.0 NMAC Regulatory Criteria**

Per the NMOCD regulatory criteria established in 19.15.29.12 NMAC, the following criteria were utilized in assessing the site.

- Benzene: 10 milligrams per kilogram (mg/kg).
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg.
- TPH: 1,000 mg/kg (GRO + DRO).
- TPH: 2,500 mg/kg (GRO + DRO + MRO).
- Chloride: 20,000 mg/kg.

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## **4.0 Liner Inspection/Site Assessment Activities**

### Liner Inspection

On May 28, 2024, Carmona Resources, LLC conducted liner inspection activities to assess the liner's integrity within the facility. Before performing the liner inspection, the NMOCD division office was notified via the NMOCD web portal on May 22, 2024, per Subsection D of 19.15.29.12 NMAC. See Appendix C. Carmona Resources, LLC personnel inspected the liner visually and found it intact with no integrity issues. Refer to the Photolog. See Figure 4B.

### Initial Assessment

Prior to the initial assessment a third-party contractor scraped the area of concern to a depth of 0.5' bgs. On May 28, 2023, Carmona Resources, LLC was onsite to perform an initial assessment to evaluate soil impacts stemming from the release. A total of four (4) sample points (S-1 through S-4) were collected at the 0.5' scraped excavation and six (7) horizontal samples (H-1 through H-6) collected from surface to 0.5' bgs surrounding the release to assess the vertical and horizontal extent. See Figure 3 for the sample locations. For chemical analysis, the soil samples were collected and placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins Laboratories in Midland, Texas. The samples were analyzed for total petroleum hydrocarbons (TPH) by EPA method 8015, modified benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B, and chloride by EPA method 300.0. The laboratory reports, including analytical methods, results, and chain-of-custody documents, are attached in Appendix E. See Table 1 for the analytical results.

### Vertical Delineation

Vertical delineation was achieved for the areas of S-1, S-3, and S-4. The area of S-2 was not vertically delineated and showed elevated levels of TPH (GRO+DRO) at 1,090 mg/kg at a depth of 0.5' bgs. Refer to Table 1.

### Horizontal Delineation

The horizontal locations of H-1, H-2, and H-3 were below the regulatory limits for benzene, total BTEX, TPH, and chloride concentrations. The areas of H-4, H-5, and H-6 showed elevated TPH (GRO+DRO+MOR) concentrations ranging from 171 mg/kg to 208 mg/kg Refer to Table 1.

## **5.0 Remediation Activities**

### Remediation Activities

Carmona Resources personnel were on site to guide the remediation activities, collect confirmation samples, and document backfill activities. Before collecting composite confirmation samples, the NMOCD division office was notified via NMOCD web portal on June 17, 2024, per Subsection D of 19.15.29.12 NMAC. See Appendix C. After all hazards were identified, the area of S-2 was excavated to a depth of 1.0' below the surface, the areas of H-4, H-5, and H-6 were excavated to a depth of 0.5' to remove all the impacted soils. A total of thirteen (13) floor confirmation samples were collected (CS-1 through CS-13), and ten (10) sidewall samples (SW-1 through SW-10) were collected every 200 square feet to ensure the proper removal of the contaminated soils. All collected samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by EPA method

CARMONA RESOURCES



300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix E. The excavation depths and confirmation sample locations are shown in Figure 4A.

All final confirmation samples were below the regulatory requirements for TPH, BTEX, and chloride. Refer to Table 2.

Once the remediation activities were completed, the excavated areas were backfilled with clean material to surface grade. Approximately 30 cubic yards of material were excavated and transported offsite for proper disposal.

## **6.0 Conclusions**

Based on the assessment of the liner inside the facility, the results and the analytical data, no further actions are required at the site. Marathon formally requests the closure of the spill. If you have any questions regarding this report or need additional information, please contact us at 432-813-1992.

Sincerely,  
**Carmona Resources, LLC**

Clinton Merritt  
Sr. Project Manager

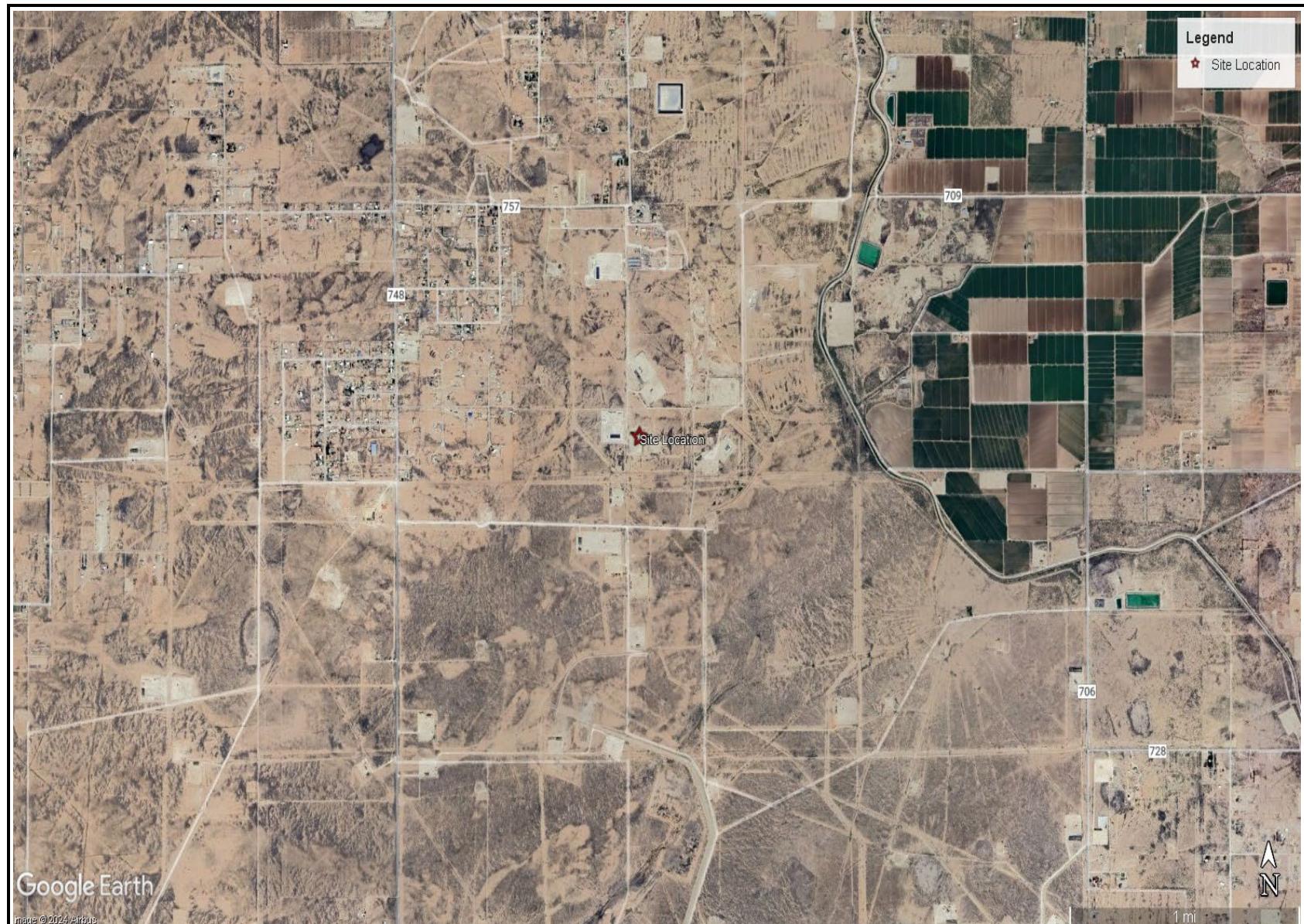
Devin Dominguez  
Sr. Project Manager

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Midland, Texas 79701  
432.813.1992

## FIGURES

CARMONA RESOURCES

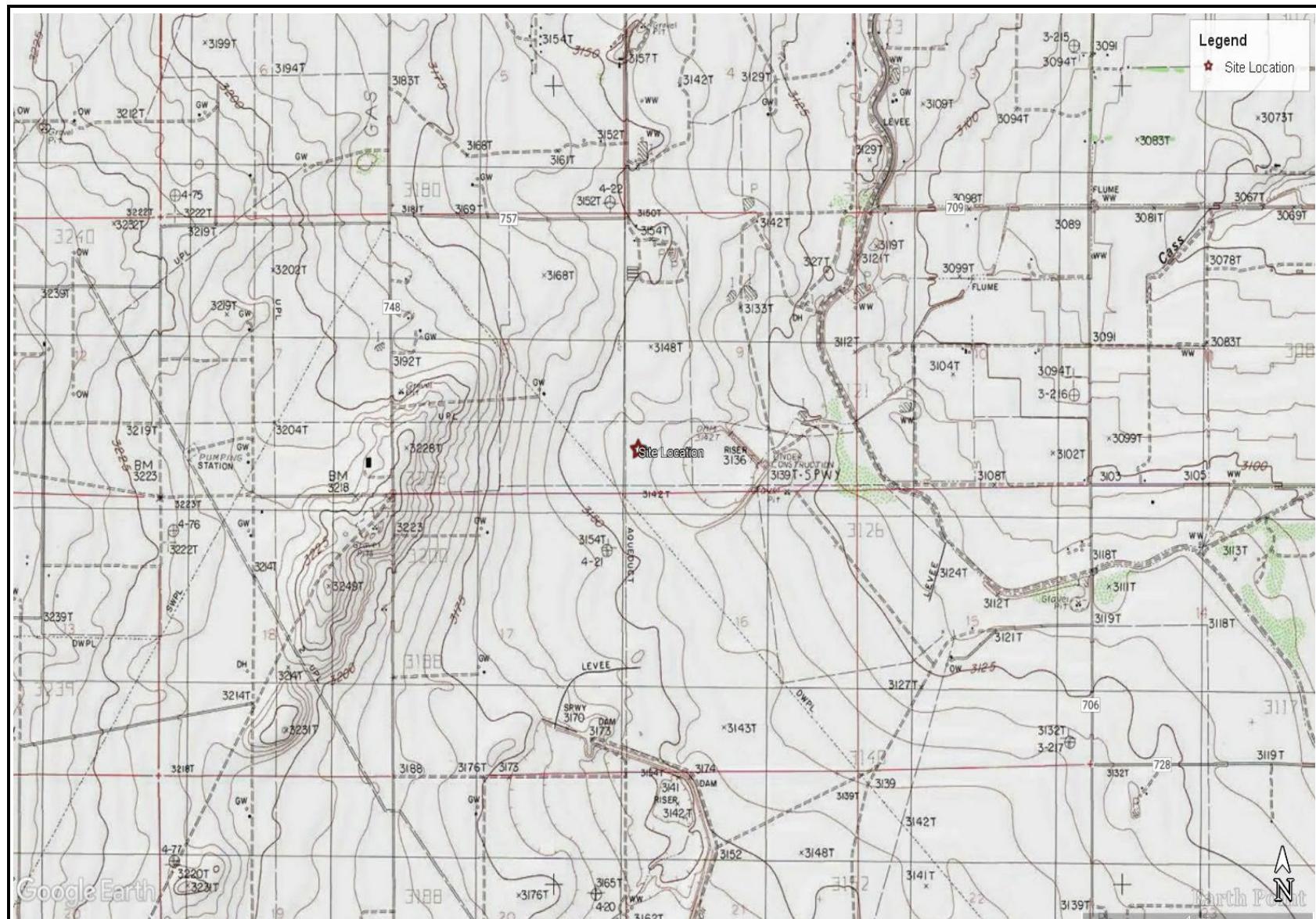




OVERVIEW MAP  
MARATHON OIL CORPORATION  
CYPRESS 2, 4 TB  
EDDY COUNTY, NEW MEXICO  
32.314455°, -104.202669°



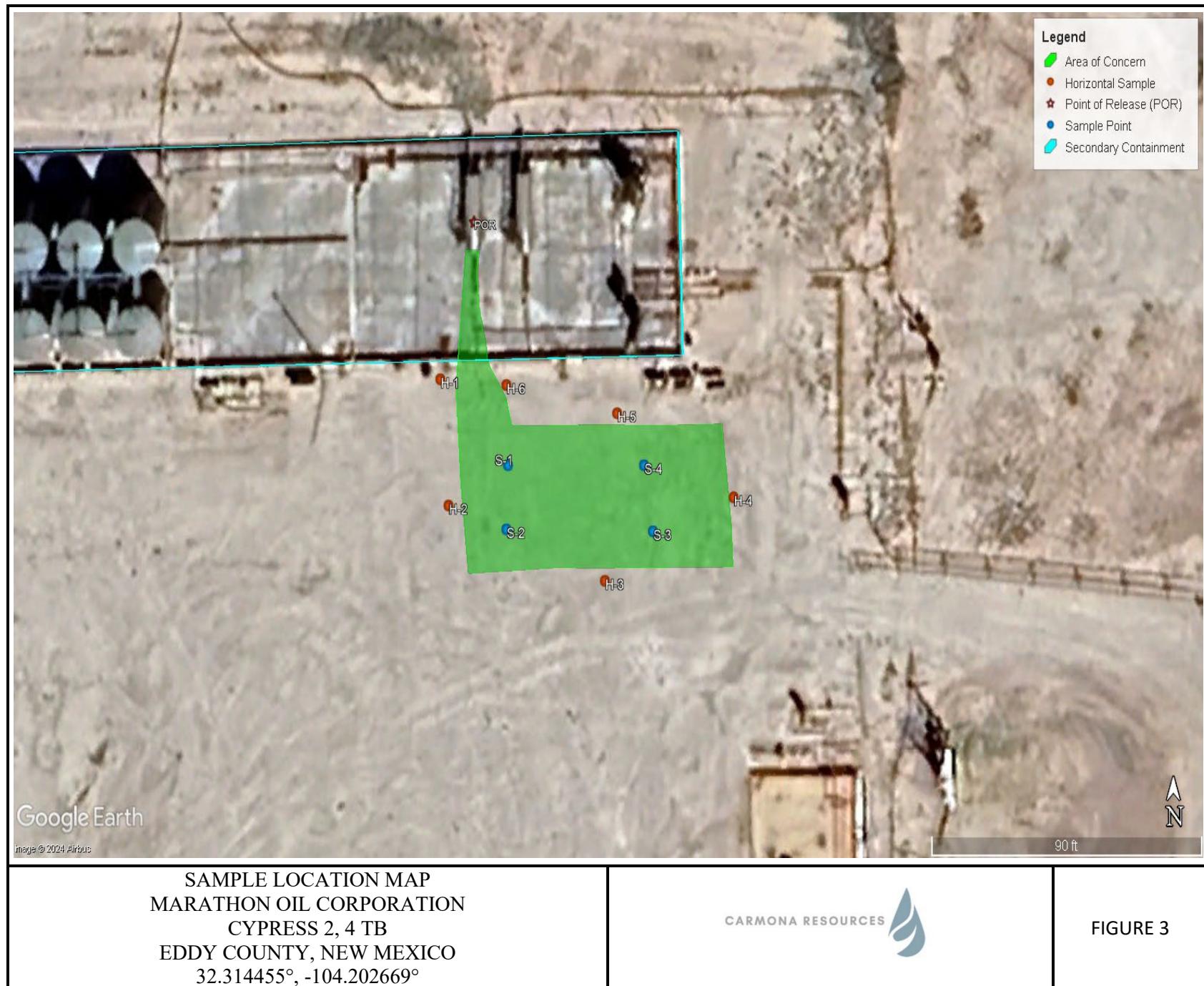
FIGURE 1

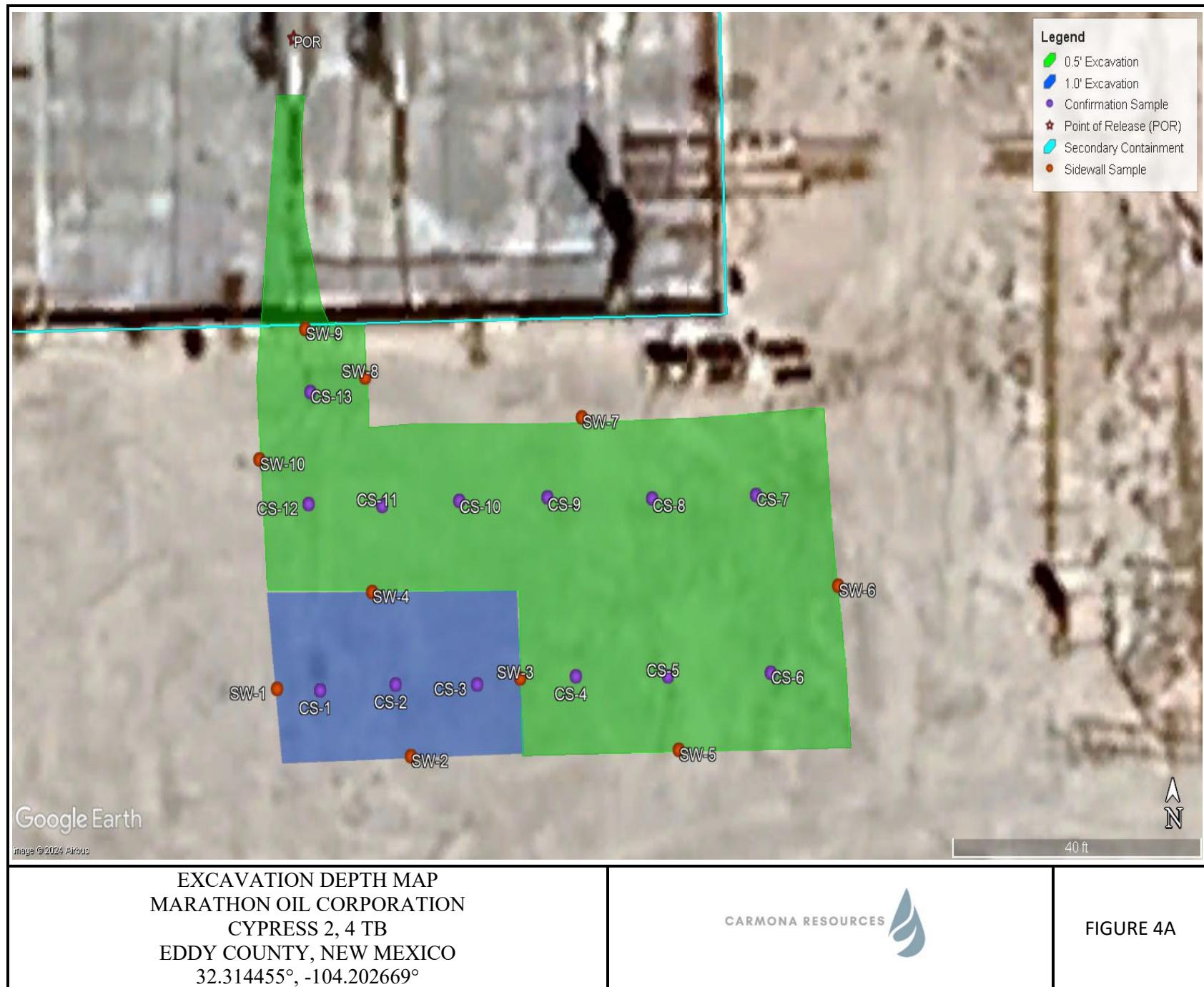


TOPOGRAPHIC MAP  
MARATHON OIL CORPORATION  
CYPRESS 2, 4 TB  
EDDY COUNTY, NEW MEXICO  
32.314455°, -104.202669°



FIGURE 2







## APPENDIX A

CARMONA RESOURCES



**Table 1**  
**Marathon Oil**  
**Cypress 2, 4 TB**  
**Eddy County, New Mexico**

Sample ID	Date	Depth (ft)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)	
			GRO	DRO	MRO	Total							
S-1	5/28/2024	0.5	<50.0	772	<50.0	772	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	551	
S-2	5/28/2024	0.5	<49.8	1,090	63.1	1,150	<0.00201	<0.00201	<0.00201	<0.00402	<0.00398	671	
S-3	5/28/2024	0.5	<49.8	787	<49.8	787	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	312	
S-4	5/28/2024	0.5	<49.9	517	<49.9	517	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	291	
H-1	5/28/2024	0-0.5	<49.9	72.6	<49.9	72.6	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	295	
H-2	5/28/2024	0-0.5	<49.7	67.3	<49.7	67.3	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	331	
H-3	5/28/2024	0-0.5	<50.0	56.5	<50.0	56.5	<0.00200	<0.00200	<0.00200	0.00426	0.00426	335	
H-4	5/28/2024	0-0.5	<49.8	208	<49.8	208	<0.00198	<0.00198	<0.00198	0.00499	0.00499	320	
H-5	5/28/2024	0-0.5	<49.9	171	<49.9	171	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	322	
H-6	5/28/2024	0-0.5	<50.0	174	<50.0	174	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	305	
<b>Regulatory Criteria<sup>A</sup></b>			1,000 mg/kg			2,500 mg/kg	10 mg/kg					50 mg/kg	20,000 mg/kg

(-) Not Analyzed

<sup>A</sup> – Table 1 - 19.15.29 NMAC

mg/kg - milligram per kilogram

TPH - Total Petroleum Hydrocarbons

ft - feet

(S) Sample Point

(H) Horizontal Sample

Removed

**Table 2**  
**Marathon Oil**  
**Cypress 2, 4 TB**  
**Eddy County, New Mexico**

Sample ID	Date	Depth (ft)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)	
			GRO	DRO	MRO	Total							
CS-1	6/19/2024	1.0	<49.8	190	<49.8	190	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	295	
CS-2	6/19/2024	1.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	287	
CS-3	6/19/2024	1.0	<49.6	<49.6	<49.6	<49.6	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	297	
CS-4	6/19/2024	0.5	<49.7	<49.7	<49.7	<49.7	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	266	
CS-5	6/19/2024	0.5	<49.7	<49.7	<49.7	<49.7	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	215	
CS-6	6/19/2024	0.5	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	242	
CS-7	6/19/2024	0.5	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	195	
CS-8	6/19/2024	0.5	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	248	
CS-9	6/19/2024	0.5	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	245	
CS-10	6/19/2024	0.5	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	4,310	
CS-11	6/19/2024	0.5	<49.8	159	<49.8	159	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	3,520	
CS-12	6/19/2024	0.5	<50.0	183	<50.0	183	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	3,410	
CS-13	6/19/2024	0.5	<49.8	178	<49.8	178	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	3,240	
<b>Regulatory Criteria<sup>A</sup></b>			1,000 mg/kg			2,500 mg/kg	10 mg/kg					50 mg/kg	20,000 mg/kg

(-) Not Analyzed

<sup>A</sup> – Table 1 - 19.15.29 NMAC

mg/kg - milligram per kilogram

TPH- Total Petroleum Hydrocarbons

ft-feet

(CS) Confirmation Sample

(SW) Sidewall Sample

**Table 2**  
**Marathon Oil**  
**Raptor West 3 State #2H**  
**Lea County, New Mexico**

Sample ID	Date	Depth (ft)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)	
			GRO	DRO	MRO	Total							
SW-1	6/19/2024	1.0	<49.7	<49.7	<49.7	<49.7	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	56.1	
SW-2	6/19/2024	1.0	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	59.9	
SW-3	6/19/2024	1.0	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	43.9	
SW-4	6/19/2024	1.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	325	
SW-5	6/19/2024	0.5	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	280	
SW-6	6/19/2024	0.5	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	330	
SW-7	6/19/2024	0.5	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	326	
SW-8	6/19/2024	0.5	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	354	
SW-9	6/19/2024	0.5	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	319	
SW-10	6/19/2024	0.5	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	308	
<b>Regulatory Criteria<sup>A</sup></b>			1,000 mg/kg			2,500 mg/kg	10 mg/kg					50 mg/kg	20,000 mg/kg

(-) Not Analyzed

<sup>A</sup> – Table 1 - 19.15.29 NMAC

mg/kg - milligram per kilogram

TPH- Total Petroleum Hydrocarbons

ft-feet

(SW) Sidewall Sample

## APPENDIX B

CARMONA RESOURCES



## PHOTOGRAPHIC LOG

Marathon Oil Corporation

### Photograph No. 1

**Facility:** Cypress 2, 4 TB

**County:** Eddy County, New Mexico

**Description:**

View East of facility sign.



### Photograph No. 2

**Facility:** Cypress 2, 4 TB

**County:** Eddy County, New Mexico

**Description:**

View Southeast, of S-1, S-2, S-3, and S-4.



### Photograph No. 3

**Facility:** Cypress 2, 4 TB

**County:** Eddy County, New Mexico

**Description:**

View Northeast, of S-1, S-2, S-3, and S-4.



## PHOTOGRAPHIC LOG

Marathon Oil Corporation

### Photograph No. 4

Facility: Cypress 2, 4 TB

County: Eddy County, New Mexico

**Description:**

View Northwest, of lined facility.



### Photograph No. 5

Facility: Cypress 2, 4 TB

County: Eddy County, New Mexico

**Description:**

View Northeast, of lined facility.



### Photograph No. 6

Facility: Cypress 2, 4 TB

County: Eddy County, New Mexico

**Description:**

View North, of lined facility.



## PHOTOGRAPHIC LOG

Marathon Oil Corporation

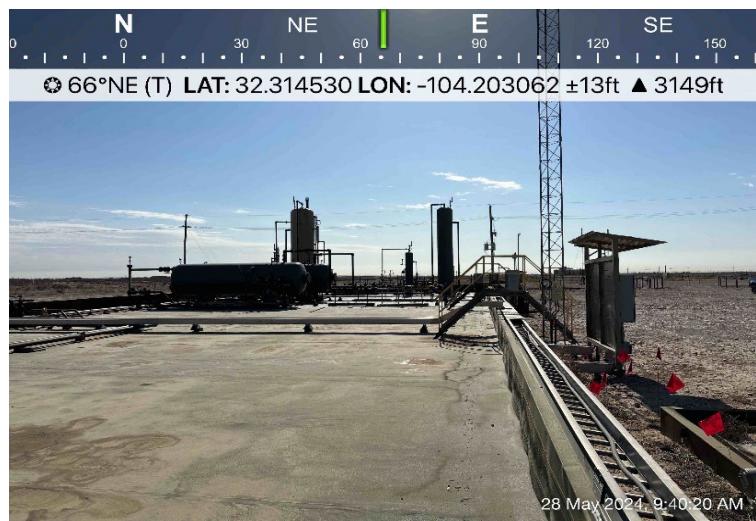
### Photograph No. 4

Facility: Cypress 2, 4 TB

County: Eddy County, New Mexico

**Description:**

View Northeast, of lined facility.



### Photograph No. 5

Facility: Cypress 2, 4 TB

County: Eddy County, New Mexico

**Description:**

View East, of lined facility.



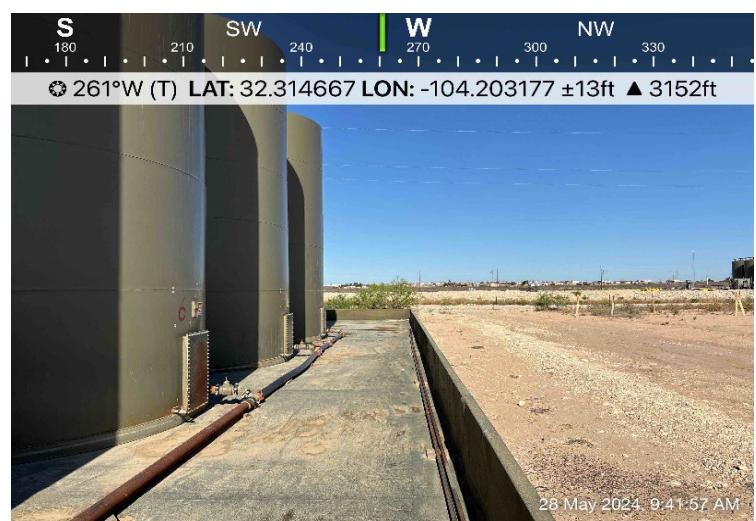
### Photograph No. 6

Facility: Cypress 2, 4 TB

County: Eddy County, New Mexico

**Description:**

View West, of lined facility.



## PHOTOGRAPHIC LOG

Marathon Oil Corporation

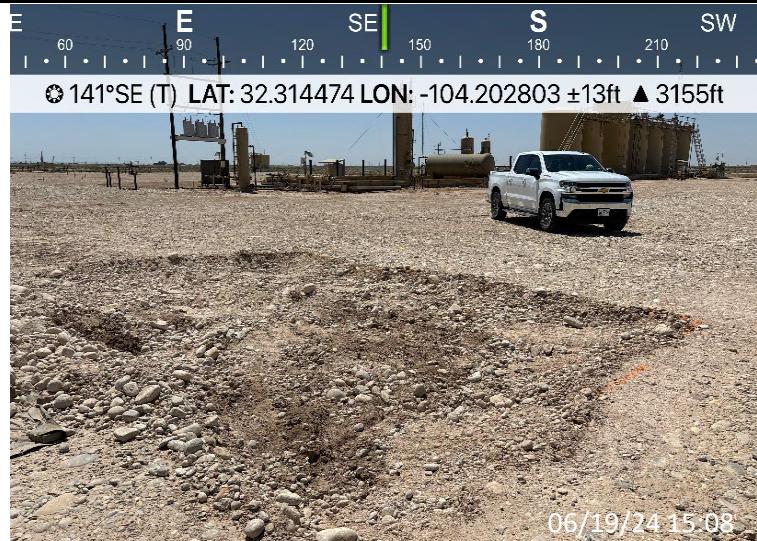
### Photograph No. 4

Facility: Cypress 2, 4 TB

County: Eddy County, New Mexico

**Description:**

View Southeast, of CS-1, CS-2, and CS-3.



### Photograph No. 5

Facility: Cypress 2, 4 TB

County: Eddy County, New Mexico

**Description:**

View Southeast, of CS-5, CS-6, CS-7 and CS-8.



### Photograph No. 6

Facility: Cypress 2, 4 TB

County: Eddy County, New Mexico

**Description:**

View Southeast, of CS-1 through CS-13.



## APPENDIX C

CARMONA RESOURCES



**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 343898

#### QUESTIONS

Operator:  MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID:  372098
	Action Number:  343898
	Action Type: [NOTIFY] Notification Of Release (NOR)

#### QUESTIONS

<b>Location of Release Source</b>	
<i>Please answer all the questions in this group.</i>	
Site Name	CYPRESS FEE 2,4 TB
Date Release Discovered	05/13/2024
Surface Owner	Private

#### Incident Details

<i>Please answer all the questions in this group.</i>	
Incident Type	Oil Release
Did this release result in a fire or is the result of a fire	No
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: Equipment Failure   Gasket   Crude Oil   Released: 11 BBL   Recovered: 11 BBL   Lost: 0 BBL.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	Not answered.
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)	Approximately 8.18 bbls contained inside lined secondary containment and approximately 2.37 bbls over sprayed onto the pad.

**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, Page 2

Action 343898

**QUESTIONS (continued)**

Operator:  MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 343898
	Action Type: [NOTIFY] Notification Of Release (NOR)

**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	No
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>

*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.*

<b>Initial Response</b>	
<i>The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.</i>	
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	True
If all the actions described above have not been undertaken, explain why	<i>Not answered.</i>

*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 19.15.29.11(A)(5)(a) NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.*

**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**

## ACKNOWLEDGMENTS

Action 343898

**ACKNOWLEDGMENTS**

Operator:  MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 343898
	Action Type: [NOTIFY] Notification Of Release (NOR)

**ACKNOWLEDGMENTS**

<input checked="" type="checkbox"/>	I acknowledge that I am authorized to submit notification of a release on behalf of my operator.
<input checked="" type="checkbox"/>	I acknowledge that upon submitting this application, I will be creating a new incident file (assigned to my operator) to track the notification(s) and corrective action(s) for a release, pursuant to NMAC 19.15.29.
<input checked="" type="checkbox"/>	I acknowledge that creating a new incident file will require my operator to file subsequent submission(s) of form "C-141, Application for administrative approval of a release notification and corrective action", pursuant to NMAC 19.15.29.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	I acknowledge the fact that 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.
<input checked="" type="checkbox"/>	I acknowledge the fact that, 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.

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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

CONDITIONS

Action 343898

#### CONDITIONS

Operator:  MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 343898
	Action Type: [NOTIFY] Notification Of Release (NOR)

#### CONDITIONS

Created By	Condition	Condition Date
icastro	When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.	5/13/2024

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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

Action 354811

#### QUESTIONS

Operator:  MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 354811
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

#### QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2413458189
Incident Name	NAPP2413458189 CYPRESS FEE 2,4 TB @ 0
Incident Type	Oil Release
Incident Status	Initial C-141 Approved
Incident Facility	[fAPP2125247655] CYPRESS FEE 24 TB

Location of Release Source	
Site Name	CYPRESS FEE 2,4 TB
Date Release Discovered	05/13/2024
Surface Owner	Private

Sampling Event General Information	
<i>Please answer all the questions in this group.</i>	
What is the sampling surface area in square feet	2,400
What is the estimated number of samples that will be gathered	23
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	06/19/2024
Time sampling will commence	02:00 PM

**Warning:** Notification can not be less than two business days prior to conducting final sampling.

Please provide any information necessary for observers to contact samplers	Clinton Merritt 432-813-9044
Please provide any information necessary for navigation to sampling site	From the intersection of CR 757 and CR 748, travel east on CR757 for 1.0 miles. Turn right (south) onto unmarked lease road and travel 0.83 miles. Job site is on the immediate right (east) side of the unmarked lease road.

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

CONDITIONS

Action 354811

**CONDITIONS**

Operator:  MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 354811
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**CONDITIONS**

Created By	Condition	Condition Date
icastro	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	6/17/2024

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**Oil Conservation Division**  
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**Santa Fe, NM 87505**

QUESTIONS

Action 346829

**QUESTIONS**

Operator:  MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 346829
	Action Type: [NOTIFY] Notification Of Liner Inspection (C-141L)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2413458189
Incident Name	NAPP2413458189 CYPRESS FEE 2,4 TB @ 0
Incident Type	Oil Release
Incident Status	Notification Accepted
Incident Facility	[fAPP2125247655] CYPRESS FEE 24 TB

Location of Release Source	
Site Name	CYPRESS FEE 2,4 TB
Date Release Discovered	05/13/2024
Surface Owner	Private

Liner Inspection Event Information	
<i>Please answer all the questions in this group.</i>	
What is the liner inspection surface area in square feet	16,203
Have all the impacted materials been removed from the liner	Yes
Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	05/28/2024
Time liner inspection will commence	08:00 AM
Please provide any information necessary for observers to liner inspection	Clinton Merritt 432-813-9044
Please provide any information necessary for navigation to liner inspection site	From the intersection of CR 757 and CR 748, travel east on CR757 for 1.0 miles. Turn right (south) onto unmarked lease road and travel 0.83 miles. Job site is on the immediate right (east) side of the unmarked lease road.

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CONDITIONS

Action 346829

**CONDITIONS**

Operator:  MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 346829
	Action Type: [NOTIFY] Notification Of Liner Inspection (C-141L)

**CONDITIONS**

Created By	Condition	Condition Date
icastro	Failure to notify the OCD of liner inspections including any changes in date/time per the requirements of 19.15.29.11.A(5)(a)(ii) NMAC, may result in the inspection not being accepted.	5/22/2024

## APPENDIX D

CARMONA RESOURCES

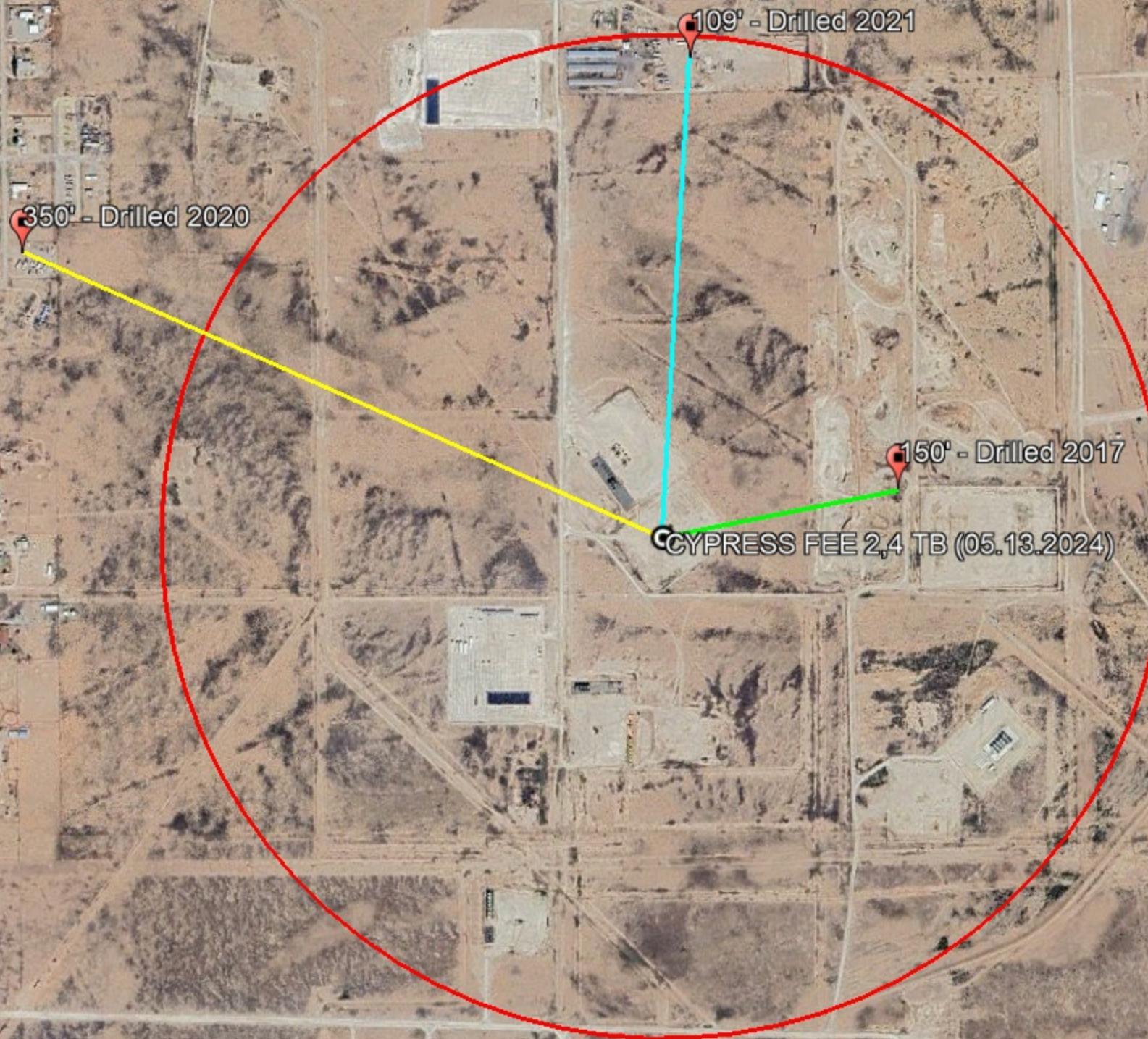


**Nearest Water Well**

MARATHON OIL PERMIAN LLC

**Legend**

- 0.24 Miles
- 0.48 Miles
- 0.50 Mile Radius
- 0.70 Miles
- CYPRESS FEE 2,4 TB (05.13.2024)
- NMSEO Water Well



# Medium Karst

MARATHON OIL PERMIAN LLC

## Legend

- CYPRESS FEE 2,4 TB (05.13.2024)
- High
- Medium

CYPRESS FEE 2,4 TB (05.13.2024)

Google Earth

Released to Imaging: 8/6/2024 11:32:53 AM

Image © 2024 Airbus

N

2000 ft



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-		Code	basin	County	64	16	4	Sec	Tws	Rng	X	Y	Distance	Depth	Depth	Water	
	Q	Q													Well	Water	Column	
C 04044 POD1	CUB	ED	3	2	3	09	23S	27E	575504	3575907		381	290	150	140			
C 04581 POD1	C	ED	3	1	1	09	23S	27E	575167	3576589		762	165	109	56			
C 00195	CUB	ED	4	1	4	09	23S	27E	576069	3575827*		938	128	83	45			
C 04429 POD1	C	ED	4	4	1	08	23S	27E	574102	3576270		1120	400	350	50			
C 00420	C	CUB	ED		4	2	09	23S	27E	576370	3576337*		1339	2151				
C 00323	C	ED		4	4	05	23S	27E	574750	3577122*		1348	200					
C 02711	C	ED		4	4	05	23S	27E	574750	3577122*		1348	170	75	95			
C 03020	C	ED		4	4	05	23S	27E	574750	3577122*		1348	176	135	41			
C 03799 POD1	C	ED	1	3	3	04	23S	27E	574981	3577170		1350	200	51	149			
C 00109 CLW203096	O	CUB	ED	1	3	3	04	23S	27E	575051	3577226*		1400	260				
C 01071	C	ED			1	08	23S	27E	573751	3576499*		1534	279	95	184			
C 02191	C	ED			1	08	23S	27E	573751	3576499*		1534	252	75	177			
C 03653 POD1	C	ED	2	4	4	05	23S	27E	574757	3577331		1549	220	180	40			
C 03892 POD1	C	ED	1	2	1	08	23S	27E	573846	3576764		1590	148	54	94			
C 00068 CLW193190	O	CUB	ED	3	3	1	10	23S	27E	576673	3576241*		1596	175				
C 02710	C	ED			4	05	23S	27E	574550	3577318*		1599	200	72	128			
C 02510	C	ED	1	2	1	08	23S	27E	573848	3576806*		1613	350	350	0			
C 00068	CUB	ED	1	3	1	10	23S	27E	576673	3576441*		1659	175					
C 00508 CLW225089	O	CUB	ED	4	1	3	10	23S	27E	576877	3575839*		1746	234	28	206		
C 00508 S	CUB	ED	2	1	3	10	23S	27E	576877	3576039*		1758	234	28	206			

\*UTM location was derived from PLSS - see Help

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

Average Depth to Water: **122 feet**

Minimum Depth: **28 feet**

Maximum Depth: **350 feet**

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**Record Count:** 20

**UTMNAD83 Radius Search (in meters):**

**Easting (X):** 575131

**Northing (Y):** 3575828

**Radius:** 1800



# WELL RECORD & LOG

## OFFICE OF THE STATE ENGINEER

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

2017 MAY 16 AM 09:08

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER)				OSE FILE NUMBER(S)			
	POD1				C-4044			
	WELL OWNER NAME(S)				PHONE (OPTIONAL)			
	Scott and Valerie Branson				575-706-5659			
	WELL OWNER MAILING ADDRESS				CITY	STATE	ZIP	
	910 W Pierce Street #138				Carlsbad	NM	88220	
	WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LATITUDE	32	19	2.85"	N		
	LONGITUDE	104	11	52.35"	W			
	DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE							
SW/4 NE/4 SW/4 Section 09 T 23S R 27E								
2. DRILLING & CASING INFORMATION	LICENSE NUMBER		NAME OF LICENSED DRILLER			NAME OF WELL DRILLING COMPANY		
	WD-331		Joel H. Stewart			Stewart Brothers Drilling Co.		
	DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)			
	4/21/17	4/22/17	290	290	150			
	COMPLETED WELL IS: <input checked="" type="radio"/> ARTESIAN <input type="radio"/> DRY HOLE <input checked="" type="radio"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT)			
	DRILLING FLUID:		<input checked="" type="radio"/> AIR	<input type="radio"/> MUD	ADDITIVES - SPECIFY:			
	DRILLING METHOD:		<input checked="" type="radio"/> ROTARY	<input type="radio"/> HAMMER	<input type="radio"/> CABLE TOOL	<input type="radio"/> OTHER - SPECIFY		
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)		CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)
	FROM	TO					SLOT SIZE (inches)	
	0	150	12.25"	8.625" certa-lok		integral bell joint	8.625"	.500
150	290	12.25"	8.625" certa-lok		integral bell joint	8.625"	.500	
							.032"	
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL		AMOUNT (cubic feet)	METHOD OF PLACEMENT	
	FROM	TO						
	0	15	12.25"	portland cement		6.2	from surface	
	15	20	12.25"	bentonite chips		2.06	from surface	
	20	290	12.25"	3/8" pea gravel		111.43	from surface	

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 06-08-2012)

FILE NUMBER	C-4044	POD NUMBER	1	TRN NUMBER	605683
LOCATION	Expt	23S. 27E. 9. 323		PAGE 1 OF 2	

RECEIVED  
JULY 1971

2017 May 14 15:21 UT

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	C-4044	POD NUMBER	1	TRN NUMBER	605683
LOCATION	Exp	235.27E	9.323	PAGE 2 OF 2	

OSE DIT DEC 2 2021 PM 2:56



# WELL RECORD & LOG

## OFFICE OF THE STATE ENGINEER

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1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD1C-4581		WELL TAG ID NO. 20FAE		OSE FILE NO(S). C-4581			
	WELL OWNER NAME(S) YADIRA MARTINEZ MEDINA				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 7090-3 THOMASON RD				CITY CARLSBAD	STATE NM	ZIP 88220	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE	32	MINUTES 19	SECONDS 25.10	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND	
		LONGITUDE	104	12	5.04	W	* DATUM REQUIRED: WGS 84	
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SECTION 9 TOWNSHIP 23S RANGE 27E								
2. DRILLING & CASING INFORMATION	LICENSE NO. WD-1753	NAME OF LICENSED DRILLER JACOB FRIESSEN			NAME OF WELL DRILLING COMPANY VANGUARD			
	DRILLING STARTED 11/18/21	DRILLING ENDED 11/22/21	DEPTH OF COMPLETED WELL (FT) 165	BORE HOLE DEPTH (FT) 8.75	DEPTH WATER FIRST ENCOUNTERED (FT) 109			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 160			
	DRILLING FLUID: <input type="checkbox"/> AIR <input checked="" type="checkbox"/> MUD ADDITIVES – SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER – SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)		CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)
	FROM -1	TO 125	8.75	BLANK PVC SCH40		GLUE 5.5	5	.25
	125	165	8.75	SCREEN PVC SCH40		GLUE 5.5	5	.25
								.032
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 0	TO 20	8.75	CONCRETE			5	POURED
	20	165	8.75	GRAVEL			32	POURED

FOR OSE INTERNAL USE

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

FILE NO. <u>C-4581</u>	POD NO. <u>1</u>	TRN NO. <u>712617</u>
LOCATION <u>23S-27E-09</u>	<u>1.1.3</u>	WELL TAG ID NO. <u>20FAE</u>

PAGE 1 OF 2

FOR OSE INTERNAL USE

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

FILE NO. C-4581	POD NO. 1	TRN NO. 712617
LOCATION 23S-27E-09 113	WELL TAG ID NO. 20FAE	PAGE 2 OF 2



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

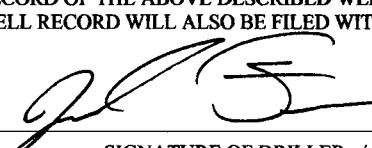
[www.ose.state.nm.us](http://www.ose.state.nm.us)

OSE DII JUN 2 2020 PM4:02

OSE DIJ AUG 24 2020 PM1:36

<b>1. GENERAL AND WELL LOCATION</b>	OSE POD NO. (WELL NO.) <b>POD 1</b>		WELL TAG ID NO. <b>2242D</b>		OSE FILE NO(S). <b>C-04429</b>			
	WELL OWNER NAME(S) <b>ADAN VAZQUES</b>				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS <b>302 CR 1260</b>				CITY <b>FAIRFIELD</b>	STATE <b>NM</b>	ZIP <b>75840 TX</b>	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE	32	MINUTES 19	SECONDS 15 ✓	N		
		LONGITUDE	-104	12	45.85	W		
	* 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 <b>SECTION 08 TOWNSHIP 23S RANGE 27E</b>							
	LICENSE NO. <b>1753</b>		NAME OF LICENSED DRILLER <b>JACOBO FRIESSEN</b>			NAME OF WELL DRILLING COMPANY <b>Vanguard</b>		
	DRILLING STARTED <b>4-27-20</b>		DRILLING ENDED <b>5-4-20</b>	DEPTH OF COMPLETED WELL (FT) <b>400</b>	BORE HOLE DEPTH (FT) <b>400</b>	DEPTH WATER FIRST ENCOUNTERED (FT) <b>350 0</b>		
COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) <b>370 0</b>			
DRILLING FLUID: <input type="checkbox"/> AIR <input checked="" type="checkbox"/> MUD ADDITIVES - SPECIFY:								
DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:								
DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)		CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
FROM	TO							
-2	320	9.875	BLANK PVC		GLUE 5.5	5	.25	
320	400	9.875	SCREEN PVC		GLUE 5.5	5	.25	.035
DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL			AMOUNT (cubic feet)	METHOD OF PLACEMENT	
FROM	TO							
0	20	9.875	CONCRETE			7.5	POURED	
20	400	9.875	GRAVEL 3/8			138	POURED	
FOR OSE INTERNAL USE								
FILE NO. <b>C-4429</b>			POD NO. <b>1</b>		WR-20 WELL RECORD & LOG (Version 04/30/19) TRN NO. <b>671575</b>			
LOCATION <b>23S-27E-08-44-41</b>			Dom <b>10</b>		WELL TAG ID NO. <b>2242D</b>		PAGE 1 OF 2	

DSE ON AUG 24 2020 PM 11:37

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES <i>(attach supplemental sheets to fully describe all units)</i>	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	3	3	TOPSOIL	Y ✓ N	
	3	25	22	GRAVEL	Y ✓ N	
	25	230	205	CLAY	Y ✓ N	
	230	400	170	CLAY W/ ROCK STREAKS	Y ✓ N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
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					Y N	
					Y N	
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:				TOTAL ESTIMATED WELL YIELD (gpm): 0.00	
	<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER		<input type="checkbox"/> OTHER - SPECIFY:			
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION:					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: WILLIAM KROHN					
6. SIGNATURE	BY SIGNING BELOW, I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED WELL. I ALSO CERTIFY THAT THE WELL TAG, IF REQUIRED, HAS BEEN INSTALLED AND THAT THIS WELL RECORD WILL ALSO BE FILED WITH THE PERMIT HOLDER WITHIN 30 DAYS AFTER THE COMPLETION OF WELL DRILLING.					5-28-20
	 JACOB FRIESSEN			SIGNATURE OF DRILLER / PRINT SIGHNEE NAME		DATE

FOR OSE INTERNAL USE

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

FILE NO.	C-4429	POD NO.	1	TRN NO.	671575
LOCATION	235-27E-08-44.4	DOm	met. 10	WELL TAG ID NO.	2242D

PAGE 2 OF 2

## FEMA National Flood Hazard Layer (NFHL)

### NFHL

Water Lines



Water Areas



Flood Hazard Boundaries

Limit Lines

NP

SFHA / Flood Zone Boundary

Flowage Easement Boundary

Flood Hazard Zones

1% Annual Chance Flood Hazard

Regulatory Floodway

Special Floodway

Area of Undetermined Flood Hazard

0.2% Annual Chance Flood Hazard

Future Conditions 1% Annual Chance Flood Hazard

Area with Reduced Risk Due to Levee

Area with Risk Due to Levee



FEMA flood layer

0.3mi

Bureau of Land Management, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA

## FEMA National Flood Hazard Layer (NFHL)

### NFHL

Water Lines



Water Areas



Flood Hazard Boundaries

Limit Lines



SFHA / Flood Zone Boundary



Flowage Easement Boundary

Flood Hazard Zones

1% Annual Chance Flood Hazard

Regulatory Floodway

Special Floodway

Area of Undetermined Flood Hazard

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Area with Reduced Risk Due to Levee

Area with Risk Due to Levee



FEMA flood layer

0.3mi

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## CYPRESS FEE 2,4 TB (05.13.2024)



5/20/2024, 2:16:23 PM

1:9,028

- OSW Water Bodys
- OSE Streams

0 0.07 0.15 0.3 0.6 km  
0 0.15 0.3 0.6 mi

Esri, NASA, NGA, USGS, FEMA, Esri Community Maps  
Contributors, New Mexico State University, Texas Parks  
& Wildlife, © OpenStreetMap, Microsoft, CONANP, Esri,  
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METI/NASA, USGS, EPA, NPS, US Census Bureau,

## APPENDIX E

CARMONA RESOURCES





Environment Testing

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14

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Clint Merritt  
Carmona Resources  
310 W Wall St  
Ste 500  
Midland, Texas 79701

Generated 6/3/2024 9:54:22 AM

## JOB DESCRIPTION

Cypress 2H 4H CTB  
Eddy County, New Mexico

## JOB NUMBER

880-44064-1

Eurofins Midland  
1211 W. Florida Ave  
Midland TX 79701

See page two for job notes and contact information.  
Released to Imaging: 6/6/2024 11:52:35 AM

# Eurofins Midland

## Job Notes

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

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

## Authorization



Generated  
6/3/2024 9:54:22 AM

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

Client: Carmona Resources  
Project/Site: Cypress 2H 4H CTB

Laboratory Job ID: 880-44064-1  
SDG: Eddy County, New Mexico

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## Definitions/Glossary

Client: Carmona Resources  
Project/Site: Cypress 2H 4H CTB

Job ID: 880-44064-1  
SDG: Eddy County, New Mexico

### Qualifiers

#### GC VOA

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

#### GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

#### HPLC/IC

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

### Glossary

#### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

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

**Case Narrative**

Client: Carmona Resources  
 Project: Cypress 2H 4H CTB

Job ID: 880-44064-1

**Job ID: 880-44064-1****Eurofins Midland****Job Narrative  
880-44064-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

**Receipt**

The samples were received on 5/30/2024 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.4°C.

**Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: S-1 (0-6") (880-44064-1), S-2 (0-6") (880-44064-2), S-3 (0-6") (880-44064-3) and S-4 (0-6") (880-44064-4).

**GC VOA**

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-81892 and analytical batch 880-81850 was outside the upper control limits.

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

**Diesel Range Organics**

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-81909 and analytical batch 880-81848 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

**HPLC/IC**

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

Eurofins Midland

**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44064-1  
 SDG: Eddy County, New Mexico

**Client Sample ID: S-1 (0-6")**  
 Date Collected: 05/28/24 00:00  
 Date Received: 05/30/24 10:30

**Lab Sample ID: 880-44064-1**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/30/24 11:44	05/30/24 14:41	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/30/24 11:44	05/30/24 14:41	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/30/24 11:44	05/30/24 14:41	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/30/24 11:44	05/30/24 14:41	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/30/24 11:44	05/30/24 14:41	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/30/24 11:44	05/30/24 14:41	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	111		70 - 130				05/30/24 11:44	05/30/24 14:41	1
1,4-Difluorobenzene (Surr)	110		70 - 130				05/30/24 11:44	05/30/24 14:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			05/30/24 14:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	772		50.0		mg/Kg			05/30/24 23:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/30/24 13:38	05/30/24 23:59	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>772</b>		50.0		mg/Kg		05/30/24 13:38	05/30/24 23:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/30/24 13:38	05/30/24 23:59	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	95		70 - 130				05/30/24 13:38	05/30/24 23:59	1
o-Terphenyl	97		70 - 130				05/30/24 13:38	05/30/24 23:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	551		5.01		mg/Kg			05/31/24 17:34	1

**Client Sample ID: S-2 (0-6")**

**Lab Sample ID: 880-44064-2**

Matrix: Solid

Date Collected: 05/28/24 00:00  
 Date Received: 05/30/24 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		05/30/24 11:44	05/30/24 15:01	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/30/24 11:44	05/30/24 15:01	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/30/24 11:44	05/30/24 15:01	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/30/24 11:44	05/30/24 15:01	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/30/24 11:44	05/30/24 15:01	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/30/24 11:44	05/30/24 15:01	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	100		70 - 130				05/30/24 11:44	05/30/24 15:01	1
1,4-Difluorobenzene (Surr)	101		70 - 130				05/30/24 11:44	05/30/24 15:01	1

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**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44064-1  
 SDG: Eddy County, New Mexico

**Client Sample ID: S-2 (0-6")****Lab Sample ID: 880-44064-2**

Matrix: Solid

Date Collected: 05/28/24 00:00  
 Date Received: 05/30/24 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			05/30/24 15:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1150		49.8		mg/Kg			05/31/24 00:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg			05/31/24 00:40	1
Diesel Range Organics (Over C10-C28)	1090		49.8		mg/Kg		05/30/24 13:38	05/31/24 00:40	1
Oil Range Organics (Over C28-C36)	63.1		49.8		mg/Kg		05/30/24 13:38	05/31/24 00:40	1

**Surrogate**

	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			05/30/24 13:38	05/31/24 00:40	1
o-Terphenyl	105		70 - 130			05/30/24 13:38	05/31/24 00:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	671		4.96		mg/Kg			05/31/24 17:40	1

**Client Sample ID: S-3 (0-6")****Lab Sample ID: 880-44064-3**

Matrix: Solid

Date Collected: 05/28/24 00:00  
 Date Received: 05/30/24 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/30/24 11:44	05/30/24 15:22	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/30/24 11:44	05/30/24 15:22	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/30/24 11:44	05/30/24 15:22	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		05/30/24 11:44	05/30/24 15:22	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/30/24 11:44	05/30/24 15:22	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/30/24 11:44	05/30/24 15:22	1

**Surrogate**

	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130			05/30/24 11:44	05/30/24 15:22	1
1,4-Difluorobenzene (Surr)	102		70 - 130			05/30/24 11:44	05/30/24 15:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			05/30/24 15:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	787		49.8		mg/Kg			05/31/24 01:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		05/30/24 13:38	05/31/24 01:01	1

Eurofins Midland

**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44064-1  
 SDG: Eddy County, New Mexico

**Client Sample ID: S-3 (0-6")****Lab Sample ID: 880-44064-3**

Matrix: Solid

Date Collected: 05/28/24 00:00  
 Date Received: 05/30/24 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	787		49.8		mg/Kg		05/30/24 13:38	05/31/24 01:01	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/30/24 13:38	05/31/24 01:01	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	84		70 - 130				05/30/24 13:38	05/31/24 01:01	1
<i>o-Terphenyl</i>	88		70 - 130				05/30/24 13:38	05/31/24 01:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	312		4.97		mg/Kg			05/31/24 17:59	1

**Client Sample ID: S-4 (0-6")****Lab Sample ID: 880-44064-4**

Matrix: Solid

Date Collected: 05/28/24 00:00  
 Date Received: 05/30/24 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/30/24 11:44	05/30/24 15:42	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/30/24 11:44	05/30/24 15:42	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/30/24 11:44	05/30/24 15:42	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		05/30/24 11:44	05/30/24 15:42	1
<i>o-Xylene</i>	<0.00202	U	0.00202		mg/Kg		05/30/24 11:44	05/30/24 15:42	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/30/24 11:44	05/30/24 15:42	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	104		70 - 130				05/30/24 11:44	05/30/24 15:42	1
1,4-Difluorobenzene (Surr)	102		70 - 130				05/30/24 11:44	05/30/24 15:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			05/30/24 15:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	517		49.9		mg/Kg			05/31/24 01:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/30/24 13:38	05/31/24 01:21	1
Diesel Range Organics (Over C10-C28)	517		49.9		mg/Kg		05/30/24 13:38	05/31/24 01:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/30/24 13:38	05/31/24 01:21	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	90		70 - 130				05/30/24 13:38	05/31/24 01:21	1
<i>o-Terphenyl</i>	92		70 - 130				05/30/24 13:38	05/31/24 01:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	291		4.99		mg/Kg			05/31/24 18:25	1

Eurofins Midland

**Surrogate Summary**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44064-1  
 SDG: Eddy County, New Mexico

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

Matrix: Solid

Prep Type: Total/NA

**Percent Surrogate Recovery (Acceptance Limits)**

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)										
880-44064-1	S-1 (0-6")	111	110										
880-44064-1 MS	S-1 (0-6")	101	95										
880-44064-1 MSD	S-1 (0-6")	105	97										
880-44064-2	S-2 (0-6")	100	101										
880-44064-3	S-3 (0-6")	110	102										
880-44064-4	S-4 (0-6")	104	102										
LCS 880-81892/1-A	Lab Control Sample	105	104										
LCSD 880-81892/2-A	Lab Control Sample Dup	108	94										
MB 880-81892/5-A	Method Blank	169 S1+	121										

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

**Percent Surrogate Recovery (Acceptance Limits)**

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)										
880-44064-1	S-1 (0-6")	95	97										
880-44064-2	S-2 (0-6")	104	105										
880-44064-3	S-3 (0-6")	84	88										
880-44064-4	S-4 (0-6")	90	92										
880-44068-A-11-D MS	Matrix Spike	110	113										
880-44068-A-11-E MSD	Matrix Spike Duplicate	94	94										
LCS 880-81909/2-A	Lab Control Sample	112	109										
LCSD 880-81909/3-A	Lab Control Sample Dup	104	106										
MB 880-81909/1-A	Method Blank	110	121										

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Midland

Client: Carmona Resources  
Project/Site: Cypress 2H 4H CTB

Job ID: 880-44064-1  
SDG: Eddy County, New Mexico

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

**Lab Sample ID: MB 880-81892/5-A**

**Matrix: Solid**

**Analysis Batch: 81850**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 81892**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Benzene	<0.00200	U	0.00200		mg/Kg	05/30/24 11:44	05/30/24 13:51	1			
Toluene	<0.00200	U	0.00200		mg/Kg	05/30/24 11:44	05/30/24 13:51	1			
Ethylbenzene	<0.00200	U	0.00200		mg/Kg	05/30/24 11:44	05/30/24 13:51	1			
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg	05/30/24 11:44	05/30/24 13:51	1			
o-Xylene	<0.00200	U	0.00200		mg/Kg	05/30/24 11:44	05/30/24 13:51	1			
Xylenes, Total	<0.00400	U	0.00400		mg/Kg	05/30/24 11:44	05/30/24 13:51	1			
Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	169	S1+	70 - 130		05/30/24 11:44	05/30/24 13:51	1				
1,4-Difluorobenzene (Surr)	121		70 - 130		05/30/24 11:44	05/30/24 13:51	1				

**Lab Sample ID: LCS 880-81892/1-A**

**Matrix: Solid**

**Analysis Batch: 81850**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 81892**

Analyte	Spikes	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	RPD
	Added	Result	Qualifier							
Benzene	0.100	0.1132		mg/Kg	113	70 - 130				
Toluene	0.100	0.1074		mg/Kg	107	70 - 130				
Ethylbenzene	0.100	0.1010		mg/Kg	101	70 - 130				
m-Xylene & p-Xylene	0.200	0.1971		mg/Kg	99	70 - 130				
o-Xylene	0.100	0.1205		mg/Kg	121	70 - 130				
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
	Result	Qualifier								
4-Bromofluorobenzene (Surr)	105		70 - 130							
1,4-Difluorobenzene (Surr)	104		70 - 130							

**Lab Sample ID: LCSD 880-81892/2-A**

**Matrix: Solid**

**Analysis Batch: 81850**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 81892**

Analyte	Spikes	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec	Limits	RPD
	Added	Result	Qualifier							
Benzene	0.100	0.09984		mg/Kg	100	70 - 130	13	35		
Toluene	0.100	0.1055		mg/Kg	106	70 - 130	2	35		
Ethylbenzene	0.100	0.1072		mg/Kg	107	70 - 130	6	35		
m-Xylene & p-Xylene	0.200	0.2158		mg/Kg	108	70 - 130	9	35		
o-Xylene	0.100	0.1197		mg/Kg	120	70 - 130	1	35		
Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
	Result	Qualifier								
4-Bromofluorobenzene (Surr)	108		70 - 130							
1,4-Difluorobenzene (Surr)	94		70 - 130							

**Lab Sample ID: 880-44064-1 MS**

**Matrix: Solid**

**Analysis Batch: 81850**

**Client Sample ID: S-1 (0-6")**

**Prep Type: Total/NA**

**Prep Batch: 81892**

Analyte	Sample	Sample	Spikes	MS	MS	Result	Qualifier	Unit	D	%Rec
	Result	Qualifier	Added	Result	Qualifier					
Benzene	<0.00199	U	0.0996	0.09660		mg/Kg	97	70 - 130		
Toluene	<0.00199	U	0.0996	0.09788		mg/Kg	98	70 - 130		

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**QC Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44064-1  
 SDG: Eddy County, New Mexico

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)****Lab Sample ID: 880-44064-1 MS****Matrix: Solid****Analysis Batch: 81850****Client Sample ID: S-1 (0-6")****Prep Type: Total/NA****Prep Batch: 81892**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits	5
	Result	Qualifier	Added	Result	Qualifier				Limits		
Ethylbenzene	<0.00199	U	0.0996	0.08319		mg/Kg		84	70 - 130		6
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1705		mg/Kg		86	70 - 130		7
o-Xylene	<0.00199	U	0.0996	0.09452		mg/Kg		95	70 - 130		
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>							8
4-Bromofluorobenzene (Surr)	101			70 - 130							9
1,4-Difluorobenzene (Surr)	95			70 - 130							

**Lab Sample ID: 880-44064-1 MSD****Matrix: Solid****Analysis Batch: 81850****Client Sample ID: S-1 (0-6")****Prep Type: Total/NA****Prep Batch: 81892**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	11
	Result	Qualifier	Added	Result	Qualifier				RPD		
Benzene	<0.00199	U	0.101	0.09717		mg/Kg		96	70 - 130	1	35
Toluene	<0.00199	U	0.101	0.09270		mg/Kg		92	70 - 130	5	35
Ethylbenzene	<0.00199	U	0.101	0.07623		mg/Kg		76	70 - 130	9	35
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1418		mg/Kg		70	70 - 130	18	35
o-Xylene	<0.00199	U	0.101	0.08395		mg/Kg		83	70 - 130	12	35
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>							12
4-Bromofluorobenzene (Surr)	105			70 - 130							13
1,4-Difluorobenzene (Surr)	97			70 - 130							14

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)****Lab Sample ID: MB 880-81909/1-A****Matrix: Solid****Analysis Batch: 81848****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 81909**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	11
	Result	Qualifier								
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/30/24 13:38	05/30/24 19:14	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/30/24 13:38	05/30/24 19:14	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/30/24 13:38	05/30/24 19:14	1	
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
1-Chlorooctane	110		70 - 130				05/30/24 13:38	05/30/24 19:14	1	
<i>o-Terphenyl</i>	121		70 - 130				05/30/24 13:38	05/30/24 19:14	1	

**Lab Sample ID: LCS 880-81909/2-A****Matrix: Solid****Analysis Batch: 81848****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 81909**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec	11
	Added	Result	Qualifier				Limits	
Gasoline Range Organics (GRO)-C6-C10	1000	946.4		mg/Kg		95	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	1068		mg/Kg		107	70 - 130	

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**QC Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44064-1  
 SDG: Eddy County, New Mexico

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

Lab Sample ID: LCS 880-81909/2-A

Matrix: Solid

Analysis Batch: 81848

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 81909

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	112		70 - 130
<i>o</i> -Terphenyl	109		70 - 130

Lab Sample ID: LCSD 880-81909/3-A

Matrix: Solid

Analysis Batch: 81848

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 81909

Analyte	Spike	LCSD	LCSD		%Rec	RPD
	Added	Result	Qualifier	Unit	D	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	890.4		mg/Kg	89	70 - 130
Diesel Range Organics (Over C10-C28)	1000	931.6		mg/Kg	93	70 - 130
Surrogate	LCSD			%Rec		RPD
	%Recovery	Qualifier	Limits	D	Limits	
1-Chlorooctane	104		70 - 130			6
<i>o</i> -Terphenyl	106		70 - 130			20

Lab Sample ID: 880-44068-A-11-D MS

Matrix: Solid

Analysis Batch: 81848

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 81909

Analyte	Sample	Sample	Spike	MS	MS		%Rec	
	Result	Qualifier	Added	Result	Qualifier	Unit	D	Limits
Gasoline Range Organics (GRO)-C6-C10	<49.6	U F2	1000	1289		mg/Kg	127	70 - 130
Diesel Range Organics (Over C10-C28)	<49.6	U F1	1000	661.3	F1	mg/Kg	64	70 - 130
Surrogate	MS			%Rec				
	%Recovery	Qualifier	Limits	D	Limits			
1-Chlorooctane	110		70 - 130					
<i>o</i> -Terphenyl	113		70 - 130					

Lab Sample ID: 880-44068-A-11-E MSD

Matrix: Solid

Analysis Batch: 81848

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 81909

Analyte	Sample	Sample	Spike	MSD	MSD		%Rec	
	Result	Qualifier	Added	Result	Qualifier	Unit	D	RPD
Gasoline Range Organics (GRO)-C6-C10	<49.6	U F2	1000	1005	F2	mg/Kg	99	70 - 130
Diesel Range Organics (Over C10-C28)	<49.6	U F1	1000	555.0	F1	mg/Kg	53	70 - 130
Surrogate	MSD			%Rec				
	%Recovery	Qualifier	Limits	D	Limits			
1-Chlorooctane	94		70 - 130					
<i>o</i> -Terphenyl	94		70 - 130					

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**QC Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44064-1  
 SDG: Eddy County, New Mexico

**Method: 300.0 - Anions, Ion Chromatography****Lab Sample ID: MB 880-81921/1-A****Matrix: Solid****Analysis Batch: 81991**

**Client Sample ID: Method Blank**  
**Prep Type: Soluble**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/31/24 16:43	1

**Lab Sample ID: LCS 880-81921/2-A****Matrix: Solid****Analysis Batch: 81991**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
Chloride	250	244.2		mg/Kg		98	90 - 110	

**Lab Sample ID: LCSD 880-81921/3-A****Matrix: Solid****Analysis Batch: 81991**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	243.7		mg/Kg		97	90 - 110	0	20

**Lab Sample ID: 880-44060-A-1-C MS****Matrix: Solid****Analysis Batch: 81991**

**Client Sample ID: Matrix Spike**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits	
Chloride	80.9		250	341.2		mg/Kg		104	90 - 110	

**Lab Sample ID: 880-44060-A-1-D MSD****Matrix: Solid****Analysis Batch: 81991**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	80.9		250	347.0		mg/Kg		107	90 - 110	2	20

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**QC Association Summary**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44064-1  
 SDG: Eddy County, New Mexico

**GC VOA****Analysis Batch: 81850**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-44064-1	S-1 (0-6")	Total/NA	Solid	8021B	81892
880-44064-2	S-2 (0-6")	Total/NA	Solid	8021B	81892
880-44064-3	S-3 (0-6")	Total/NA	Solid	8021B	81892
880-44064-4	S-4 (0-6")	Total/NA	Solid	8021B	81892
MB 880-81892/5-A	Method Blank	Total/NA	Solid	8021B	81892
LCS 880-81892/1-A	Lab Control Sample	Total/NA	Solid	8021B	81892
LCSD 880-81892/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	81892
880-44064-1 MS	S-1 (0-6")	Total/NA	Solid	8021B	81892
880-44064-1 MSD	S-1 (0-6")	Total/NA	Solid	8021B	81892

**Prep Batch: 81892**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-44064-1	S-1 (0-6")	Total/NA	Solid	5035	10
880-44064-2	S-2 (0-6")	Total/NA	Solid	5035	11
880-44064-3	S-3 (0-6")	Total/NA	Solid	5035	12
880-44064-4	S-4 (0-6")	Total/NA	Solid	5035	13
MB 880-81892/5-A	Method Blank	Total/NA	Solid	5035	14
LCS 880-81892/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-81892/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-44064-1 MS	S-1 (0-6")	Total/NA	Solid	5035	
880-44064-1 MSD	S-1 (0-6")	Total/NA	Solid	5035	

**Analysis Batch: 81951**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-44064-1	S-1 (0-6")	Total/NA	Solid	Total BTEX	
880-44064-2	S-2 (0-6")	Total/NA	Solid	Total BTEX	
880-44064-3	S-3 (0-6")	Total/NA	Solid	Total BTEX	
880-44064-4	S-4 (0-6")	Total/NA	Solid	Total BTEX	

**GC Semi VOA****Analysis Batch: 81848**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-44064-1	S-1 (0-6")	Total/NA	Solid	8015B NM	81909
880-44064-2	S-2 (0-6")	Total/NA	Solid	8015B NM	81909
880-44064-3	S-3 (0-6")	Total/NA	Solid	8015B NM	81909
880-44064-4	S-4 (0-6")	Total/NA	Solid	8015B NM	81909
MB 880-81909/1-A	Method Blank	Total/NA	Solid	8015B NM	81909
LCS 880-81909/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	81909
LCSD 880-81909/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	81909
880-44068-A-11-D MS	Matrix Spike	Total/NA	Solid	8015B NM	81909
880-44068-A-11-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	81909

**Prep Batch: 81909**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-44064-1	S-1 (0-6")	Total/NA	Solid	8015NM Prep	
880-44064-2	S-2 (0-6")	Total/NA	Solid	8015NM Prep	
880-44064-3	S-3 (0-6")	Total/NA	Solid	8015NM Prep	
880-44064-4	S-4 (0-6")	Total/NA	Solid	8015NM Prep	
MB 880-81909/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-81909/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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**QC Association Summary**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44064-1  
 SDG: Eddy County, New Mexico

**GC Semi VOA (Continued)****Prep Batch: 81909 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-81909/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-44068-A-11-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-44068-A-11-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

**Analysis Batch: 82066**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-44064-1	S-1 (0-6")	Total/NA	Solid	8015 NM	
880-44064-2	S-2 (0-6")	Total/NA	Solid	8015 NM	
880-44064-3	S-3 (0-6")	Total/NA	Solid	8015 NM	
880-44064-4	S-4 (0-6")	Total/NA	Solid	8015 NM	

**HPLC/IC****Leach Batch: 81921**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-44064-1	S-1 (0-6")	Soluble	Solid	DI Leach	
880-44064-2	S-2 (0-6")	Soluble	Solid	DI Leach	
880-44064-3	S-3 (0-6")	Soluble	Solid	DI Leach	
880-44064-4	S-4 (0-6")	Soluble	Solid	DI Leach	
MB 880-81921/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-81921/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-81921/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-44060-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-44060-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

**Analysis Batch: 81991**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-44064-1	S-1 (0-6")	Soluble	Solid	300.0	81921
880-44064-2	S-2 (0-6")	Soluble	Solid	300.0	81921
880-44064-3	S-3 (0-6")	Soluble	Solid	300.0	81921
880-44064-4	S-4 (0-6")	Soluble	Solid	300.0	81921
MB 880-81921/1-A	Method Blank	Soluble	Solid	300.0	81921
LCS 880-81921/2-A	Lab Control Sample	Soluble	Solid	300.0	81921
LCSD 880-81921/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	81921
880-44060-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	81921
880-44060-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	81921

**Lab Chronicle**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44064-1  
 SDG: Eddy County, New Mexico

**Client Sample ID: S-1 (0-6")**

Date Collected: 05/28/24 00:00

Date Received: 05/30/24 10:30

**Lab Sample ID: 880-44064-1**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	81892	05/30/24 11:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	81850	05/30/24 14:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			81951	05/30/24 14:41	SM	EET MID
Total/NA	Analysis	8015 NM		1			82066	05/30/24 23:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	81909	05/30/24 13:38	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	81848	05/30/24 23:59	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	81921	05/30/24 14:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	81991	05/31/24 17:34	SMC	EET MID

**Client Sample ID: S-2 (0-6")**

Date Collected: 05/28/24 00:00

Date Received: 05/30/24 10:30

**Lab Sample ID: 880-44064-2**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	81892	05/30/24 11:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	81850	05/30/24 15:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			81951	05/30/24 15:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			82066	05/31/24 00:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	81909	05/30/24 13:38	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	81848	05/31/24 00:40	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	81921	05/30/24 14:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	81991	05/31/24 17:40	SMC	EET MID

**Client Sample ID: S-3 (0-6")**

Date Collected: 05/28/24 00:00

Date Received: 05/30/24 10:30

**Lab Sample ID: 880-44064-3**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	81892	05/30/24 11:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	81850	05/30/24 15:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			81951	05/30/24 15:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			82066	05/31/24 01:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	81909	05/30/24 13:38	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	81848	05/31/24 01:01	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	81921	05/30/24 14:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	81991	05/31/24 17:59	SMC	EET MID

**Client Sample ID: S-4 (0-6")**

Date Collected: 05/28/24 00:00

Date Received: 05/30/24 10:30

**Lab Sample ID: 880-44064-4**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	81892	05/30/24 11:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	81850	05/30/24 15:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			81951	05/30/24 15:42	SM	EET MID

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**Lab Chronicle**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44064-1  
 SDG: Eddy County, New Mexico

**Client Sample ID: S-4 (0-6")**

Date Collected: 05/28/24 00:00

Date Received: 05/30/24 10:30

**Lab Sample ID: 880-44064-4**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			82066	05/31/24 01:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	81909	05/30/24 13:38	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	81848	05/31/24 01:21	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	81921	05/30/24 14:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	81991	05/31/24 18:25	SMC	EET MID

**Laboratory References:**

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

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Eurofins Midland

## Accreditation/Certification Summary

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44064-1  
 SDG: Eddy County, New Mexico

### **Laboratory: Eurofins Midland**

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

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

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

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

1  
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Eurofins Midland

**Method Summary**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44064-1  
 SDG: Eddy County, New Mexico

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

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

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

Eurofins Midland

**Sample Summary**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44064-1  
 SDG: Eddy County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-44064-1	S-1 (0-6")	Solid	05/28/24 00:00	05/30/24 10:30
880-44064-2	S-2 (0-6")	Solid	05/28/24 00:00	05/30/24 10:30
880-44064-3	S-3 (0-6")	Solid	05/28/24 00:00	05/30/24 10:30
880-44064-4	S-4 (0-6")	Solid	05/28/24 00:00	05/30/24 10:30

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## Chain of Custody

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880-44064 Chain of Custody



Project Manager:	Clinton Merritt	Bill To: (if different)	Isaac Castro	Work Order Comments		
Company Name:	Carmona Resources	Company Name:	Marathon Oil Corporation			
Address:	310 W Wall St Ste 500	Address:	990 Town and Country Blvd			
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Houston, TX 77024			
Phone:		Email:	icastro@marathonoil.com			
Project Name: Cypress 2H 4H CTB Project Number: 2377 Project Location: Eddy County, New Mexico Sampler's Name: CCM PO #: CL.24.01580				<b>ANALYSIS REQUEST</b> Turn Around <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush Due Date: 5 day <b>Parameters</b> Received Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A Thermometer ID: <i>TRE</i> Cooler Custody Seals: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A Correction Factor: <i>.5</i> Sample Custody Seals: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A Temperature Reading: <i>44</i> Total Containers:		
				<b>Preservative Codes</b> None: NO <input type="checkbox"/> DI Water: H <sub>2</sub> O Cool: Cool <input type="checkbox"/> MeOH: Me HCl: HC <input type="checkbox"/> HNO <sub>3</sub> : HN H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub> <input type="checkbox"/> NaOH: Na H <sub>3</sub> PO <sub>4</sub> : HP <input type="checkbox"/> NaHSO <sub>4</sub> : NABIS Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub> Zn Acetate-NaOH: Zn NaOH+Ascorbic Acid: SAPC		
				<b>Sample Identification</b> S-1 (0-6") 5/28/2024 X G 1 X X X S-2 (0-6") 5/28/2024 X G 1 X X X S-3 (0-6") 5/28/2024 X G 1 X X X S-4 (0-6") 5/28/2024 X G 1 X X X		
				<b>Sample Comments</b>		
				Comments: Email results to Mike Carmona mcarmona@carmonaresources.com, Conner Moshring cmoshring@carmonaresources.com, Clint Merritt MerrittC@carmonaresources.com		
Relinquished by: (Signature)		Date/Time	Received by: (Signature)		Date/Time	
<i>[Signature]</i>		5/30/2024	<i>[Signature]</i>		5/30/2024	

## Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-44064-1

SDG Number: Eddy County, New Mexico

**Login Number: 44064****List Source: Eurofins Midland****List Number: 1****Creator: Vasquez, Julisa**

Question	Answer	Comment	
The cooler's custody seal, if present, is intact.	N/A		1
Sample custody seals, if present, are intact.	N/A		2
The cooler or samples do not appear to have been compromised or tampered with.	True		3
Samples were received on ice.	True		4
Cooler Temperature is acceptable.	True		5
Cooler Temperature is recorded.	True		6
COC is present.	True		7
COC is filled out in ink and legible.	True		8
COC is filled out with all pertinent information.	True		9
Is the Field Sampler's name present on COC?	True		10
There are no discrepancies between the containers received and the COC.	True		11
Samples are received within Holding Time (excluding tests with immediate HTs)	True		12
Sample containers have legible labels.	True		13
Containers are not broken or leaking.	True		14
Sample collection date/times are provided.	True		
Appropriate sample containers are used.	True		
Sample bottles are completely filled.	True		
Sample Preservation Verified.	N/A		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A		



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Clint Merritt  
Carmona Resources  
310 W Wall St  
Ste 500  
Midland, Texas 79701

Generated 6/3/2024 2:23:34 PM

## JOB DESCRIPTION

Cypress 2H 4H CTB  
Eddy County, New Mexico

## JOB NUMBER

880-44066-1

Eurofins Midland  
1211 W. Florida Ave  
Midland TX 79701

See page two for job notes and contact information.  
Released to Imaging: 6/6/2024 11:32:33 AM

# Eurofins Midland

## Job Notes

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

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

## Authorization



Generated  
6/3/2024 2:23:34 PM

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

Client: Carmona Resources  
Project/Site: Cypress 2H 4H CTB

Laboratory Job ID: 880-44066-1  
SDG: Eddy County, New Mexico

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## Definitions/Glossary

Client: Carmona Resources  
Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
SDG: Eddy County, New Mexico

### Qualifiers

#### GC VOA

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

#### GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

#### HPLC/IC

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

### Glossary

#### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

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

## Case Narrative

Client: Carmona Resources  
Project: Cypress 2H 4H CTB

Job ID: 880-44066-1

**Job ID: 880-44066-1**

**Eurofins Midland**

### Job Narrative 880-44066-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### **Receipt**

The samples were received on 5/30/2024 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.4°C.

#### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: H-1 (0-6") (880-44066-1), H-2 (0-6") (880-44066-2), H-3 (0-6") (880-44066-3), H-4 (0-6") (880-44066-4), H-5 (0-6") (880-44066-5) and H-6 (0-6") (880-44066-6).

#### **GC VOA**

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-81746 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

#### **Diesel Range Organics**

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-81909 and analytical batch 880-81848 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-81926 and analytical batch 880-82104 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD\_NM: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: (LCS 880-81926/2-A), (LCSD 880-81926/3-A) and (MB 880-81926/1-A). Percent recoveries are based on the amount spiked.

Method 8015MOD\_NM: The method blank for preparation batch 880-81926 and analytical batch 880-82104 contained Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

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

#### **HPLC/IC**

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

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**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
 SDG: Eddy County, New Mexico

**Client Sample ID: H-1 (0-6")**  
 Date Collected: 05/28/24 00:00  
 Date Received: 05/30/24 10:30

**Lab Sample ID: 880-44066-1**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/30/24 11:36	05/30/24 19:20	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/30/24 11:36	05/30/24 19:20	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/30/24 11:36	05/30/24 19:20	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/30/24 11:36	05/30/24 19:20	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/30/24 11:36	05/30/24 19:20	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/30/24 11:36	05/30/24 19:20	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	104		70 - 130				05/30/24 11:36	05/30/24 19:20	1
1,4-Difluorobenzene (Surr)	81		70 - 130				05/30/24 11:36	05/30/24 19:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			05/30/24 19:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	72.6		49.9		mg/Kg			05/31/24 01:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/30/24 13:38	05/31/24 01:41	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>72.6</b>		49.9		mg/Kg		05/30/24 13:38	05/31/24 01:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/30/24 13:38	05/31/24 01:41	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	97		70 - 130				05/30/24 13:38	05/31/24 01:41	1
o-Terphenyl	101		70 - 130				05/30/24 13:38	05/31/24 01:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	295		5.02		mg/Kg			05/31/24 18:31	1

**Client Sample ID: H-2 (0-6")****Lab Sample ID: 880-44066-2**

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/30/24 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/30/24 11:36	05/30/24 19:41	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/30/24 11:36	05/30/24 19:41	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/30/24 11:36	05/30/24 19:41	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		05/30/24 11:36	05/30/24 19:41	1
<b>o-Xylene</b>	<b>0.00367</b>		0.00198		mg/Kg		05/30/24 11:36	05/30/24 19:41	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/30/24 11:36	05/30/24 19:41	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	107		70 - 130				05/30/24 11:36	05/30/24 19:41	1
1,4-Difluorobenzene (Surr)	84		70 - 130				05/30/24 11:36	05/30/24 19:41	1

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**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
 SDG: Eddy County, New Mexico

**Client Sample ID: H-2 (0-6")****Lab Sample ID: 880-44066-2**

Matrix: Solid

Date Collected: 05/28/24 00:00  
 Date Received: 05/30/24 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			05/30/24 19:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	67.3		49.7		mg/Kg			05/31/24 02:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		05/30/24 13:38	05/31/24 02:01	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>67.3</b>		49.7		mg/Kg		05/30/24 13:38	05/31/24 02:01	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		05/30/24 13:38	05/31/24 02:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				05/30/24 13:38	05/31/24 02:01	1
<i>o</i> -Terphenyl	106		70 - 130				05/30/24 13:38	05/31/24 02:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	331		5.03		mg/Kg			05/31/24 18:50	1

**Client Sample ID: H-3 (0-6")****Lab Sample ID: 880-44066-3**

Matrix: Solid

Date Collected: 05/28/24 00:00  
 Date Received: 05/30/24 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/30/24 11:13	05/30/24 20:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/30/24 11:13	05/30/24 20:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/30/24 11:13	05/30/24 20:01	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/30/24 11:13	05/30/24 20:01	1
<b><i>o</i>-Xylene</b>	<b>0.00426</b>		0.00200		mg/Kg		05/30/24 11:13	05/30/24 20:01	1
<b>Xylenes, Total</b>	<b>0.00426</b>		0.00399		mg/Kg		05/30/24 11:13	05/30/24 20:01	1

**Surrogate**

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				05/30/24 11:13	05/30/24 20:01	1
1,4-Difluorobenzene (Surr)	87		70 - 130				05/30/24 11:13	05/30/24 20:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total BTEX</b>	<b>0.00426</b>		0.00399		mg/Kg			05/30/24 20:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	56.5		50.0		mg/Kg			05/31/24 02:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/30/24 13:38	05/31/24 02:22	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>56.5</b>		50.0		mg/Kg		05/30/24 13:38	05/31/24 02:22	1

Eurofins Midland

**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
 SDG: Eddy County, New Mexico

**Client Sample ID: H-3 (0-6")****Lab Sample ID: 880-44066-3**

Date Collected: 05/28/24 00:00  
 Date Received: 05/30/24 10:30

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/30/24 13:38	05/31/24 02:22	1
<b>Surrogate</b>									
1-Chlorooctane	88		70 - 130				05/30/24 13:38	05/31/24 02:22	1
o-Terphenyl	93		70 - 130				05/30/24 13:38	05/31/24 02:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	335		4.97		mg/Kg			05/31/24 18:57	1

**Client Sample ID: H-4 (0-6")****Lab Sample ID: 880-44066-4**

Date Collected: 05/28/24 00:00  
 Date Received: 05/30/24 10:30

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/30/24 11:13	05/30/24 20:22	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/30/24 11:13	05/30/24 20:22	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/30/24 11:13	05/30/24 20:22	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		05/30/24 11:13	05/30/24 20:22	1
<b>o-Xylene</b>	<b>0.00499</b>		0.00198		mg/Kg		05/30/24 11:13	05/30/24 20:22	1
<b>Xylenes, Total</b>	<b>0.00499</b>		0.00396		mg/Kg		05/30/24 11:13	05/30/24 20:22	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	107		70 - 130				05/30/24 11:13	05/30/24 20:22	1
1,4-Difluorobenzene (Surr)	84		70 - 130				05/30/24 11:13	05/30/24 20:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00499		0.00396		mg/Kg			05/30/24 20:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	208		49.8		mg/Kg			06/02/24 06:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F1	49.8		mg/Kg		05/30/24 15:26	06/02/24 06:32	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>208</b>	<b>F1</b>	49.8		mg/Kg		05/30/24 15:26	06/02/24 06:32	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/30/24 15:26	06/02/24 06:32	1
<b>Surrogate</b>									
1-Chlorooctane	90		70 - 130				05/30/24 15:26	06/02/24 06:32	1
o-Terphenyl	92		70 - 130				05/30/24 15:26	06/02/24 06:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	320		4.99		mg/Kg			05/31/24 19:16	1

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**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
 SDG: Eddy County, New Mexico

**Client Sample ID: H-5 (0-6")****Lab Sample ID: 880-44066-5**

Matrix: Solid

Date Collected: 05/28/24 00:00  
 Date Received: 05/30/24 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		05/30/24 11:36	05/30/24 20:42	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/30/24 11:36	05/30/24 20:42	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/30/24 11:36	05/30/24 20:42	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/30/24 11:36	05/30/24 20:42	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/30/24 11:36	05/30/24 20:42	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/30/24 11:36	05/30/24 20:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				05/30/24 11:36	05/30/24 20:42	1
1,4-Difluorobenzene (Surr)	85		70 - 130				05/30/24 11:36	05/30/24 20:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			05/30/24 20:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	171		49.9		mg/Kg			06/02/24 07:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/30/24 15:26	06/02/24 07:21	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>171</b>		49.9		mg/Kg		05/30/24 15:26	06/02/24 07:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/30/24 15:26	06/02/24 07:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				05/30/24 15:26	06/02/24 07:21	1
o-Terphenyl	106		70 - 130				05/30/24 15:26	06/02/24 07:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	322		4.98		mg/Kg			05/31/24 19:22	1

**Client Sample ID: H-6 (0-6")****Lab Sample ID: 880-44066-6**

Matrix: Solid

Date Collected: 05/28/24 00:00  
 Date Received: 05/30/24 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		05/30/24 11:38	05/31/24 02:17	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/30/24 11:38	05/31/24 02:17	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/30/24 11:38	05/31/24 02:17	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/30/24 11:38	05/31/24 02:17	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/30/24 11:38	05/31/24 02:17	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/30/24 11:38	05/31/24 02:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				05/30/24 11:38	05/31/24 02:17	1
1,4-Difluorobenzene (Surr)	91		70 - 130				05/30/24 11:38	05/31/24 02:17	1

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**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
 SDG: Eddy County, New Mexico

**Client Sample ID: H-6 (0-6")****Lab Sample ID: 880-44066-6**

Matrix: Solid

Date Collected: 05/28/24 00:00  
 Date Received: 05/30/24 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			05/31/24 02:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	174		50.0		mg/Kg			06/02/24 07:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/30/24 15:26	06/02/24 07:37	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>174</b>		50.0		mg/Kg		05/30/24 15:26	06/02/24 07:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/30/24 15:26	06/02/24 07:37	1
<b>Surrogate</b>									
1-Chlorooctane	101		70 - 130				05/30/24 15:26	06/02/24 07:37	1
<i>o</i> -Terphenyl	101		70 - 130				05/30/24 15:26	06/02/24 07:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	305		5.02		mg/Kg			05/31/24 19:28	1

**Surrogate Summary**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
 SDG: Eddy County, New Mexico

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-44063-A-38-A MS	Matrix Spike	107	97
880-44063-A-38-B MSD	Matrix Spike Duplicate	112	96
880-44066-1	H-1 (0-6")	104	81
880-44066-2	H-2 (0-6")	107	84
880-44066-3	H-3 (0-6")	110	87
880-44066-4	H-4 (0-6")	107	84
880-44066-5	H-5 (0-6")	109	85
880-44066-6	H-6 (0-6")	106	91
880-44068-A-1-A MS	Matrix Spike	101	102
880-44068-A-1-B MSD	Matrix Spike Duplicate	106	102
LCS 880-81877/1-A	Lab Control Sample	110	96
LCS 880-81890/1-A	Lab Control Sample	101	102
LCSD 880-81877/2-A	Lab Control Sample Dup	112	101
LCSD 880-81890/2-A	Lab Control Sample Dup	101	102
MB 880-81877/5-A	Method Blank	96	86
MB 880-81890/5-A	Method Blank	106	93

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
880-44066-1	H-1 (0-6")	97	101
880-44066-2	H-2 (0-6")	102	106
880-44066-3	H-3 (0-6")	88	93
880-44066-4	H-4 (0-6")	90	92
880-44066-4 MS	H-4 (0-6")	84	90
880-44066-4 MSD	H-4 (0-6")	105	92
880-44066-5	H-5 (0-6")	106	106
880-44066-6	H-6 (0-6")	101	101
880-44068-A-11-D MS	Matrix Spike	110	113
880-44068-A-11-E MSD	Matrix Spike Duplicate	94	94
LCS 880-81909/2-A	Lab Control Sample	112	109
LCS 880-81926/2-A	Lab Control Sample	123	134 S1+
LCSD 880-81909/3-A	Lab Control Sample Dup	104	106
LCSD 880-81926/3-A	Lab Control Sample Dup	138 S1+	124
MB 880-81909/1-A	Method Blank	110	121
MB 880-81926/1-A	Method Blank	211 S1+	221 S1+

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
 SDG: Eddy County, New Mexico

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

**Lab Sample ID: MB 880-81877/5-A**

**Matrix: Solid**

**Analysis Batch: 81746**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 81877**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Benzene	<0.00200	U			0.00200		mg/Kg		05/30/24 10:47	05/30/24 12:41	1
Toluene	<0.00200	U			0.00200		mg/Kg		05/30/24 10:47	05/30/24 12:41	1
Ethylbenzene	<0.00200	U			0.00200		mg/Kg		05/30/24 10:47	05/30/24 12:41	1
m-Xylene & p-Xylene	<0.00400	U			0.00400		mg/Kg		05/30/24 10:47	05/30/24 12:41	1
o-Xylene	<0.00200	U			0.00200		mg/Kg		05/30/24 10:47	05/30/24 12:41	1
Xylenes, Total	<0.00400	U			0.00400		mg/Kg		05/30/24 10:47	05/30/24 12:41	1
Surrogate	MB	MB	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	96				70 - 130				05/30/24 10:47	05/30/24 12:41	1
1,4-Difluorobenzene (Surr)	86				70 - 130				05/30/24 10:47	05/30/24 12:41	1

**Lab Sample ID: LCS 880-81877/1-A**

**Matrix: Solid**

**Analysis Batch: 81746**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 81877**

Analyte	Spikes	LCS	LCS	Result	Qualifier	Unit	D	%Rec	%Rec	
	Added	Result	Qualifier						Limits	Limits
Benzene		0.100		0.1166		mg/Kg		117	70 - 130	
Toluene		0.100		0.1010		mg/Kg		101	70 - 130	
Ethylbenzene		0.100		0.1111		mg/Kg		111	70 - 130	
m-Xylene & p-Xylene		0.200		0.2209		mg/Kg		110	70 - 130	
o-Xylene		0.100		0.1063		mg/Kg		106	70 - 130	
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits			%Rec	Limits	
	Result	Qualifier								
4-Bromofluorobenzene (Surr)	110				70 - 130					
1,4-Difluorobenzene (Surr)	96				70 - 130					

**Lab Sample ID: LCSD 880-81877/2-A**

**Matrix: Solid**

**Analysis Batch: 81746**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 81877**

Analyte	Spike	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec	%Rec	
	Added	Result	Qualifier						Limits	RPD
Benzene		0.100		0.1127		mg/Kg		113	70 - 130	3
Toluene		0.100		0.09509		mg/Kg		95	70 - 130	6
Ethylbenzene		0.100		0.1026		mg/Kg		103	70 - 130	8
m-Xylene & p-Xylene		0.200		0.2075		mg/Kg		104	70 - 130	6
o-Xylene		0.100		0.09989		mg/Kg		100	70 - 130	6
Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits			%Rec	Limits	
	Result	Qualifier								
4-Bromofluorobenzene (Surr)	112				70 - 130					
1,4-Difluorobenzene (Surr)	101				70 - 130					

**Lab Sample ID: 880-44063-A-38-A MS**

**Matrix: Solid**

**Analysis Batch: 81746**

**Client Sample ID: Matrix Spike**

**Prep Type: Total/NA**

**Prep Batch: 81877**

Analyte	Sample	Sample	Spike	MS	MS	Result	Qualifier	Unit	D	%Rec
	Result	Qualifier	Added	Result	Qualifier					
Benzene	<0.00199	U	0.0996	0.09943		mg/Kg		100	70 - 130	
Toluene	<0.00199	U	0.0996	0.08732		mg/Kg		88	70 - 130	

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**QC Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
 SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-44063-A-38-A MS

Matrix: Solid

Analysis Batch: 81746

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 81877

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				Limits
Ethylbenzene	<0.00199	U	0.0996	0.09093		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1826		mg/Kg		92	70 - 130
o-Xylene	<0.00199	U	0.0996	0.08643		mg/Kg		87	70 - 130

Surrogate	MS	MS	
	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: 880-44063-A-38-B MSD

Matrix: Solid

Analysis Batch: 81746

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 81877

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD
	Result	Qualifier	Added	Result	Qualifier				RPD	Limit
Benzene	<0.00199	U	0.101	0.1016		mg/Kg		101	70 - 130	2
Toluene	<0.00199	U	0.101	0.08817		mg/Kg		87	70 - 130	1
Ethylbenzene	<0.00199	U	0.101	0.09469		mg/Kg		94	70 - 130	4
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1905		mg/Kg		95	70 - 130	4
o-Xylene	<0.00199	U	0.101	0.09108		mg/Kg		90	70 - 130	5

Surrogate	MSD	MSD	
	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: MB 880-81890/5-A

Matrix: Solid

Analysis Batch: 81924

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 81890

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.00200	U	0.00200		mg/Kg		05/30/24 11:38	05/30/24 18:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/30/24 11:38	05/30/24 18:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/30/24 11:38	05/30/24 18:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/30/24 11:38	05/30/24 18:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/30/24 11:38	05/30/24 18:14	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/30/24 11:38	05/30/24 18:14	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	106		70 - 130			
1,4-Difluorobenzene (Surr)	93		70 - 130			

Lab Sample ID: LCS 880-81890/1-A

Matrix: Solid

Analysis Batch: 81924

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 81890

Analyte	Spike	LCS	LCS	%Rec				
	Added			Result	Qualifier	Unit	D	%Rec
Benzene	0.100	0.1249		mg/Kg			125	70 - 130
Toluene	0.100	0.1117		mg/Kg			112	70 - 130
Ethylbenzene	0.100	0.1149		mg/Kg			115	70 - 130
m-Xylene & p-Xylene	0.200	0.2346		mg/Kg			117	70 - 130

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**QC Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
 SDG: Eddy County, New Mexico

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)****Lab Sample ID: LCS 880-81890/1-A****Matrix: Solid****Analysis Batch: 81924****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 81890**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	RPD	Limit
o-Xylene	0.100	0.1153		mg/Kg		115	70 - 130	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
4-Bromofluorobenzene (Surr)	101		70 - 130					
1,4-Difluorobenzene (Surr)	102		70 - 130					

**Lab Sample ID: LCSD 880-81890/2-A****Matrix: Solid****Analysis Batch: 81924****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 81890**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD	Limit
Benzene	0.100	0.1175		mg/Kg		118	70 - 130	
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits					
4-Bromofluorobenzene (Surr)	101		70 - 130				6	35
1,4-Difluorobenzene (Surr)	102		70 - 130				6	35

**Lab Sample ID: 880-44068-A-1-A MS****Matrix: Solid****Analysis Batch: 81924****Client Sample ID: Matrix Spike****Prep Type: Total/NA****Prep Batch: 81890**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	RPD	Limit
Benzene	<0.00199	U	0.0996	0.1086		mg/Kg		109	70 - 130	
Surrogate	MS %Recovery	MS Qualifier	Limits							
4-Bromofluorobenzene (Surr)	101		70 - 130							
1,4-Difluorobenzene (Surr)	102		70 - 130							

**Lab Sample ID: 880-44068-A-1-B MSD****Matrix: Solid****Analysis Batch: 81924****Client Sample ID: Matrix Spike Duplicate****Prep Type: Total/NA****Prep Batch: 81890**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	Limit
Benzene	<0.00199	U	0.101	0.1109		mg/Kg		110	70 - 130	
Surrogate	MSD %Recovery	MSD Qualifier	Limits							
4-Bromofluorobenzene (Surr)	101		70 - 130						2	35
1,4-Difluorobenzene (Surr)	102		70 - 130						2	35

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**QC Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
 SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-44068-A-1-B MSD

Matrix: Solid

Analysis Batch: 81924

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 81890

Surrogate	MSD	MSD	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	106				70 - 130
1,4-Difluorobenzene (Surr)	102				70 - 130

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

Lab Sample ID: MB 880-81909/1-A

Matrix: Solid

Analysis Batch: 81848

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 81909

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U			50.0		mg/Kg		05/30/24 13:38	05/30/24 19:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U			50.0		mg/Kg		05/30/24 13:38	05/30/24 19:14	1
Oil Range Organics (Over C28-C36)	<50.0	U			50.0		mg/Kg		05/30/24 13:38	05/30/24 19:14	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110				70 - 130	05/30/24 13:38	05/30/24 19:14	1
o-Terphenyl	121				70 - 130	05/30/24 13:38	05/30/24 19:14	1

Lab Sample ID: LCS 880-81909/2-A

Matrix: Solid

Analysis Batch: 81848

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 81909

Analyte	Spike	LCS	LCS	%Rec
	Added	Result	Qualifier	Limits
Gasoline Range Organics (GRO)-C6-C10	1000	946.4		mg/Kg
Diesel Range Organics (Over C10-C28)	1000	1068		mg/Kg

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
1-Chlorooctane	112				70 - 130
o-Terphenyl	109				70 - 130

Lab Sample ID: LCSD 880-81909/3-A

Matrix: Solid

Analysis Batch: 81848

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 81909

Analyte	Spike	LCSD	LCSD	%Rec
	Added	Result	Qualifier	Unit
Gasoline Range Organics (GRO)-C6-C10	1000	890.4		mg/Kg
Diesel Range Organics (Over C10-C28)	1000	931.6		mg/Kg

Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits
1-Chlorooctane	104				70 - 130
o-Terphenyl	106				70 - 130

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**QC Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
 SDG: Eddy County, New Mexico

**Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)****Lab Sample ID: 880-44068-A-11-D MS****Matrix: Solid****Analysis Batch: 81848**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 81909**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	<49.6	U F2	1000	1289		mg/Kg		127	70 - 130
Diesel Range Organics (Over C10-C28)	<49.6	U F1	1000	661.3	F1	mg/Kg		64	70 - 130
<b>Surrogate</b>	<b>MS</b>	<b>MS</b>							
	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>					
1-Chlorooctane	110			70 - 130					
<i>o-Terphenyl</i>	113			70 - 130					

**Lab Sample ID: 880-44068-A-11-E MSD****Matrix: Solid****Analysis Batch: 81848**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 81909**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<49.6	U F2	1000	1005	F2	mg/Kg		99	70 - 130	25	20
Diesel Range Organics (Over C10-C28)	<49.6	U F1	1000	555.0	F1	mg/Kg		53	70 - 130	17	20
<b>Surrogate</b>	<b>MSD</b>	<b>MSD</b>									
	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>							
1-Chlorooctane	94			70 - 130							
<i>o-Terphenyl</i>	94			70 - 130							

**Lab Sample ID: MB 880-81926/1-A****Matrix: Solid****Analysis Batch: 82104**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 81926**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/30/24 15:26	06/02/24 05:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/30/24 15:26	06/02/24 05:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/30/24 15:26	06/02/24 05:45	1
<b>Surrogate</b>	<b>MB</b>	<b>MB</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>					
1-Chlorooctane	211	S1+	70 - 130				05/30/24 15:26	06/02/24 05:45	1
<i>o-Terphenyl</i>	221	S1+	70 - 130				05/30/24 15:26	06/02/24 05:45	1

**Lab Sample ID: LCS 880-81926/2-A****Matrix: Solid****Analysis Batch: 82104**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 81926**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	1163		mg/Kg		116	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1235		mg/Kg		124	70 - 130

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**QC Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
 SDG: Eddy County, New Mexico

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

Lab Sample ID: LCS 880-81926/2-A

Matrix: Solid

Analysis Batch: 82104

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 81926

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	123		70 - 130
<i>o</i> -Terphenyl	134	S1+	70 - 130

Lab Sample ID: LCSD 880-81926/3-A

Matrix: Solid

Analysis Batch: 82104

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 81926

Analyte		Spike	LCSD	LCSD			%Rec	RPD
		Added	Result	Qualifier	Unit	D	Limits	Limit
Gasoline Range Organics (GRO)-C6-C10		1000	1021		mg/Kg	102	70 - 130	13
Diesel Range Organics (Over C10-C28)		1000	1058		mg/Kg	106	70 - 130	15

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	138	S1+	70 - 130
<i>o</i> -Terphenyl	124		70 - 130

Lab Sample ID: 880-44066-4 MS

Matrix: Solid

Analysis Batch: 82104

Client Sample ID: H-4 (0-6")

Prep Type: Total/NA

Prep Batch: 81926

Analyte	Sample	Sample	Spike	MS	MS		%Rec	
	Result	Qualifier	Added	Result	Qualifier	Unit	D	Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F1	1000	675.2	F1	mg/Kg	68	70 - 130
Diesel Range Organics (Over C10-C28)	208	F1	1000	871.2	F1	mg/Kg	66	70 - 130

Surrogate	MS	MS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	84		70 - 130
<i>o</i> -Terphenyl	90		70 - 130

Lab Sample ID: 880-44066-4 MSD

Matrix: Solid

Analysis Batch: 82104

Client Sample ID: H-4 (0-6")

Prep Type: Total/NA

Prep Batch: 81926

Analyte	Sample	Sample	Spike	MSD	MSD		%Rec	
	Result	Qualifier	Added	Result	Qualifier	Unit	D	Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F1	1000	692.7	F1	mg/Kg	69	70 - 130
Diesel Range Organics (Over C10-C28)	208	F1	1000	846.3	F1	mg/Kg	64	70 - 130

Surrogate	MSD	MSD	
	%Recovery	Qualifier	Limits
1-Chlorooctane	105		70 - 130
<i>o</i> -Terphenyl	92		70 - 130

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**QC Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
 SDG: Eddy County, New Mexico

**Method: 300.0 - Anions, Ion Chromatography****Lab Sample ID: MB 880-81921/1-A****Matrix: Solid****Analysis Batch: 81991**

**Client Sample ID: Method Blank**  
**Prep Type: Soluble**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/31/24 16:43	1

**Lab Sample ID: LCS 880-81921/2-A****Matrix: Solid****Analysis Batch: 81991**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
Chloride	250	244.2		mg/Kg		98	90 - 110	

**Lab Sample ID: LCSD 880-81921/3-A****Matrix: Solid****Analysis Batch: 81991**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	243.7		mg/Kg		97	90 - 110	0	20

**Lab Sample ID: 880-44066-1 MS****Matrix: Solid****Analysis Batch: 81991**

**Client Sample ID: H-1 (0-6")**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	295		251	541.2		mg/Kg		98	90 - 110	0	20

**Lab Sample ID: 880-44066-1 MSD****Matrix: Solid****Analysis Batch: 81991**

**Client Sample ID: H-1 (0-6")**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	295		251	540.6		mg/Kg		98	90 - 110	0	20

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**QC Association Summary**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
 SDG: Eddy County, New Mexico

**GC VOA****Analysis Batch: 81746**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-44066-1	H-1 (0-6")	Total/NA	Solid	8021B	81877
880-44066-2	H-2 (0-6")	Total/NA	Solid	8021B	81877
880-44066-3	H-3 (0-6")	Total/NA	Solid	8021B	81877
880-44066-4	H-4 (0-6")	Total/NA	Solid	8021B	81877
880-44066-5	H-5 (0-6")	Total/NA	Solid	8021B	81877
MB 880-81877/5-A	Method Blank	Total/NA	Solid	8021B	81877
LCS 880-81877/1-A	Lab Control Sample	Total/NA	Solid	8021B	81877
LCSD 880-81877/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	81877
880-44063-A-38-A MS	Matrix Spike	Total/NA	Solid	8021B	81877
880-44063-A-38-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	81877

**Prep Batch: 81877**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-44066-1	H-1 (0-6")	Total/NA	Solid	5035	10
880-44066-2	H-2 (0-6")	Total/NA	Solid	5035	11
880-44066-3	H-3 (0-6")	Total/NA	Solid	5035	12
880-44066-4	H-4 (0-6")	Total/NA	Solid	5035	13
880-44066-5	H-5 (0-6")	Total/NA	Solid	5035	14
MB 880-81877/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-81877/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-81877/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-44063-A-38-A MS	Matrix Spike	Total/NA	Solid	5035	
880-44063-A-38-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

**Prep Batch: 81890**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-44066-6	H-6 (0-6")	Total/NA	Solid	5035	
MB 880-81890/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-81890/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-81890/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-44068-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-44068-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

**Analysis Batch: 81924**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-44066-6	H-6 (0-6")	Total/NA	Solid	8021B	81890
MB 880-81890/5-A	Method Blank	Total/NA	Solid	8021B	81890
LCS 880-81890/1-A	Lab Control Sample	Total/NA	Solid	8021B	81890
LCSD 880-81890/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	81890
880-44068-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	81890
880-44068-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	81890

**Analysis Batch: 82023**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-44066-1	H-1 (0-6")	Total/NA	Solid	Total BTEX	
880-44066-2	H-2 (0-6")	Total/NA	Solid	Total BTEX	
880-44066-3	H-3 (0-6")	Total/NA	Solid	Total BTEX	
880-44066-4	H-4 (0-6")	Total/NA	Solid	Total BTEX	
880-44066-5	H-5 (0-6")	Total/NA	Solid	Total BTEX	
880-44066-6	H-6 (0-6")	Total/NA	Solid	Total BTEX	

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**QC Association Summary**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
 SDG: Eddy County, New Mexico

**GC Semi VOA****Analysis Batch: 81848**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-44066-1	H-1 (0-6")	Total/NA	Solid	8015B NM	81909
880-44066-2	H-2 (0-6")	Total/NA	Solid	8015B NM	81909
880-44066-3	H-3 (0-6")	Total/NA	Solid	8015B NM	81909
MB 880-81909/1-A	Method Blank	Total/NA	Solid	8015B NM	81909
LCS 880-81909/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	81909
LCSD 880-81909/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	81909
880-44068-A-11-D MS	Matrix Spike	Total/NA	Solid	8015B NM	81909
880-44068-A-11-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	81909

**Prep Batch: 81909**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-44066-1	H-1 (0-6")	Total/NA	Solid	8015NM Prep	10
880-44066-2	H-2 (0-6")	Total/NA	Solid	8015NM Prep	11
880-44066-3	H-3 (0-6")	Total/NA	Solid	8015NM Prep	12
MB 880-81909/1-A	Method Blank	Total/NA	Solid	8015NM Prep	13
LCS 880-81909/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	14
LCSD 880-81909/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-44068-A-11-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-44068-A-11-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

**Prep Batch: 81926**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-44066-4	H-4 (0-6")	Total/NA	Solid	8015NM Prep	
880-44066-5	H-5 (0-6")	Total/NA	Solid	8015NM Prep	
880-44066-6	H-6 (0-6")	Total/NA	Solid	8015NM Prep	
MB 880-81926/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-81926/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-81926/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-44066-4 MS	H-4 (0-6")	Total/NA	Solid	8015NM Prep	
880-44066-4 MSD	H-4 (0-6")	Total/NA	Solid	8015NM Prep	

**Analysis Batch: 82067**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-44066-1	H-1 (0-6")	Total/NA	Solid	8015 NM	
880-44066-2	H-2 (0-6")	Total/NA	Solid	8015 NM	
880-44066-3	H-3 (0-6")	Total/NA	Solid	8015 NM	
880-44066-4	H-4 (0-6")	Total/NA	Solid	8015 NM	
880-44066-5	H-5 (0-6")	Total/NA	Solid	8015 NM	
880-44066-6	H-6 (0-6")	Total/NA	Solid	8015 NM	

**Analysis Batch: 82104**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-44066-4	H-4 (0-6")	Total/NA	Solid	8015B NM	81926
880-44066-5	H-5 (0-6")	Total/NA	Solid	8015B NM	81926
880-44066-6	H-6 (0-6")	Total/NA	Solid	8015B NM	81926
MB 880-81926/1-A	Method Blank	Total/NA	Solid	8015B NM	81926
LCS 880-81926/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	81926
LCSD 880-81926/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	81926
880-44066-4 MS	H-4 (0-6")	Total/NA	Solid	8015B NM	81926
880-44066-4 MSD	H-4 (0-6")	Total/NA	Solid	8015B NM	81926

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**QC Association Summary**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
 SDG: Eddy County, New Mexico

**HPLC/IC****Leach Batch: 81921**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-44066-1	H-1 (0-6")	Soluble	Solid	DI Leach	
880-44066-2	H-2 (0-6")	Soluble	Solid	DI Leach	
880-44066-3	H-3 (0-6")	Soluble	Solid	DI Leach	
880-44066-4	H-4 (0-6")	Soluble	Solid	DI Leach	
880-44066-5	H-5 (0-6")	Soluble	Solid	DI Leach	
880-44066-6	H-6 (0-6")	Soluble	Solid	DI Leach	
MB 880-81921/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-81921/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-81921/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-44066-1 MS	H-1 (0-6")	Soluble	Solid	DI Leach	
880-44066-1 MSD	H-1 (0-6")	Soluble	Solid	DI Leach	

**Analysis Batch: 81991**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-44066-1	H-1 (0-6")	Soluble	Solid	300.0	81921
880-44066-2	H-2 (0-6")	Soluble	Solid	300.0	81921
880-44066-3	H-3 (0-6")	Soluble	Solid	300.0	81921
880-44066-4	H-4 (0-6")	Soluble	Solid	300.0	81921
880-44066-5	H-5 (0-6")	Soluble	Solid	300.0	81921
880-44066-6	H-6 (0-6")	Soluble	Solid	300.0	81921
MB 880-81921/1-A	Method Blank	Soluble	Solid	300.0	81921
LCS 880-81921/2-A	Lab Control Sample	Soluble	Solid	300.0	81921
LCSD 880-81921/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	81921
880-44066-1 MS	H-1 (0-6")	Soluble	Solid	300.0	81921
880-44066-1 MSD	H-1 (0-6")	Soluble	Solid	300.0	81921

**Lab Chronicle**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
 SDG: Eddy County, New Mexico

**Client Sample ID: H-1 (0-6")**

Date Collected: 05/28/24 00:00

Date Received: 05/30/24 10:30

**Lab Sample ID: 880-44066-1**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	81877	05/30/24 11:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	81746	05/30/24 19:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			82023	05/30/24 19:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			82067	05/31/24 01:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	81909	05/30/24 13:38	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	81848	05/31/24 01:41	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	81921	05/30/24 14:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	81991	05/31/24 18:31	SMC	EET MID

**Client Sample ID: H-2 (0-6")**

Date Collected: 05/28/24 00:00

Date Received: 05/30/24 10:30

**Lab Sample ID: 880-44066-2**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	81877	05/30/24 11:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	81746	05/30/24 19:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			82023	05/30/24 19:41	SM	EET MID
Total/NA	Analysis	8015 NM		1			82067	05/31/24 02:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	81909	05/30/24 13:38	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	81848	05/31/24 02:01	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	81921	05/30/24 14:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	81991	05/31/24 18:50	SMC	EET MID

**Client Sample ID: H-3 (0-6")**

Date Collected: 05/28/24 00:00

Date Received: 05/30/24 10:30

**Lab Sample ID: 880-44066-3**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	81877	05/30/24 11:13	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	81746	05/30/24 20:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			82023	05/30/24 20:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			82067	05/31/24 02:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	81909	05/30/24 13:38	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	81848	05/31/24 02:22	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	81921	05/30/24 14:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	81991	05/31/24 18:57	SMC	EET MID

**Client Sample ID: H-4 (0-6")**

Date Collected: 05/28/24 00:00

Date Received: 05/30/24 10:30

**Lab Sample ID: 880-44066-4**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	81877	05/30/24 11:13	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	81746	05/30/24 20:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			82023	05/30/24 20:22	SM	EET MID

Eurofins Midland

**Lab Chronicle**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
 SDG: Eddy County, New Mexico

**Client Sample ID: H-4 (0-6")**

Date Collected: 05/28/24 00:00

Date Received: 05/30/24 10:30

**Lab Sample ID: 880-44066-4**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			82067	06/02/24 06:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	81926	05/30/24 15:26	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	82104	06/02/24 06:32	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	81921	05/30/24 14:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	81991	05/31/24 19:16	SMC	EET MID

**Client Sample ID: H-5 (0-6")**

Date Collected: 05/28/24 00:00

Date Received: 05/30/24 10:30

**Lab Sample ID: 880-44066-5**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	81877	05/30/24 11:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	81746	05/30/24 20:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			82023	05/30/24 20:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			82067	06/02/24 07:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	81926	05/30/24 15:26	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	82104	06/02/24 07:21	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	81921	05/30/24 14:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	81991	05/31/24 19:22	SMC	EET MID

**Client Sample ID: H-6 (0-6")**

Date Collected: 05/28/24 00:00

Date Received: 05/30/24 10:30

**Lab Sample ID: 880-44066-6**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	81890	05/30/24 11:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	81924	05/31/24 02:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			82023	05/31/24 02:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			82067	06/02/24 07:37	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	81926	05/30/24 15:26	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	82104	06/02/24 07:37	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	81921	05/30/24 14:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	81991	05/31/24 19:28	SMC	EET MID

**Laboratory References:**

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

Eurofins Midland

## Accreditation/Certification Summary

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
 SDG: Eddy County, New Mexico

### **Laboratory: Eurofins Midland**

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

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

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

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

1  
2  
3  
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11  
12  
13  
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Eurofins Midland

**Method Summary**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
 SDG: Eddy County, New Mexico

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

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

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

Eurofins Midland

**Sample Summary**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-44066-1  
 SDG: Eddy County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-44066-1	H-1 (0-6")	Solid	05/28/24 00:00	05/30/24 10:30
880-44066-2	H-2 (0-6")	Solid	05/28/24 00:00	05/30/24 10:30
880-44066-3	H-3 (0-6")	Solid	05/28/24 00:00	05/30/24 10:30
880-44066-4	H-4 (0-6")	Solid	05/28/24 00:00	05/30/24 10:30
880-44066-5	H-5 (0-6")	Solid	05/28/24 00:00	05/30/24 10:30
880-44066-6	H-6 (0-6")	Solid	05/28/24 00:00	05/30/24 10:30

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## Chain of Custody

W

880-44066 Chain of Custody



Page 1 of 1

Project Manager:	Clinton Merritt	Bill to: (if different)	Isaac Castro
Company Name:	Carmona Resources	Company Name:	Marathon Oil Corporation
Address:	310 W Wall St Ste 500	Address:	990 Town and Country Blvd
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Houston, TX 77024
Phone:		Email:	<a href="mailto:jcastro@marathonoil.com">jcastro@marathonoil.com</a>

Work Order Comments			
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> IRC <input type="checkbox"/> Superfund <input type="checkbox"/>			
State of Project:			
Reporting Level: <input type="checkbox"/> Level II <input checked="" type="checkbox"/> Level III <input type="checkbox"/> STS/UST <input type="checkbox"/> RRP <input type="checkbox"/> Level IV <input type="checkbox"/>			
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____			

ANALYSIS REQUEST				Preservative Codes	
Project Name:	Cypress 2H 4H CTB	Turn Around			
Project Number:	2377	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush	Pres. Code:	
Project Location:	Eddy County, New Mexico	Due Date:	5 day		
Sampler's Name:	CCM				
PO #:	CL 24.01580				
SAMPLE RECEIPT					
Received Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Thermometer ID:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Parameters	
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Correction Factor:	-	BTEX 8021B	
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Temperature Reading:	74	TPH 8015M ( GRO + DRO + MRO)	
Total Containers:		Corrected Temperature:	74	Chloride 300.0	

Sample Identification						
Date	Time	Soil	Water	Gelatin	# of Cont	Sample Comments
H-1 (0-6")	5/28/2024	X	G	1	X X X	
H-2 (0-6")	5/28/2024	X	G	1	X X X	
H-3 (0-6")	5/28/2024	X	G	1	X X X	
H-4 (0-6")	5/28/2024	X	G	1	X X X	
H-5 (0-6")	5/28/2024	X	G	1	X X X	
H-6 (0-6")	5/28/2024	X	G	1	X X X	

Comments: Email results to Mike Carmona [mcarmona@carmonaresources.com](mailto:mcarmona@carmonaresources.com), Conner Moehring [cmoehring@carmonaresources.com](mailto:cmoehring@carmonaresources.com), Clint Merritt [Clint.MerrittC@carmonaresources.com](mailto:Clint.MerrittC@carmonaresources.com)

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
	5/30/24		5/30/24 1030

## Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-44066-1

SDG Number: Eddy County, New Mexico

**Login Number: 44066****List Source: Eurofins Midland****List Number: 1****Creator: Vasquez, Julisa**

Question	Answer	Comment	
The cooler's custody seal, if present, is intact.	N/A		1
Sample custody seals, if present, are intact.	N/A		2
The cooler or samples do not appear to have been compromised or tampered with.	True		3
Samples were received on ice.	True		4
Cooler Temperature is acceptable.	True		5
Cooler Temperature is recorded.	True		6
COC is present.	True		7
COC is filled out in ink and legible.	True		8
COC is filled out with all pertinent information.	True		9
Is the Field Sampler's name present on COC?	True		10
There are no discrepancies between the containers received and the COC.	True		11
Samples are received within Holding Time (excluding tests with immediate HTs)	True		12
Sample containers have legible labels.	True		13
Containers are not broken or leaking.	True		14
Sample collection date/times are provided.	True		
Appropriate sample containers are used.	True		
Sample bottles are completely filled.	True		
Sample Preservation Verified.	N/A		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A		



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Clint Merritt  
Carmona Resources  
310 W Wall St  
Ste 500  
Midland, Texas 79701

Generated 6/24/2024 6:13:52 PM

## JOB DESCRIPTION

Cypress 2H 4H CTB  
Eddy County NM

## JOB NUMBER

880-45012-1

Eurofins Midland  
1211 W. Florida Ave  
Midland TX 79701

See page two for job notes and contact information.  
Released to Imaging: 6/6/2024 11:32:35 AM

# Eurofins Midland

## Job Notes

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

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

## Authorization



Generated  
6/24/2024 6:13:52 PM

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

Client: Carmona Resources  
Project/Site: Cypress 2H 4H CTB

Laboratory Job ID: 880-45012-1  
SDG: Eddy County NM

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## Definitions/Glossary

Client: Carmona Resources  
Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
SDG: Eddy County NM

### Qualifiers

#### GC VOA

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

#### GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

#### HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

### Glossary

#### Abbreviation

These commonly used abbreviations may or may not be present in this report.

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

## Case Narrative

Client: Carmona Resources  
Project: Cypress 2H 4H CTB

Job ID: 880-45012-1

**Job ID: 880-45012-1****Eurofins Midland**

### Job Narrative 880-45012-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### **Receipt**

The samples were received on 6/19/2024 4:40 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -2.2°C.

#### **GC VOA**

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-83673 and analytical batch 880-83657 was outside the control limits.

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

#### **Diesel Range Organics**

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: SW-9 (0-6") (880-45012-22), (880-45012-A-21-B MS) and (880-45012-A-21-C MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-83670 and analytical batch 880-83641 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (LCSD 880-83669/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: CS-5 (0-6") (880-45012-5) and CS-6 (0-6") (880-45012-6). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: CS-8 (0-6") (880-45012-8), CS-9 (0-6") (880-45012-9), SW-1 (1') (880-45012-14), SW-2 (1') (880-45012-15), SW-3 (1') (880-45012-16) and SW-6 (0-6") (880-45012-19). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-83669 and analytical batch 880-83869 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

#### **HPLC/IC**

Method 300\_ORGFM\_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-83710 and analytical batch 880-83731 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Eurofins Midland

**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: CS-1 (1')**  
 Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-1**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		06/20/24 08:58	06/20/24 12:34	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/20/24 08:58	06/20/24 12:34	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/20/24 08:58	06/20/24 12:34	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/20/24 08:58	06/20/24 12:34	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/20/24 08:58	06/20/24 12:34	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/20/24 08:58	06/20/24 12:34	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	100			70 - 130			06/20/24 08:58	06/20/24 12:34	1
1,4-Difluorobenzene (Surr)	110			70 - 130			06/20/24 08:58	06/20/24 12:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			06/20/24 12:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	190		49.8		mg/Kg			06/22/24 23:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/20/24 08:45	06/22/24 23:47	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>190</b>		49.8		mg/Kg		06/20/24 08:45	06/22/24 23:47	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/20/24 08:45	06/22/24 23:47	1
<b>Surrogate</b>									
1-Chlorooctane	105		70 - 130				06/20/24 08:45	06/22/24 23:47	1
o-Terphenyl	108		70 - 130				06/20/24 08:45	06/22/24 23:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	295		5.04		mg/Kg			06/22/24 03:23	1

**Client Sample ID: CS-2 (1')****Lab Sample ID: 880-45012-2**

Date Collected: 06/19/24 00:00

Matrix: Solid

Date Received: 06/19/24 16:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/20/24 08:58	06/20/24 13:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/20/24 08:58	06/20/24 13:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/20/24 08:58	06/20/24 13:01	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/20/24 08:58	06/20/24 13:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/20/24 08:58	06/20/24 13:01	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/20/24 08:58	06/20/24 13:01	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	102			70 - 130			06/20/24 08:58	06/20/24 13:01	1
1,4-Difluorobenzene (Surr)	97			70 - 130			06/20/24 08:58	06/20/24 13:01	1

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**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: CS-2 (1')**  
 Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-2**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			06/20/24 13:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			06/22/24 20:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/20/24 08:45	06/22/24 20:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/20/24 08:45	06/22/24 20:21	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/20/24 08:45	06/22/24 20:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				06/20/24 08:45	06/22/24 20:21	1
<i>o</i> -Terphenyl	115		70 - 130				06/20/24 08:45	06/22/24 20:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	287		4.98		mg/Kg			06/22/24 03:29	1

**Client Sample ID: CS-3 (1')****Lab Sample ID: 880-45012-3**

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		06/20/24 08:58	06/20/24 13:27	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/20/24 08:58	06/20/24 13:27	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/20/24 08:58	06/20/24 13:27	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/20/24 08:58	06/20/24 13:27	1
<i>o</i> -Xylene	<0.00199	U	0.00199		mg/Kg		06/20/24 08:58	06/20/24 13:27	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/20/24 08:58	06/20/24 13:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130				06/20/24 08:58	06/20/24 13:27	1
1,4-Difluorobenzene (Surr)	107		70 - 130				06/20/24 08:58	06/20/24 13:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			06/20/24 13:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			06/22/24 20:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		06/20/24 08:45	06/22/24 20:42	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		06/20/24 08:45	06/22/24 20:42	1

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**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: CS-3 (1')**  
 Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-3**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		06/20/24 08:45	06/22/24 20:42	1
<b>Surrogate</b>									
1-Chlorooctane	116		70 - 130				06/20/24 08:45	06/22/24 20:42	1
o-Terphenyl	123		70 - 130				06/20/24 08:45	06/22/24 20:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	297		5.03		mg/Kg			06/22/24 03:47	1

**Client Sample ID: CS-4 (0-6")**

**Lab Sample ID: 880-45012-4**  
 Matrix: Solid

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/20/24 08:58	06/20/24 13:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/20/24 08:58	06/20/24 13:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/20/24 08:58	06/20/24 13:54	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/20/24 08:58	06/20/24 13:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/20/24 08:58	06/20/24 13:54	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/20/24 08:58	06/20/24 13:54	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	102		70 - 130				06/20/24 08:58	06/20/24 13:54	1
1,4-Difluorobenzene (Surr)	112		70 - 130				06/20/24 08:58	06/20/24 13:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			06/20/24 13:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			06/22/24 21:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		06/20/24 08:45	06/22/24 21:02	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		06/20/24 08:45	06/22/24 21:02	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/20/24 08:45	06/22/24 21:02	1
<b>Surrogate</b>									
1-Chlorooctane	113		70 - 130				06/20/24 08:45	06/22/24 21:02	1
o-Terphenyl	122		70 - 130				06/20/24 08:45	06/22/24 21:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	266		5.04		mg/Kg			06/22/24 03:53	1

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**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: CS-5 (0-6")****Lab Sample ID: 880-45012-5**

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		06/20/24 08:58	06/20/24 14:21	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/20/24 08:58	06/20/24 14:21	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/20/24 08:58	06/20/24 14:21	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/20/24 08:58	06/20/24 14:21	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/20/24 08:58	06/20/24 14:21	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/20/24 08:58	06/20/24 14:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130				06/20/24 08:58	06/20/24 14:21	1
1,4-Difluorobenzene (Surr)	105		70 - 130				06/20/24 08:58	06/20/24 14:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			06/20/24 14:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			06/22/24 21:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		06/20/24 08:45	06/22/24 21:23	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		06/20/24 08:45	06/22/24 21:23	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/20/24 08:45	06/22/24 21:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	142	S1+	70 - 130				06/20/24 08:45	06/22/24 21:23	1
o-Terphenyl	155	S1+	70 - 130				06/20/24 08:45	06/22/24 21:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	215		5.05		mg/Kg			06/22/24 03:59	1

**Client Sample ID: CS-6 (0-6")****Lab Sample ID: 880-45012-6**

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		06/20/24 08:58	06/20/24 14:48	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/20/24 08:58	06/20/24 14:48	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/20/24 08:58	06/20/24 14:48	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		06/20/24 08:58	06/20/24 14:48	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/20/24 08:58	06/20/24 14:48	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		06/20/24 08:58	06/20/24 14:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				06/20/24 08:58	06/20/24 14:48	1
1,4-Difluorobenzene (Surr)	99		70 - 130				06/20/24 08:58	06/20/24 14:48	1

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**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: CS-6 (0-6")****Lab Sample ID: 880-45012-6**

Matrix: Solid

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			06/20/24 14:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			06/22/24 21:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/20/24 08:45	06/22/24 21:44	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/20/24 08:45	06/22/24 21:44	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/20/24 08:45	06/22/24 21:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130				06/20/24 08:45	06/22/24 21:44	1
<i>o</i> -Terphenyl	133	S1+	70 - 130				06/20/24 08:45	06/22/24 21:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	242		5.02		mg/Kg			06/22/24 04:05	1

**Client Sample ID: CS-7 (0-6")****Lab Sample ID: 880-45012-7**

Matrix: Solid

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		06/20/24 08:58	06/20/24 15:14	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/20/24 08:58	06/20/24 15:14	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/20/24 08:58	06/20/24 15:14	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		06/20/24 08:58	06/20/24 15:14	1
<i>o</i> -Xylene	<0.00198	U	0.00198		mg/Kg		06/20/24 08:58	06/20/24 15:14	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		06/20/24 08:58	06/20/24 15:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				06/20/24 08:58	06/20/24 15:14	1
1,4-Difluorobenzene (Surr)	94		70 - 130				06/20/24 08:58	06/20/24 15:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			06/20/24 15:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			06/22/24 22:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/20/24 08:45	06/22/24 22:05	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/20/24 08:45	06/22/24 22:05	1

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**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: CS-7 (0-6")****Lab Sample ID: 880-45012-7**

Matrix: Solid

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/20/24 08:45	06/22/24 22:05	1
<b>Surrogate</b>									
1-Chlorooctane	112		70 - 130				06/20/24 08:45	06/22/24 22:05	1
o-Terphenyl	120		70 - 130				06/20/24 08:45	06/22/24 22:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	195		5.05		mg/Kg			06/22/24 04:10	1

**Client Sample ID: CS-8 (0-6")****Lab Sample ID: 880-45012-8**

Matrix: Solid

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		06/20/24 08:58	06/20/24 15:41	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/20/24 08:58	06/20/24 15:41	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/20/24 08:58	06/20/24 15:41	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/20/24 08:58	06/20/24 15:41	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/20/24 08:58	06/20/24 15:41	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/20/24 08:58	06/20/24 15:41	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	105		70 - 130				06/20/24 08:58	06/20/24 15:41	1
1,4-Difluorobenzene (Surr)	92		70 - 130				06/20/24 08:58	06/20/24 15:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			06/20/24 15:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			06/22/24 22:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/20/24 08:45	06/22/24 22:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/20/24 08:45	06/22/24 22:25	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/20/24 08:45	06/22/24 22:25	1
<b>Surrogate</b>									
1-Chlorooctane	129		70 - 130				06/20/24 08:45	06/22/24 22:25	1
o-Terphenyl	137	S1+	70 - 130				06/20/24 08:45	06/22/24 22:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	248	F1	5.04		mg/Kg			06/22/24 04:16	1

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**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: CS-9 (0-6")****Lab Sample ID: 880-45012-9**

Matrix: Solid

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg	06/20/24 08:58	06/20/24 16:08		1
Toluene	<0.00200	U	0.00200		mg/Kg	06/20/24 08:58	06/20/24 16:08		1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg	06/20/24 08:58	06/20/24 16:08		1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg	06/20/24 08:58	06/20/24 16:08		1
o-Xylene	<0.00200	U	0.00200		mg/Kg	06/20/24 08:58	06/20/24 16:08		1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg	06/20/24 08:58	06/20/24 16:08		1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130				06/20/24 08:58	06/20/24 16:08	1
1,4-Difluorobenzene (Surr)	109		70 - 130				06/20/24 08:58	06/20/24 16:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			06/20/24 16:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			06/22/24 22:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg	06/20/24 08:45	06/22/24 22:46		1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg	06/20/24 08:45	06/22/24 22:46		1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg	06/20/24 08:45	06/22/24 22:46		1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	132	S1+	70 - 130				06/20/24 08:45	06/22/24 22:46	1
o-Terphenyl	139	S1+	70 - 130				06/20/24 08:45	06/22/24 22:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	245		4.96		mg/Kg			06/22/24 04:34	1

**Client Sample ID: CS-10 (0-6")****Lab Sample ID: 880-45012-10**

Matrix: Solid

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg	06/20/24 08:58	06/20/24 16:34		1
Toluene	<0.00201	U	0.00201		mg/Kg	06/20/24 08:58	06/20/24 16:34		1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg	06/20/24 08:58	06/20/24 16:34		1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg	06/20/24 08:58	06/20/24 16:34		1
o-Xylene	<0.00201	U	0.00201		mg/Kg	06/20/24 08:58	06/20/24 16:34		1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg	06/20/24 08:58	06/20/24 16:34		1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				06/20/24 08:58	06/20/24 16:34	1
1,4-Difluorobenzene (Surr)	99		70 - 130				06/20/24 08:58	06/20/24 16:34	1

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**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: CS-10 (0-6")**

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-10**

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			06/20/24 16:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			06/22/24 23:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg			06/20/24 08:45	06/22/24 23:06
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg			06/20/24 08:45	06/22/24 23:06
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg			06/20/24 08:45	06/22/24 23:06
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130				06/20/24 08:45	06/22/24 23:06	1
<i>o</i> -Terphenyl	129		70 - 130				06/20/24 08:45	06/22/24 23:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4310		25.2		mg/Kg			06/22/24 04:40	5

**Client Sample ID: CS-11 (0-6")**

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-11**

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg			06/20/24 08:58	06/20/24 18:21
Toluene	<0.00201	U	0.00201		mg/Kg			06/20/24 08:58	06/20/24 18:21
Ethylbenzene	<0.00201	U	0.00201		mg/Kg			06/20/24 08:58	06/20/24 18:21
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg			06/20/24 08:58	06/20/24 18:21
<i>o</i> -Xylene	<0.00201	U	0.00201		mg/Kg			06/20/24 08:58	06/20/24 18:21
Xylenes, Total	<0.00402	U	0.00402		mg/Kg			06/20/24 08:58	06/20/24 18:21
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130				06/20/24 08:58	06/20/24 18:21	1
1,4-Difluorobenzene (Surr)	89		70 - 130				06/20/24 08:58	06/20/24 18:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			06/20/24 18:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	159		49.8		mg/Kg			06/22/24 19:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg			06/20/24 08:45	06/22/24 19:20
<i>Diesel Range Organics (Over C10-C28)</i>	159	F1	49.8		mg/Kg			06/20/24 08:45	06/22/24 19:20

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**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: CS-11 (0-6")****Lab Sample ID: 880-45012-11**

Matrix: Solid

Date Collected: 06/19/24 00:00

Date Received: 06/19/24 16:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/20/24 08:45	06/22/24 19:20	1
<b>Surrogate</b>									
1-Chlorooctane	107		70 - 130				06/20/24 08:45	06/22/24 19:20	1
o-Terphenyl	109		70 - 130				06/20/24 08:45	06/22/24 19:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3520		25.2		mg/Kg			06/22/24 04:58	5

**Client Sample ID: CS-12 (0-6")****Lab Sample ID: 880-45012-12**

Matrix: Solid

Date Collected: 06/19/24 00:00

Date Received: 06/19/24 16:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/20/24 08:58	06/20/24 18:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/20/24 08:58	06/20/24 18:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/20/24 08:58	06/20/24 18:48	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/20/24 08:58	06/20/24 18:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/20/24 08:58	06/20/24 18:48	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/20/24 08:58	06/20/24 18:48	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	104		70 - 130				06/20/24 08:58	06/20/24 18:48	1
1,4-Difluorobenzene (Surr)	109		70 - 130				06/20/24 08:58	06/20/24 18:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			06/20/24 18:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	183		50.0		mg/Kg			06/23/24 00:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/20/24 08:45	06/23/24 00:08	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>183</b>		50.0		mg/Kg		06/20/24 08:45	06/23/24 00:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/20/24 08:45	06/23/24 00:08	1
<b>Surrogate</b>									
1-Chlorooctane	121		70 - 130				06/20/24 08:45	06/23/24 00:08	1
o-Terphenyl	126		70 - 130				06/20/24 08:45	06/23/24 00:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3410		24.9		mg/Kg			06/22/24 05:04	5

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**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: CS-13 (0-6")**

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-13**

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg	06/20/24 08:58	06/20/24 19:15		1
Toluene	<0.00199	U	0.00199		mg/Kg	06/20/24 08:58	06/20/24 19:15		1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg	06/20/24 08:58	06/20/24 19:15		1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg	06/20/24 08:58	06/20/24 19:15		1
o-Xylene	<0.00199	U	0.00199		mg/Kg	06/20/24 08:58	06/20/24 19:15		1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg	06/20/24 08:58	06/20/24 19:15		1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				06/20/24 08:58	06/20/24 19:15	1
1,4-Difluorobenzene (Surr)	93		70 - 130				06/20/24 08:58	06/20/24 19:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			06/20/24 19:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	178		49.8		mg/Kg			06/23/24 00:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg	06/20/24 08:45	06/23/24 00:28		1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>178</b>		49.8		mg/Kg	06/20/24 08:45	06/23/24 00:28		1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg	06/20/24 08:45	06/23/24 00:28		1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				06/20/24 08:45	06/23/24 00:28	1
o-Terphenyl	107		70 - 130				06/20/24 08:45	06/23/24 00:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3240		25.2		mg/Kg			06/22/24 05:10	5

**Client Sample ID: SW-1 (1')**

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-14**

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg	06/20/24 08:58	06/20/24 19:42		1
Toluene	<0.00201	U	0.00201		mg/Kg	06/20/24 08:58	06/20/24 19:42		1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg	06/20/24 08:58	06/20/24 19:42		1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg	06/20/24 08:58	06/20/24 19:42		1
o-Xylene	<0.00201	U	0.00201		mg/Kg	06/20/24 08:58	06/20/24 19:42		1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg	06/20/24 08:58	06/20/24 19:42		1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130				06/20/24 08:58	06/20/24 19:42	1
1,4-Difluorobenzene (Surr)	112		70 - 130				06/20/24 08:58	06/20/24 19:42	1

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## Client Sample Results

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: SW-1 (1')**  
 Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-14**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			06/20/24 19:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			06/23/24 00:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg			06/23/24 00:48	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		06/20/24 08:45	06/23/24 00:48	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/20/24 08:45	06/23/24 00:48	1
<b>Surrogate</b>									
1-Chlorooctane	127		70 - 130				06/20/24 08:45	06/23/24 00:48	1
<i>o</i> -Terphenyl	135	S1+	70 - 130				06/20/24 08:45	06/23/24 00:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56.1		5.02		mg/Kg			06/22/24 05:16	1

**Client Sample ID: SW-2 (1')**

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-15**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		06/20/24 08:58	06/20/24 20:08	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/20/24 08:58	06/20/24 20:08	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/20/24 08:58	06/20/24 20:08	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		06/20/24 08:58	06/20/24 20:08	1
<i>o</i> -Xylene	<0.00202	U	0.00202		mg/Kg		06/20/24 08:58	06/20/24 20:08	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		06/20/24 08:58	06/20/24 20:08	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	116		70 - 130				06/20/24 08:58	06/20/24 20:08	1
1,4-Difluorobenzene (Surr)	109		70 - 130				06/20/24 08:58	06/20/24 20:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			06/20/24 20:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			06/23/24 01:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/20/24 08:45	06/23/24 01:08	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/20/24 08:45	06/23/24 01:08	1

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## Client Sample Results

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: SW-2 (1')**  
 Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-15**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/20/24 08:45	06/23/24 01:08	1
<b>Surrogate</b>									
1-Chlorooctane	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	123		70 - 130				06/20/24 08:45	06/23/24 01:08	1
o-Terphenyl	132	S1+	70 - 130				06/20/24 08:45	06/23/24 01:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	59.9		5.05		mg/Kg			06/22/24 05:21	1

**Client Sample ID: SW-3 (1')**  
 Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-16**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/20/24 08:58	06/20/24 20:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/20/24 08:58	06/20/24 20:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/20/24 08:58	06/20/24 20:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/20/24 08:58	06/20/24 20:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/20/24 08:58	06/20/24 20:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/20/24 08:58	06/20/24 20:35	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				06/20/24 08:58	06/20/24 20:35	1
1,4-Difluorobenzene (Surr)	100		70 - 130				06/20/24 08:58	06/20/24 20:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			06/20/24 20:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			06/23/24 01:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/20/24 08:45	06/23/24 01:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/20/24 08:45	06/23/24 01:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/20/24 08:45	06/23/24 01:27	1
<b>Surrogate</b>									
1-Chlorooctane	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	9	S1-	70 - 130				06/20/24 08:45	06/23/24 01:27	1
o-Terphenyl	8	S1-	70 - 130				06/20/24 08:45	06/23/24 01:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43.9		5.03		mg/Kg			06/22/24 05:27	1

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**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: SW-4 (1')**  
 Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-17**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		06/20/24 08:58	06/20/24 21:02	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/20/24 08:58	06/20/24 21:02	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/20/24 08:58	06/20/24 21:02	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/20/24 08:58	06/20/24 21:02	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/20/24 08:58	06/20/24 21:02	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/20/24 08:58	06/20/24 21:02	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	114		70 - 130				06/20/24 08:58	06/20/24 21:02	1
1,4-Difluorobenzene (Surr)	102		70 - 130				06/20/24 08:58	06/20/24 21:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			06/20/24 21:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			06/23/24 02:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/20/24 08:45	06/23/24 02:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/20/24 08:45	06/23/24 02:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/20/24 08:45	06/23/24 02:34	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	126		70 - 130				06/20/24 08:45	06/23/24 02:34	1
o-Terphenyl	128		70 - 130				06/20/24 08:45	06/23/24 02:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	325		5.01		mg/Kg			06/22/24 05:33	1

**Client Sample ID: SW-5 (0-6")****Lab Sample ID: 880-45012-18**

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		06/20/24 08:58	06/20/24 21:28	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/20/24 08:58	06/20/24 21:28	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/20/24 08:58	06/20/24 21:28	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/20/24 08:58	06/20/24 21:28	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/20/24 08:58	06/20/24 21:28	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/20/24 08:58	06/20/24 21:28	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	97		70 - 130				06/20/24 08:58	06/20/24 21:28	1
1,4-Difluorobenzene (Surr)	107		70 - 130				06/20/24 08:58	06/20/24 21:28	1

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**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: SW-5 (0-6")**

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-18**

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			06/20/24 21:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			06/23/24 02:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/20/24 08:45	06/23/24 02:55	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/20/24 08:45	06/23/24 02:55	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/20/24 08:45	06/23/24 02:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				06/20/24 08:45	06/23/24 02:55	1
<i>o</i> -Terphenyl	113		70 - 130				06/20/24 08:45	06/23/24 02:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	280		4.96		mg/Kg			06/21/24 00:32	1

**Client Sample ID: SW-6 (0-6")**

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-19**

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		06/20/24 08:58	06/20/24 21:55	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/20/24 08:58	06/20/24 21:55	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/20/24 08:58	06/20/24 21:55	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		06/20/24 08:58	06/20/24 21:55	1
<i>o</i> -Xylene	<0.00198	U	0.00198		mg/Kg		06/20/24 08:58	06/20/24 21:55	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		06/20/24 08:58	06/20/24 21:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130				06/20/24 08:58	06/20/24 21:55	1
1,4-Difluorobenzene (Surr)	107		70 - 130				06/20/24 08:58	06/20/24 21:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			06/20/24 21:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			06/23/24 03:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/20/24 08:45	06/23/24 03:15	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/20/24 08:45	06/23/24 03:15	1

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## Client Sample Results

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: SW-6 (0-6")****Lab Sample ID: 880-45012-19**

Matrix: Solid

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/20/24 08:45	06/23/24 03:15	1
<b>Surrogate</b>									
1-Chlorooctane	134	S1+	70 - 130				06/20/24 08:45	06/23/24 03:15	1
o-Terphenyl	144	S1+	70 - 130				06/20/24 08:45	06/23/24 03:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	330		4.98		mg/Kg			06/21/24 00:47	1

**Client Sample ID: SW-7 (0-6")****Lab Sample ID: 880-45012-20**

Matrix: Solid

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/20/24 08:58	06/20/24 22:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/20/24 08:58	06/20/24 22:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/20/24 08:58	06/20/24 22:22	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		06/20/24 08:58	06/20/24 22:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/20/24 08:58	06/20/24 22:22	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		06/20/24 08:58	06/20/24 22:22	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	109		70 - 130				06/20/24 08:58	06/20/24 22:22	1
1,4-Difluorobenzene (Surr)	114		70 - 130				06/20/24 08:58	06/20/24 22:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			06/20/24 22:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			06/23/24 03:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/20/24 08:45	06/23/24 03:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/20/24 08:45	06/23/24 03:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/20/24 08:45	06/23/24 03:36	1
<b>Surrogate</b>									
1-Chlorooctane	120		70 - 130				06/20/24 08:45	06/23/24 03:36	1
o-Terphenyl	130		70 - 130				06/20/24 08:45	06/23/24 03:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	326		5.04		mg/Kg			06/21/24 00:52	1

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**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: SW-8 (0-6")**

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-21**

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg	06/20/24 08:21	06/20/24 14:05		1
Toluene	<0.00200	U	0.00200		mg/Kg	06/20/24 08:21	06/20/24 14:05		1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg	06/20/24 08:21	06/20/24 14:05		1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg	06/20/24 08:21	06/20/24 14:05		1
o-Xylene	<0.00200	U	0.00200		mg/Kg	06/20/24 08:21	06/20/24 14:05		1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg	06/20/24 08:21	06/20/24 14:05		1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				06/20/24 08:21	06/20/24 14:05	1
1,4-Difluorobenzene (Surr)	99		70 - 130				06/20/24 08:21	06/20/24 14:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			06/20/24 14:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			06/20/24 19:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg	06/20/24 08:48	06/20/24 19:55		1
Diesel Range Organics (Over C10-C28)	<50.0	U F1	50.0		mg/Kg	06/20/24 08:48	06/20/24 19:55		1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg	06/20/24 08:48	06/20/24 19:55		1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130				06/20/24 08:48	06/20/24 19:55	1
o-Terphenyl	123		70 - 130				06/20/24 08:48	06/20/24 19:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	354		4.97		mg/Kg			06/21/24 00:57	1

**Client Sample ID: SW-9 (0-6")**

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-22**

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg	06/20/24 08:21	06/20/24 14:25		1
Toluene	<0.00199	U	0.00199		mg/Kg	06/20/24 08:21	06/20/24 14:25		1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg	06/20/24 08:21	06/20/24 14:25		1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg	06/20/24 08:21	06/20/24 14:25		1
o-Xylene	<0.00199	U	0.00199		mg/Kg	06/20/24 08:21	06/20/24 14:25		1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg	06/20/24 08:21	06/20/24 14:25		1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				06/20/24 08:21	06/20/24 14:25	1
1,4-Difluorobenzene (Surr)	89		70 - 130				06/20/24 08:21	06/20/24 14:25	1

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**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: SW-9 (0-6")****Lab Sample ID: 880-45012-22**

Matrix: Solid

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			06/20/24 14:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			06/20/24 20:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/20/24 08:48	06/20/24 20:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/20/24 08:48	06/20/24 20:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/20/24 08:48	06/20/24 20:57	1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130	06/20/24 08:48	06/20/24 20:57	1
<i>o</i> -Terphenyl	131	S1+	70 - 130	06/20/24 08:48	06/20/24 20:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	319		5.02		mg/Kg			06/21/24 01:02	1

**Client Sample ID: SW-10 (0-6")****Lab Sample ID: 880-45012-23**

Matrix: Solid

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		06/20/24 08:21	06/20/24 14:45	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/20/24 08:21	06/20/24 14:45	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/20/24 08:21	06/20/24 14:45	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/20/24 08:21	06/20/24 14:45	1
<i>o</i> -Xylene	<0.00201	U	0.00201		mg/Kg		06/20/24 08:21	06/20/24 14:45	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/20/24 08:21	06/20/24 14:45	1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	06/20/24 08:21	06/20/24 14:45	1
1,4-Difluorobenzene (Surr)	97		70 - 130	06/20/24 08:21	06/20/24 14:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			06/20/24 14:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			06/20/24 21:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/20/24 08:48	06/20/24 21:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/20/24 08:48	06/20/24 21:17	1

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**Client Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: SW-10 (0-6")**

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-23**

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/20/24 08:48	06/20/24 21:17	1
<b>Surrogate</b>									
1-Chlorooctane	113		70 - 130				06/20/24 08:48	06/20/24 21:17	1
<i>o</i> -Terphenyl	128		70 - 130				06/20/24 08:48	06/20/24 21:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	308		4.98		mg/Kg			06/21/24 01:18	1

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**Surrogate Summary**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-45012-1	CS-1 (1')	100	110
880-45012-1 MS	CS-1 (1')	96	116
880-45012-1 MSD	CS-1 (1')	104	104
880-45012-2	CS-2 (1')	102	97
880-45012-3	CS-3 (1')	96	107
880-45012-4	CS-4 (0-6")	102	112
880-45012-5	CS-5 (0-6")	114	105
880-45012-6	CS-6 (0-6")	109	99
880-45012-7	CS-7 (0-6")	106	94
880-45012-8	CS-8 (0-6")	105	92
880-45012-9	CS-9 (0-6")	101	109
880-45012-10	CS-10 (0-6")	106	99
880-45012-11	CS-11 (0-6")	100	89
880-45012-12	CS-12 (0-6")	104	109
880-45012-13	CS-13 (0-6")	113	93
880-45012-14	SW-1 (1')	99	112
880-45012-15	SW-2 (1')	116	109
880-45012-16	SW-3 (1')	111	100
880-45012-17	SW-4 (1')	114	102
880-45012-18	SW-5 (0-6")	97	107
880-45012-19	SW-6 (0-6")	98	107
880-45012-20	SW-7 (0-6")	109	114
880-45012-21	SW-8 (0-6")	113	99
880-45012-22	SW-9 (0-6")	112	89
880-45012-23	SW-10 (0-6")	111	97
890-6838-A-1-D MS	Matrix Spike	109	100
890-6838-A-1-E MSD	Matrix Spike Duplicate	110	102
LCS 880-83651/1-A	Lab Control Sample	110	102
LCS 880-83673/1-A	Lab Control Sample	111	96
LCSD 880-83651/2-A	Lab Control Sample Dup	107	102
LCSD 880-83673/2-A	Lab Control Sample Dup	101	105
MB 880-83651/5-A	Method Blank	112	93
MB 880-83673/5-A	Method Blank	63 S1-	102

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
880-45012-1	CS-1 (1')	105	108
880-45012-2	CS-2 (1')	105	115
880-45012-3	CS-3 (1')	116	123
880-45012-4	CS-4 (0-6")	113	122
880-45012-5	CS-5 (0-6")	142 S1+	155 S1+
880-45012-6	CS-6 (0-6")	127	133 S1+

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**Surrogate Summary**

Client: Carmona Resources

Job ID: 880-45012-1

Project/Site: Cypress 2H 4H CTB

SDG: Eddy County NM

**Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)****Matrix: Solid****Prep Type: Total/NA**

<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Percent Surrogate Recovery (Acceptance Limits)</b>		
		<b>1CO1 (70-130)</b>	<b>OTPH1 (70-130)</b>	
880-45012-7	CS-7 (0-6")	112	120	
880-45012-8	CS-8 (0-6")	129	137 S1+	
880-45012-9	CS-9 (0-6")	132 S1+	139 S1+	
880-45012-10	CS-10 (0-6")	121	129	
880-45012-11	CS-11 (0-6")	107	109	
880-45012-11 MS	CS-11 (0-6")	106	96	
880-45012-11 MSD	CS-11 (0-6")	104	94	
880-45012-12	CS-12 (0-6")	121	126	
880-45012-13	CS-13 (0-6")	104	107	
880-45012-14	SW-1 (1')	127	135 S1+	
880-45012-15	SW-2 (1')	123	132 S1+	
880-45012-16	SW-3 (1')	9 S1-	8 S1-	
880-45012-17	SW-4 (1')	126	128	
880-45012-18	SW-5 (0-6")	105	113	
880-45012-19	SW-6 (0-6")	134 S1+	144 S1+	
880-45012-20	SW-7 (0-6")	120	130	
880-45012-21	SW-8 (0-6")	107	123	
880-45012-21 MS	SW-8 (0-6")	141 S1+	136 S1+	
880-45012-21 MSD	SW-8 (0-6")	131 S1+	129	
880-45012-22	SW-9 (0-6")	117	131 S1+	
880-45012-23	SW-10 (0-6")	113	128	
LCS 880-83669/2-A	Lab Control Sample	129	118	
LCS 880-83670/2-A	Lab Control Sample	121	115	
LCSD 880-83669/3-A	Lab Control Sample Dup	134 S1+	124	
LCSD 880-83670/3-A	Lab Control Sample Dup	119	117	
MB 880-83669/1-A	Method Blank	111	112	
MB 880-83670/1-A	Method Blank	99	106	

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Carmona Resources  
Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
SDG: Eddy County NM

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

**Lab Sample ID: MB 880-83651/5-A**

**Matrix: Solid**

**Analysis Batch: 83656**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 83651**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Benzene	<0.00201	U	0.00201		mg/Kg	06/20/24 08:21	06/20/24 11:40	1			
Toluene	<0.00201	U	0.00201		mg/Kg	06/20/24 08:21	06/20/24 11:40	1			
Ethylbenzene	<0.00201	U	0.00201		mg/Kg	06/20/24 08:21	06/20/24 11:40	1			
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg	06/20/24 08:21	06/20/24 11:40	1			
o-Xylene	<0.00201	U	0.00201		mg/Kg	06/20/24 08:21	06/20/24 11:40	1			
Xylenes, Total	<0.00402	U	0.00402		mg/Kg	06/20/24 08:21	06/20/24 11:40	1			
Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	112		70 - 130		06/20/24 08:21	06/20/24 11:40	1				
1,4-Difluorobenzene (Surr)	93		70 - 130		06/20/24 08:21	06/20/24 11:40	1				

**Lab Sample ID: LCS 880-83651/1-A**

**Matrix: Solid**

**Analysis Batch: 83656**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 83651**

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	%Rec	RPD
	Added	Result	Qualifier								
Benzene	0.100	0.1119		mg/Kg	112	70 - 130					
Toluene	0.100	0.1006		mg/Kg	101	70 - 130					
Ethylbenzene	0.100	0.1004		mg/Kg	100	70 - 130					
m-Xylene & p-Xylene	0.200	0.2086		mg/Kg	104	70 - 130					
o-Xylene	0.100	0.1054		mg/Kg	105	70 - 130					
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	110		70 - 130								
1,4-Difluorobenzene (Surr)	102		70 - 130								

**Lab Sample ID: LCSD 880-83651/2-A**

**Matrix: Solid**

**Analysis Batch: 83656**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 83651**

Analyte	Spike	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier								
Benzene	0.100	0.1210		mg/Kg	121	70 - 130				8	35
Toluene	0.100	0.1085		mg/Kg	109	70 - 130				8	35
Ethylbenzene	0.100	0.1083		mg/Kg	108	70 - 130				8	35
m-Xylene & p-Xylene	0.200	0.2246		mg/Kg	112	70 - 130				7	35
o-Xylene	0.100	0.1125		mg/Kg	113	70 - 130				7	35
Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	107		70 - 130								
1,4-Difluorobenzene (Surr)	102		70 - 130								

**Lab Sample ID: 890-6838-A-1-D MS**

**Matrix: Solid**

**Analysis Batch: 83656**

**Client Sample ID: Matrix Spike**

**Prep Type: Total/NA**

**Prep Batch: 83651**

Analyte	Sample	Sample	Spike	MS	MS	Result	Qualifier	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier						
Benzene	<0.00201	U	0.100	0.1071		mg/Kg	107	70 - 130			
Toluene	<0.00201	U	0.100	0.09566		mg/Kg	96	70 - 130			

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**QC Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)****Lab Sample ID: 890-6838-A-1-D MS****Matrix: Solid****Analysis Batch: 83656****Client Sample ID: Matrix Spike****Prep Type: Total/NA****Prep Batch: 83651**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				Limits
Ethylbenzene	<0.00201	U	0.100	0.09450		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1959		mg/Kg		98	70 - 130
o-Xylene	<0.00201	U	0.100	0.09666		mg/Kg		97	70 - 130
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
4-Bromofluorobenzene (Surr)	109			70 - 130					
1,4-Difluorobenzene (Surr)	100			70 - 130					

**Lab Sample ID: 890-6838-A-1-E MSD****Matrix: Solid****Analysis Batch: 83656****Client Sample ID: Matrix Spike Duplicate****Prep Type: Total/NA****Prep Batch: 83651**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				RPD
Benzene	<0.00201	U	0.100	0.1089		mg/Kg		109	70 - 130
Toluene	<0.00201	U	0.100	0.09709		mg/Kg		97	70 - 130
Ethylbenzene	<0.00201	U	0.100	0.09593		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.2000		mg/Kg		100	70 - 130
o-Xylene	<0.00201	U	0.100	0.09856		mg/Kg		99	70 - 130
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
4-Bromofluorobenzene (Surr)	110			70 - 130					
1,4-Difluorobenzene (Surr)	102			70 - 130					

**Lab Sample ID: MB 880-83673/5-A****Matrix: Solid****Analysis Batch: 83657****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 83673**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.00201	U	0.00201		mg/Kg		06/20/24 08:58	06/20/24 12:07	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/20/24 08:58	06/20/24 12:07	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/20/24 08:58	06/20/24 12:07	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/20/24 08:58	06/20/24 12:07	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/20/24 08:58	06/20/24 12:07	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/20/24 08:58	06/20/24 12:07	1
<b>Surrogate</b>		<b>MB</b>	<b>MB</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	63	S1-		70 - 130			06/20/24 08:58	06/20/24 12:07	1
1,4-Difluorobenzene (Surr)	102			70 - 130			06/20/24 08:58	06/20/24 12:07	1

**Lab Sample ID: LCS 880-83673/1-A****Matrix: Solid****Analysis Batch: 83657****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 83673**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Benzene	0.100	0.1202		mg/Kg		120	70 - 130
Toluene	0.100	0.1103		mg/Kg		110	70 - 130
Ethylbenzene	0.100	0.1089		mg/Kg		109	70 - 130
m-Xylene & p-Xylene	0.200	0.2204		mg/Kg		110	70 - 130

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## QC Sample Results

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)****Lab Sample ID: LCS 880-83673/1-A****Matrix: Solid****Analysis Batch: 83657****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 83673**

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	RPD
o-Xylene		0.100	0.1079		mg/Kg		108	70 - 130
Surrogate		%Recovery	LCS	LCS			Limits	
4-Bromofluorobenzene (Surr)		111		70 - 130				
1,4-Difluorobenzene (Surr)		96		70 - 130				

**Lab Sample ID: LCSD 880-83673/2-A****Matrix: Solid****Analysis Batch: 83657****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 83673**

Analyte		Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD
Benzene		0.100	0.1125		mg/Kg		112	70 - 130
Surrogate		%Recovery	LCSD	LCSD			Limits	Limit
4-Bromofluorobenzene (Surr)		101		70 - 130				
1,4-Difluorobenzene (Surr)		105		70 - 130				

**Lab Sample ID: 880-45012-1 MS****Matrix: Solid****Analysis Batch: 83657****Client Sample ID: CS-1 (1')****Prep Type: Total/NA****Prep Batch: 83673**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec
Benzene	<0.00201	U	0.100	0.1120		mg/Kg		112
Surrogate	%Recovery	Qualifier		MS	MS			Limits
4-Bromofluorobenzene (Surr)	96			70 - 130				
1,4-Difluorobenzene (Surr)	116			70 - 130				

**Lab Sample ID: 880-45012-1 MSD****Matrix: Solid****Analysis Batch: 83657****Client Sample ID: CS-1 (1')****Prep Type: Total/NA****Prep Batch: 83673**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD
Benzene	<0.00201	U	0.100	0.09843		mg/Kg		98	70 - 130
Surrogate	%Recovery	Qualifier		MSD	MSD			Limits	Limit
4-Bromofluorobenzene (Surr)	96			70 - 130					
1,4-Difluorobenzene (Surr)	116			70 - 130					

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## QC Sample Results

Client: Carmona Resources  
Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
SDG: Eddy County NM

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

Lab Sample ID: 880-45012-1 MSD

Client Sample ID: CS-1 (1')

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 83657

Prep Batch: 83673

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

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

Lab Sample ID: MB 880-83669/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 83869

Prep Batch: 83669

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier					Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		06/20/24 08:44	06/22/24 18:19		1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/20/24 08:44	06/22/24 18:19		1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/20/24 08:44	06/22/24 18:19		1
Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
1-Chlorooctane	111		70 - 130	06/20/24 08:44	06/22/24 18:19	1			
o-Terphenyl	112		70 - 130	06/20/24 08:44	06/22/24 18:19	1			

Lab Sample ID: LCS 880-83669/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 83869

Prep Batch: 83669

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits	Limits
	Added	Result	Qualifier					
Gasoline Range Organics (GRO)-C6-C10	1000	944.0		mg/Kg		94	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	937.5		mg/Kg		94	70 - 130	
Surrogate								
Surrogate	LCS	LCS	Limits					
1-Chlorooctane	129		70 - 130					
o-Terphenyl	118		70 - 130					

Lab Sample ID: LCSD 880-83669/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 83869

Prep Batch: 83669

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	1000	920.5		mg/Kg		92	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	921.3		mg/Kg		92	70 - 130	2	20
Surrogate									
Surrogate	LCSD	LCSD	Limits						
1-Chlorooctane	134	S1+	70 - 130						
o-Terphenyl	124		70 - 130						

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**QC Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)****Lab Sample ID: 880-45012-11 MS****Matrix: Solid****Analysis Batch: 83869****Client Sample ID: CS-11 (0-6")****Prep Type: Total/NA****Prep Batch: 83669**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	1000	950.4		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	159	F1	1000	553.2	F1	mg/Kg	39	70 - 130	
<b>Surrogate</b>									
<b>MS %Recovery</b>									
1-Chlorooctane	106			70 - 130					
o-Terphenyl	96			70 - 130					

**Lab Sample ID: 880-45012-11 MSD****Matrix: Solid****Analysis Batch: 83869****Client Sample ID: CS-11 (0-6")****Prep Type: Total/NA****Prep Batch: 83669**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	1000	952.6		mg/Kg		93	70 - 130	0 20
Diesel Range Organics (Over C10-C28)	159	F1	1000	549.4	F1	mg/Kg	39	70 - 130	1	20
<b>Surrogate</b>										
<b>MSD %Recovery</b>										
1-Chlorooctane	104			70 - 130						
o-Terphenyl	94			70 - 130						

**Lab Sample ID: MB 880-83670/1-A****Matrix: Solid****Analysis Batch: 83641****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 83670**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/20/24 08:48	06/20/24 18:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/20/24 08:48	06/20/24 18:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/20/24 08:48	06/20/24 18:53	1
<b>Surrogate</b>									
<b>MB %Recovery</b>									
1-Chlorooctane	99		70 - 130				06/20/24 08:48	06/20/24 18:53	1
o-Terphenyl	106		70 - 130				06/20/24 08:48	06/20/24 18:53	1

**Lab Sample ID: LCS 880-83670/2-A****Matrix: Solid****Analysis Batch: 83641****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 83670**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics (GRO)-C6-C10	1000	834.7		mg/Kg		83	70 - 130
Diesel Range Organics (Over C10-C28)	1000	888.3		mg/Kg		89	70 - 130

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**QC Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

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

Lab Sample ID: LCS 880-83670/2-A

Matrix: Solid

Analysis Batch: 83641

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 83670

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	121		70 - 130
<i>o</i> -Terphenyl	115		70 - 130

Lab Sample ID: LCSD 880-83670/3-A

Matrix: Solid

Analysis Batch: 83641

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 83670

Analyte	Spike	LCSD	LCSD		%Rec	RPD
	Added	Result	Qualifier	Unit	D	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	874.6		mg/Kg	87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	868.3		mg/Kg	87	70 - 130

Surrogate	LCSD	LCSD	
	%Recovery	Qualifier	Limits
1-Chlorooctane	119		70 - 130
<i>o</i> -Terphenyl	117		70 - 130

Lab Sample ID: 880-45012-21 MS

Matrix: Solid

Analysis Batch: 83641

Client Sample ID: SW-8 (0-6")

Prep Type: Total/NA

Prep Batch: 83670

Analyte	Sample	Sample	Spike	MS	MS		%Rec
	Result	Qualifier	Added	Result	Qualifier	Unit	D
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	995.0		mg/Kg	98
Diesel Range Organics (Over C10-C28)	<50.0	U F1	998	597.7	F1	mg/Kg	60

Surrogate	MS	MS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	141	S1+	70 - 130
<i>o</i> -Terphenyl	136	S1+	70 - 130

Lab Sample ID: 880-45012-21 MSD

Matrix: Solid

Analysis Batch: 83641

Client Sample ID: SW-8 (0-6")

Prep Type: Total/NA

Prep Batch: 83670

Analyte	Sample	Sample	Spike	MSD	MSD		%Rec
	Result	Qualifier	Added	Result	Qualifier	Unit	D
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	945.8		mg/Kg	93
Diesel Range Organics (Over C10-C28)	<50.0	U F1	998	569.6	F1	mg/Kg	57

Surrogate	MSD	MSD	
	%Recovery	Qualifier	Limits
1-Chlorooctane	131	S1+	70 - 130
<i>o</i> -Terphenyl	129		70 - 130

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**QC Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

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

Lab Sample ID: MB 880-83710/1-A

Client Sample ID: Method Blank  
 Prep Type: Soluble

Matrix: Solid

Analysis Batch: 83731

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	<5.00	U	5.00		mg/Kg			06/22/24 02:36	1

Lab Sample ID: LCS 880-83710/2-A

Client Sample ID: Lab Control Sample  
 Prep Type: Soluble

Matrix: Solid

Analysis Batch: 83731

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits	RPD
	Added	Result	Qualifier					
Chloride	250	265.4		mg/Kg		106	90 - 110	

Lab Sample ID: LCSD 880-83710/3-A

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

Matrix: Solid

Analysis Batch: 83731

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD
	Added	Result	Qualifier					
Chloride	250	266.4		mg/Kg		107	90 - 110	0

Lab Sample ID: 880-45012-8 MS

Client Sample ID: CS-8 (0-6")  
 Prep Type: Soluble

Matrix: Solid

Analysis Batch: 83731

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	RPD
	Result	Qualifier	Added	Result	Qualifier					
Chloride	248	F1	252	470.4	F1	mg/Kg		88	90 - 110	

Lab Sample ID: 880-45012-8 MSD

Client Sample ID: CS-8 (0-6")  
 Prep Type: Soluble

Matrix: Solid

Analysis Batch: 83731

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD
	Result	Qualifier	Added	Result	Qualifier					
Chloride	248	F1	252	470.7	F1	mg/Kg		88	90 - 110	0

Lab Sample ID: MB 880-83711/1-A

Client Sample ID: Method Blank  
 Prep Type: Soluble

Matrix: Solid

Analysis Batch: 83735

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	<5.00	U	5.00		mg/Kg			06/21/24 00:17	1

Lab Sample ID: LCS 880-83711/2-A

Client Sample ID: Lab Control Sample  
 Prep Type: Soluble

Matrix: Solid

Analysis Batch: 83735

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits	RPD
	Added	Result	Qualifier					
Chloride	250	241.7		mg/Kg		97	90 - 110	

Lab Sample ID: LCSD 880-83711/3-A

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

Matrix: Solid

Analysis Batch: 83735

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD
	Added	Result	Qualifier					
Chloride	250	242.1		mg/Kg		97	90 - 110	0

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**QC Sample Results**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

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

**Lab Sample ID: 880-45012-18 MS**

**Matrix: Solid**

**Analysis Batch: 83735**

**Client Sample ID: SW-5 (0-6")**

**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits		
Chloride	280		248	537.5		mg/Kg		104	90 - 110		

**Lab Sample ID: 880-45012-18 MSD**

**Matrix: Solid**

**Analysis Batch: 83735**

**Client Sample ID: SW-5 (0-6")**

**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	280		248	542.4		mg/Kg		106	90 - 110	1	20

**QC Association Summary**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**GC VOA****Prep Batch: 83651**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45012-21	SW-8 (0-6")	Total/NA	Solid	5035	
880-45012-22	SW-9 (0-6")	Total/NA	Solid	5035	
880-45012-23	SW-10 (0-6")	Total/NA	Solid	5035	
MB 880-83651/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-83651/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-83651/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6838-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
890-6838-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

**Analysis Batch: 83656**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45012-21	SW-8 (0-6")	Total/NA	Solid	8021B	83651
880-45012-22	SW-9 (0-6")	Total/NA	Solid	8021B	83651
880-45012-23	SW-10 (0-6")	Total/NA	Solid	8021B	83651
MB 880-83651/5-A	Method Blank	Total/NA	Solid	8021B	83651
LCS 880-83651/1-A	Lab Control Sample	Total/NA	Solid	8021B	83651
LCSD 880-83651/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	83651
890-6838-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	83651
890-6838-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	83651

**Analysis Batch: 83657**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45012-1	CS-1 (1')	Total/NA	Solid	8021B	83673
880-45012-2	CS-2 (1')	Total/NA	Solid	8021B	83673
880-45012-3	CS-3 (1')	Total/NA	Solid	8021B	83673
880-45012-4	CS-4 (0-6")	Total/NA	Solid	8021B	83673
880-45012-5	CS-5 (0-6")	Total/NA	Solid	8021B	83673
880-45012-6	CS-6 (0-6")	Total/NA	Solid	8021B	83673
880-45012-7	CS-7 (0-6")	Total/NA	Solid	8021B	83673
880-45012-8	CS-8 (0-6")	Total/NA	Solid	8021B	83673
880-45012-9	CS-9 (0-6")	Total/NA	Solid	8021B	83673
880-45012-10	CS-10 (0-6")	Total/NA	Solid	8021B	83673
880-45012-11	CS-11 (0-6")	Total/NA	Solid	8021B	83673
880-45012-12	CS-12 (0-6")	Total/NA	Solid	8021B	83673
880-45012-13	CS-13 (0-6")	Total/NA	Solid	8021B	83673
880-45012-14	SW-1 (1')	Total/NA	Solid	8021B	83673
880-45012-15	SW-2 (1')	Total/NA	Solid	8021B	83673
880-45012-16	SW-3 (1')	Total/NA	Solid	8021B	83673
880-45012-17	SW-4 (1')	Total/NA	Solid	8021B	83673
880-45012-18	SW-5 (0-6")	Total/NA	Solid	8021B	83673
880-45012-19	SW-6 (0-6")	Total/NA	Solid	8021B	83673
880-45012-20	SW-7 (0-6")	Total/NA	Solid	8021B	83673
MB 880-83673/5-A	Method Blank	Total/NA	Solid	8021B	83673
LCS 880-83673/1-A	Lab Control Sample	Total/NA	Solid	8021B	83673
LCSD 880-83673/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	83673
880-45012-1 MS	CS-1 (1')	Total/NA	Solid	8021B	83673
880-45012-1 MSD	CS-1 (1')	Total/NA	Solid	8021B	83673

**Prep Batch: 83673**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45012-1	CS-1 (1')	Total/NA	Solid	5035	

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**QC Association Summary**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**GC VOA (Continued)****Prep Batch: 83673 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45012-2	CS-2 (1')	Total/NA	Solid	5035	1
880-45012-3	CS-3 (1')	Total/NA	Solid	5035	2
880-45012-4	CS-4 (0-6")	Total/NA	Solid	5035	3
880-45012-5	CS-5 (0-6")	Total/NA	Solid	5035	4
880-45012-6	CS-6 (0-6")	Total/NA	Solid	5035	5
880-45012-7	CS-7 (0-6")	Total/NA	Solid	5035	6
880-45012-8	CS-8 (0-6")	Total/NA	Solid	5035	7
880-45012-9	CS-9 (0-6")	Total/NA	Solid	5035	8
880-45012-10	CS-10 (0-6")	Total/NA	Solid	5035	9
880-45012-11	CS-11 (0-6")	Total/NA	Solid	5035	10
880-45012-12	CS-12 (0-6")	Total/NA	Solid	5035	11
880-45012-13	CS-13 (0-6")	Total/NA	Solid	5035	12
880-45012-14	SW-1 (1')	Total/NA	Solid	5035	13
880-45012-15	SW-2 (1')	Total/NA	Solid	5035	14
880-45012-16	SW-3 (1')	Total/NA	Solid	5035	15
880-45012-17	SW-4 (1')	Total/NA	Solid	5035	16
880-45012-18	SW-5 (0-6")	Total/NA	Solid	5035	17
880-45012-19	SW-6 (0-6")	Total/NA	Solid	5035	18
880-45012-20	SW-7 (0-6")	Total/NA	Solid	5035	19
MB 880-83673/5-A	Method Blank	Total/NA	Solid	5035	20
LCS 880-83673/1-A	Lab Control Sample	Total/NA	Solid	5035	21
LCSD 880-83673/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	22
880-45012-1 MS	CS-1 (1')	Total/NA	Solid	5035	23
880-45012-1 MSD	CS-1 (1')	Total/NA	Solid	5035	24

**Analysis Batch: 83832**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45012-1	CS-1 (1')	Total/NA	Solid	Total BTEX	1
880-45012-2	CS-2 (1')	Total/NA	Solid	Total BTEX	2
880-45012-3	CS-3 (1')	Total/NA	Solid	Total BTEX	3
880-45012-4	CS-4 (0-6")	Total/NA	Solid	Total BTEX	4
880-45012-5	CS-5 (0-6")	Total/NA	Solid	Total BTEX	5
880-45012-6	CS-6 (0-6")	Total/NA	Solid	Total BTEX	6
880-45012-7	CS-7 (0-6")	Total/NA	Solid	Total BTEX	7
880-45012-8	CS-8 (0-6")	Total/NA	Solid	Total BTEX	8
880-45012-9	CS-9 (0-6")	Total/NA	Solid	Total BTEX	9
880-45012-10	CS-10 (0-6")	Total/NA	Solid	Total BTEX	10
880-45012-11	CS-11 (0-6")	Total/NA	Solid	Total BTEX	11
880-45012-12	CS-12 (0-6")	Total/NA	Solid	Total BTEX	12
880-45012-13	CS-13 (0-6")	Total/NA	Solid	Total BTEX	13
880-45012-14	SW-1 (1')	Total/NA	Solid	Total BTEX	14
880-45012-15	SW-2 (1')	Total/NA	Solid	Total BTEX	15
880-45012-16	SW-3 (1')	Total/NA	Solid	Total BTEX	16
880-45012-17	SW-4 (1')	Total/NA	Solid	Total BTEX	17
880-45012-18	SW-5 (0-6")	Total/NA	Solid	Total BTEX	18
880-45012-19	SW-6 (0-6")	Total/NA	Solid	Total BTEX	19
880-45012-20	SW-7 (0-6")	Total/NA	Solid	Total BTEX	20
880-45012-21	SW-8 (0-6")	Total/NA	Solid	Total BTEX	21
880-45012-22	SW-9 (0-6")	Total/NA	Solid	Total BTEX	22
880-45012-23	SW-10 (0-6")	Total/NA	Solid	Total BTEX	23

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**QC Association Summary**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**GC Semi VOA****Analysis Batch: 83641**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45012-21	SW-8 (0-6")	Total/NA	Solid	8015B NM	83670
880-45012-22	SW-9 (0-6")	Total/NA	Solid	8015B NM	83670
880-45012-23	SW-10 (0-6")	Total/NA	Solid	8015B NM	83670
MB 880-83670/1-A	Method Blank	Total/NA	Solid	8015B NM	83670
LCS 880-83670/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	83670
LCSD 880-83670/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	83670
880-45012-21 MS	SW-8 (0-6")	Total/NA	Solid	8015B NM	83670
880-45012-21 MSD	SW-8 (0-6")	Total/NA	Solid	8015B NM	83670

**Prep Batch: 83669**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45012-1	CS-1 (1')	Total/NA	Solid	8015NM Prep	10
880-45012-2	CS-2 (1')	Total/NA	Solid	8015NM Prep	11
880-45012-3	CS-3 (1')	Total/NA	Solid	8015NM Prep	12
880-45012-4	CS-4 (0-6")	Total/NA	Solid	8015NM Prep	13
880-45012-5	CS-5 (0-6")	Total/NA	Solid	8015NM Prep	14
880-45012-6	CS-6 (0-6")	Total/NA	Solid	8015NM Prep	
880-45012-7	CS-7 (0-6")	Total/NA	Solid	8015NM Prep	
880-45012-8	CS-8 (0-6")	Total/NA	Solid	8015NM Prep	
880-45012-9	CS-9 (0-6")	Total/NA	Solid	8015NM Prep	
880-45012-10	CS-10 (0-6")	Total/NA	Solid	8015NM Prep	
880-45012-11	CS-11 (0-6")	Total/NA	Solid	8015NM Prep	
880-45012-12	CS-12 (0-6")	Total/NA	Solid	8015NM Prep	
880-45012-13	CS-13 (0-6")	Total/NA	Solid	8015NM Prep	
880-45012-14	SW-1 (1')	Total/NA	Solid	8015NM Prep	
880-45012-15	SW-2 (1')	Total/NA	Solid	8015NM Prep	
880-45012-16	SW-3 (1')	Total/NA	Solid	8015NM Prep	
880-45012-17	SW-4 (1')	Total/NA	Solid	8015NM Prep	
880-45012-18	SW-5 (0-6")	Total/NA	Solid	8015NM Prep	
880-45012-19	SW-6 (0-6")	Total/NA	Solid	8015NM Prep	
880-45012-20	SW-7 (0-6")	Total/NA	Solid	8015NM Prep	
MB 880-83669/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-83669/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-83669/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-45012-11 MS	CS-11 (0-6")	Total/NA	Solid	8015NM Prep	
880-45012-11 MSD	CS-11 (0-6")	Total/NA	Solid	8015NM Prep	

**Prep Batch: 83670**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45012-21	SW-8 (0-6")	Total/NA	Solid	8015NM Prep	
880-45012-22	SW-9 (0-6")	Total/NA	Solid	8015NM Prep	
880-45012-23	SW-10 (0-6")	Total/NA	Solid	8015NM Prep	
MB 880-83670/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-83670/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-83670/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-45012-21 MS	SW-8 (0-6")	Total/NA	Solid	8015NM Prep	
880-45012-21 MSD	SW-8 (0-6")	Total/NA	Solid	8015NM Prep	

**Analysis Batch: 83815**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45012-1	CS-1 (1')	Total/NA	Solid	8015 NM	

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**QC Association Summary**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**GC Semi VOA (Continued)****Analysis Batch: 83815 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45012-2	CS-2 (1')	Total/NA	Solid	8015 NM	
880-45012-3	CS-3 (1')	Total/NA	Solid	8015 NM	
880-45012-4	CS-4 (0-6")	Total/NA	Solid	8015 NM	
880-45012-5	CS-5 (0-6")	Total/NA	Solid	8015 NM	
880-45012-6	CS-6 (0-6")	Total/NA	Solid	8015 NM	
880-45012-7	CS-7 (0-6")	Total/NA	Solid	8015 NM	
880-45012-8	CS-8 (0-6")	Total/NA	Solid	8015 NM	
880-45012-9	CS-9 (0-6")	Total/NA	Solid	8015 NM	
880-45012-10	CS-10 (0-6")	Total/NA	Solid	8015 NM	
880-45012-11	CS-11 (0-6")	Total/NA	Solid	8015 NM	
880-45012-12	CS-12 (0-6")	Total/NA	Solid	8015 NM	
880-45012-13	CS-13 (0-6")	Total/NA	Solid	8015 NM	
880-45012-14	SW-1 (1')	Total/NA	Solid	8015 NM	
880-45012-15	SW-2 (1')	Total/NA	Solid	8015 NM	
880-45012-16	SW-3 (1')	Total/NA	Solid	8015 NM	
880-45012-17	SW-4 (1')	Total/NA	Solid	8015 NM	
880-45012-18	SW-5 (0-6")	Total/NA	Solid	8015 NM	
880-45012-19	SW-6 (0-6")	Total/NA	Solid	8015 NM	
880-45012-20	SW-7 (0-6")	Total/NA	Solid	8015 NM	
880-45012-21	SW-8 (0-6")	Total/NA	Solid	8015 NM	
880-45012-22	SW-9 (0-6")	Total/NA	Solid	8015 NM	
880-45012-23	SW-10 (0-6")	Total/NA	Solid	8015 NM	

**Analysis Batch: 83869**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45012-1	CS-1 (1')	Total/NA	Solid	8015B NM	83669
880-45012-2	CS-2 (1')	Total/NA	Solid	8015B NM	83669
880-45012-3	CS-3 (1')	Total/NA	Solid	8015B NM	83669
880-45012-4	CS-4 (0-6")	Total/NA	Solid	8015B NM	83669
880-45012-5	CS-5 (0-6")	Total/NA	Solid	8015B NM	83669
880-45012-6	CS-6 (0-6")	Total/NA	Solid	8015B NM	83669
880-45012-7	CS-7 (0-6")	Total/NA	Solid	8015B NM	83669
880-45012-8	CS-8 (0-6")	Total/NA	Solid	8015B NM	83669
880-45012-9	CS-9 (0-6")	Total/NA	Solid	8015B NM	83669
880-45012-10	CS-10 (0-6")	Total/NA	Solid	8015B NM	83669
880-45012-11	CS-11 (0-6")	Total/NA	Solid	8015B NM	83669
880-45012-12	CS-12 (0-6")	Total/NA	Solid	8015B NM	83669
880-45012-13	CS-13 (0-6")	Total/NA	Solid	8015B NM	83669
880-45012-14	SW-1 (1')	Total/NA	Solid	8015B NM	83669
880-45012-15	SW-2 (1')	Total/NA	Solid	8015B NM	83669
880-45012-16	SW-3 (1')	Total/NA	Solid	8015B NM	83669
880-45012-17	SW-4 (1')	Total/NA	Solid	8015B NM	83669
880-45012-18	SW-5 (0-6")	Total/NA	Solid	8015B NM	83669
880-45012-19	SW-6 (0-6")	Total/NA	Solid	8015B NM	83669
880-45012-20	SW-7 (0-6")	Total/NA	Solid	8015B NM	83669
MB 880-83669/1-A	Method Blank	Total/NA	Solid	8015B NM	83669
LCS 880-83669/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	83669
LCSD 880-83669/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	83669
880-45012-11 MS	CS-11 (0-6")	Total/NA	Solid	8015B NM	83669
880-45012-11 MSD	CS-11 (0-6")	Total/NA	Solid	8015B NM	83669

Eurofins Midland

**QC Association Summary**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**HPLC/IC****Leach Batch: 83710**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45012-1	CS-1 (1')	Soluble	Solid	DI Leach	1
880-45012-2	CS-2 (1')	Soluble	Solid	DI Leach	2
880-45012-3	CS-3 (1')	Soluble	Solid	DI Leach	3
880-45012-4	CS-4 (0-6")	Soluble	Solid	DI Leach	4
880-45012-5	CS-5 (0-6")	Soluble	Solid	DI Leach	5
880-45012-6	CS-6 (0-6")	Soluble	Solid	DI Leach	6
880-45012-7	CS-7 (0-6")	Soluble	Solid	DI Leach	7
880-45012-8	CS-8 (0-6")	Soluble	Solid	DI Leach	8
880-45012-9	CS-9 (0-6")	Soluble	Solid	DI Leach	9
880-45012-10	CS-10 (0-6")	Soluble	Solid	DI Leach	10
880-45012-11	CS-11 (0-6")	Soluble	Solid	DI Leach	11
880-45012-12	CS-12 (0-6")	Soluble	Solid	DI Leach	12
880-45012-13	CS-13 (0-6")	Soluble	Solid	DI Leach	13
880-45012-14	SW-1 (1')	Soluble	Solid	DI Leach	14
880-45012-15	SW-2 (1')	Soluble	Solid	DI Leach	15
880-45012-16	SW-3 (1')	Soluble	Solid	DI Leach	16
880-45012-17	SW-4 (1')	Soluble	Solid	DI Leach	17
MB 880-83710/1-A	Method Blank	Soluble	Solid	DI Leach	18
LCS 880-83710/2-A	Lab Control Sample	Soluble	Solid	DI Leach	19
LCSD 880-83710/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	20
880-45012-8 MS	CS-8 (0-6")	Soluble	Solid	DI Leach	21
880-45012-8 MSD	CS-8 (0-6")	Soluble	Solid	DI Leach	22

**Leach Batch: 83711**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45012-18	SW-5 (0-6")	Soluble	Solid	DI Leach	1
880-45012-19	SW-6 (0-6")	Soluble	Solid	DI Leach	2
880-45012-20	SW-7 (0-6")	Soluble	Solid	DI Leach	3
880-45012-21	SW-8 (0-6")	Soluble	Solid	DI Leach	4
880-45012-22	SW-9 (0-6")	Soluble	Solid	DI Leach	5
880-45012-23	SW-10 (0-6")	Soluble	Solid	DI Leach	6
MB 880-83711/1-A	Method Blank	Soluble	Solid	DI Leach	7
LCS 880-83711/2-A	Lab Control Sample	Soluble	Solid	DI Leach	8
LCSD 880-83711/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	9
880-45012-18 MS	SW-5 (0-6")	Soluble	Solid	DI Leach	10
880-45012-18 MSD	SW-5 (0-6")	Soluble	Solid	DI Leach	11

**Analysis Batch: 83731**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45012-1	CS-1 (1')	Soluble	Solid	300.0	83710
880-45012-2	CS-2 (1')	Soluble	Solid	300.0	83710
880-45012-3	CS-3 (1')	Soluble	Solid	300.0	83710
880-45012-4	CS-4 (0-6")	Soluble	Solid	300.0	83710
880-45012-5	CS-5 (0-6")	Soluble	Solid	300.0	83710
880-45012-6	CS-6 (0-6")	Soluble	Solid	300.0	83710
880-45012-7	CS-7 (0-6")	Soluble	Solid	300.0	83710
880-45012-8	CS-8 (0-6")	Soluble	Solid	300.0	83710
880-45012-9	CS-9 (0-6")	Soluble	Solid	300.0	83710
880-45012-10	CS-10 (0-6")	Soluble	Solid	300.0	83710
880-45012-11	CS-11 (0-6")	Soluble	Solid	300.0	83710
880-45012-12	CS-12 (0-6")	Soluble	Solid	300.0	83710

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**QC Association Summary**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**HPLC/IC (Continued)****Analysis Batch: 83731 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45012-13	CS-13 (0-6")	Soluble	Solid	300.0	83710
880-45012-14	SW-1 (1")	Soluble	Solid	300.0	83710
880-45012-15	SW-2 (1")	Soluble	Solid	300.0	83710
880-45012-16	SW-3 (1")	Soluble	Solid	300.0	83710
880-45012-17	SW-4 (1")	Soluble	Solid	300.0	83710
MB 880-83710/1-A	Method Blank	Soluble	Solid	300.0	83710
LCS 880-83710/2-A	Lab Control Sample	Soluble	Solid	300.0	83710
LCSD 880-83710/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	83710
880-45012-8 MS	CS-8 (0-6")	Soluble	Solid	300.0	83710
880-45012-8 MSD	CS-8 (0-6")	Soluble	Solid	300.0	83710

**Analysis Batch: 83735**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45012-18	SW-5 (0-6")	Soluble	Solid	300.0	83711
880-45012-19	SW-6 (0-6")	Soluble	Solid	300.0	83711
880-45012-20	SW-7 (0-6")	Soluble	Solid	300.0	83711
880-45012-21	SW-8 (0-6")	Soluble	Solid	300.0	83711
880-45012-22	SW-9 (0-6")	Soluble	Solid	300.0	83711
880-45012-23	SW-10 (0-6")	Soluble	Solid	300.0	83711
MB 880-83711/1-A	Method Blank	Soluble	Solid	300.0	83711
LCS 880-83711/2-A	Lab Control Sample	Soluble	Solid	300.0	83711
LCSD 880-83711/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	83711
880-45012-18 MS	SW-5 (0-6")	Soluble	Solid	300.0	83711
880-45012-18 MSD	SW-5 (0-6")	Soluble	Solid	300.0	83711

## Lab Chronicle

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: CS-1 (1')**  
**Date Collected: 06/19/24 00:00**  
**Date Received: 06/19/24 16:40**

**Lab Sample ID: 880-45012-1**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	83673	06/20/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83657	06/20/24 12:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 12:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			83815	06/22/24 23:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	83669	06/20/24 08:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83869	06/22/24 23:47	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	83710	06/20/24 11:04	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	83731	06/22/24 03:23	CH	EET MID

**Client Sample ID: CS-2 (1')**  
**Date Collected: 06/19/24 00:00**  
**Date Received: 06/19/24 16:40**

**Lab Sample ID: 880-45012-2**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	83673	06/20/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83657	06/20/24 13:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 13:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			83815	06/22/24 20:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	83669	06/20/24 08:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83869	06/22/24 20:21	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	83710	06/20/24 11:04	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	83731	06/22/24 03:29	CH	EET MID

**Client Sample ID: CS-3 (1')**  
**Date Collected: 06/19/24 00:00**  
**Date Received: 06/19/24 16:40**

**Lab Sample ID: 880-45012-3**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	83673	06/20/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83657	06/20/24 13:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 13:27	SM	EET MID
Total/NA	Analysis	8015 NM		1			83815	06/22/24 20:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	83669	06/20/24 08:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83869	06/22/24 20:42	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	83710	06/20/24 11:04	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	83731	06/22/24 03:47	CH	EET MID

**Client Sample ID: CS-4 (0-6")**  
**Date Collected: 06/19/24 00:00**  
**Date Received: 06/19/24 16:40**

**Lab Sample ID: 880-45012-4**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	83673	06/20/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83657	06/20/24 13:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 13:54	SM	EET MID

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**Lab Chronicle**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: CS-4 (0-6")****Lab Sample ID: 880-45012-4**

Matrix: Solid

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			83815	06/22/24 21:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	83669	06/20/24 08:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83869	06/22/24 21:02	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	83710	06/20/24 11:04	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	83731	06/22/24 03:53	CH	EET MID

**Client Sample ID: CS-5 (0-6")****Lab Sample ID: 880-45012-5**

Matrix: Solid

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	83673	06/20/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83657	06/20/24 14:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 14:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			83815	06/22/24 21:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	83669	06/20/24 08:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83869	06/22/24 21:23	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	83710	06/20/24 11:04	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	83731	06/22/24 03:59	CH	EET MID

**Client Sample ID: CS-6 (0-6")****Lab Sample ID: 880-45012-6**

Matrix: Solid

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	83673	06/20/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83657	06/20/24 14:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 14:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			83815	06/22/24 21:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	83669	06/20/24 08:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83869	06/22/24 21:44	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	83710	06/20/24 11:04	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	83731	06/22/24 04:05	CH	EET MID

**Client Sample ID: CS-7 (0-6")****Lab Sample ID: 880-45012-7**

Matrix: Solid

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	83673	06/20/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83657	06/20/24 15:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 15:14	SM	EET MID
Total/NA	Analysis	8015 NM		1			83815	06/22/24 22:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	83669	06/20/24 08:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83869	06/22/24 22:05	SM	EET MID

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**Lab Chronicle**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: CS-7 (0-6")****Lab Sample ID: 880-45012-7**

Matrix: Solid

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	83710	06/20/24 11:04	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	83731	06/22/24 04:10	CH	EET MID

**Client Sample ID: CS-8 (0-6")****Lab Sample ID: 880-45012-8**

Matrix: Solid

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	83673	06/20/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83657	06/20/24 15:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 15:41	SM	EET MID
Total/NA	Analysis	8015 NM		1			83815	06/22/24 22:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	83669	06/20/24 08:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83869	06/22/24 22:25	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	83710	06/20/24 11:04	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	83731	06/22/24 04:16	CH	EET MID

**Client Sample ID: CS-9 (0-6")****Lab Sample ID: 880-45012-9**

Matrix: Solid

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	83673	06/20/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83657	06/20/24 16:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 16:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			83815	06/22/24 22:46	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	83669	06/20/24 08:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83869	06/22/24 22:46	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	83710	06/20/24 11:04	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	83731	06/22/24 04:34	CH	EET MID

**Client Sample ID: CS-10 (0-6")****Lab Sample ID: 880-45012-10**

Matrix: Solid

Date Collected: 06/19/24 00:00  
 Date Received: 06/19/24 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	83673	06/20/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83657	06/20/24 16:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 16:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			83815	06/22/24 23:06	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	83669	06/20/24 08:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83869	06/22/24 23:06	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	83710	06/20/24 11:04	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	83731	06/22/24 04:40	CH	EET MID

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**Lab Chronicle**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: CS-11 (0-6")**

Date Collected: 06/19/24 00:00

Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-11**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	83673	06/20/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83657	06/20/24 18:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 18:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			83815	06/22/24 19:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	83669	06/20/24 08:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83869	06/22/24 19:20	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	83710	06/20/24 11:04	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	83731	06/22/24 04:58	CH	EET MID

**Client Sample ID: CS-12 (0-6")**

Date Collected: 06/19/24 00:00

Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-12**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	83673	06/20/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83657	06/20/24 18:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 18:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			83815	06/23/24 00:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	83669	06/20/24 08:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83869	06/23/24 00:08	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	83710	06/20/24 11:04	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	83731	06/22/24 05:04	CH	EET MID

**Client Sample ID: CS-13 (0-6")**

Date Collected: 06/19/24 00:00

Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-13**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	83673	06/20/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83657	06/20/24 19:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 19:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			83815	06/23/24 00:28	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	83669	06/20/24 08:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83869	06/23/24 00:28	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	83710	06/20/24 11:04	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	83731	06/22/24 05:10	CH	EET MID

**Client Sample ID: SW-1 (1')**

Date Collected: 06/19/24 00:00

Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-14**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	83673	06/20/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83657	06/20/24 19:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 19:42	SM	EET MID

Eurofins Midland

**Lab Chronicle**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: SW-1 (1')**

Date Collected: 06/19/24 00:00

Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-14**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			83815	06/23/24 00:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	83669	06/20/24 08:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83869	06/23/24 00:48	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	83710	06/20/24 11:04	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	83731	06/22/24 05:16	CH	EET MID

**Client Sample ID: SW-2 (1')**

Date Collected: 06/19/24 00:00

Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-15**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	83673	06/20/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83657	06/20/24 20:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 20:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			83815	06/23/24 01:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	83669	06/20/24 08:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83869	06/23/24 01:08	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	83710	06/20/24 11:04	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	83731	06/22/24 05:21	CH	EET MID

**Client Sample ID: SW-3 (1')**

Date Collected: 06/19/24 00:00

Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-16**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	83673	06/20/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83657	06/20/24 20:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 20:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			83815	06/23/24 01:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	83669	06/20/24 08:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83869	06/23/24 01:27	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	83710	06/20/24 11:04	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	83731	06/22/24 05:27	CH	EET MID

**Client Sample ID: SW-4 (1')**

Date Collected: 06/19/24 00:00

Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-17**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	83673	06/20/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83657	06/20/24 21:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 21:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			83815	06/23/24 02:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	83669	06/20/24 08:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83869	06/23/24 02:34	SM	EET MID

Eurofins Midland

**Lab Chronicle**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: SW-4 (1')**

Date Collected: 06/19/24 00:00

Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-17**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	83710	06/20/24 11:04	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	83731	06/22/24 05:33	CH	EET MID

**Client Sample ID: SW-5 (0-6")**

Date Collected: 06/19/24 00:00

Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-18**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	83673	06/20/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83657	06/20/24 21:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 21:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			83815	06/23/24 02:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	83669	06/20/24 08:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83869	06/23/24 02:55	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	83711	06/20/24 11:06	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	83735	06/21/24 00:32	CH	EET MID

**Client Sample ID: SW-6 (0-6")**

Date Collected: 06/19/24 00:00

Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-19**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	83673	06/20/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83657	06/20/24 21:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 21:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			83815	06/23/24 03:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	83669	06/20/24 08:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83869	06/23/24 03:15	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	83711	06/20/24 11:06	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	83735	06/21/24 00:47	CH	EET MID

**Client Sample ID: SW-7 (0-6")**

Date Collected: 06/19/24 00:00

Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-20**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	83673	06/20/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83657	06/20/24 22:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 22:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			83815	06/23/24 03:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	83669	06/20/24 08:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83869	06/23/24 03:36	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	83711	06/20/24 11:06	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	83735	06/21/24 00:52	CH	EET MID

Eurofins Midland

**Lab Chronicle**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

**Client Sample ID: SW-8 (0-6")**

Date Collected: 06/19/24 00:00

Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-21**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	83651	06/20/24 08:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83656	06/20/24 14:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 14:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			83815	06/20/24 19:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	83670	06/20/24 08:48	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83641	06/20/24 19:55	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	83711	06/20/24 11:06	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	83735	06/21/24 00:57	CH	EET MID

**Client Sample ID: SW-9 (0-6")**

Date Collected: 06/19/24 00:00

Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-22**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	83651	06/20/24 08:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83656	06/20/24 14:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 14:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			83815	06/20/24 20:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	83670	06/20/24 08:48	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83641	06/20/24 20:57	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	83711	06/20/24 11:06	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	83735	06/21/24 01:02	CH	EET MID

**Client Sample ID: SW-10 (0-6")**

Date Collected: 06/19/24 00:00

Date Received: 06/19/24 16:40

**Lab Sample ID: 880-45012-23**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	83651	06/20/24 08:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	83656	06/20/24 14:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			83832	06/20/24 14:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			83815	06/20/24 21:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	83670	06/20/24 08:48	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	83641	06/20/24 21:17	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	83711	06/20/24 11:06	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	83735	06/21/24 01:18	CH	EET MID

**Laboratory References:**

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

Eurofins Midland

## Accreditation/Certification Summary

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

### **Laboratory: Eurofins Midland**

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

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

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

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

**Method Summary**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

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

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

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

Eurofins Midland

**Sample Summary**

Client: Carmona Resources  
 Project/Site: Cypress 2H 4H CTB

Job ID: 880-45012-1  
 SDG: Eddy County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
880-45012-1	CS-1 (1')	Solid	06/19/24 00:00	06/19/24 16:40	1
880-45012-2	CS-2 (1')	Solid	06/19/24 00:00	06/19/24 16:40	2
880-45012-3	CS-3 (1')	Solid	06/19/24 00:00	06/19/24 16:40	3
880-45012-4	CS-4 (0-6")	Solid	06/19/24 00:00	06/19/24 16:40	4
880-45012-5	CS-5 (0-6")	Solid	06/19/24 00:00	06/19/24 16:40	5
880-45012-6	CS-6 (0-6")	Solid	06/19/24 00:00	06/19/24 16:40	6
880-45012-7	CS-7 (0-6")	Solid	06/19/24 00:00	06/19/24 16:40	7
880-45012-8	CS-8 (0-6")	Solid	06/19/24 00:00	06/19/24 16:40	8
880-45012-9	CS-9 (0-6")	Solid	06/19/24 00:00	06/19/24 16:40	9
880-45012-10	CS-10 (0-6")	Solid	06/19/24 00:00	06/19/24 16:40	10
880-45012-11	CS-11 (0-6")	Solid	06/19/24 00:00	06/19/24 16:40	11
880-45012-12	CS-12 (0-6")	Solid	06/19/24 00:00	06/19/24 16:40	12
880-45012-13	CS-13 (0-6")	Solid	06/19/24 00:00	06/19/24 16:40	13
880-45012-14	SW-1 (1')	Solid	06/19/24 00:00	06/19/24 16:40	14
880-45012-15	SW-2 (1')	Solid	06/19/24 00:00	06/19/24 16:40	
880-45012-16	SW-3 (1')	Solid	06/19/24 00:00	06/19/24 16:40	
880-45012-17	SW-4 (1')	Solid	06/19/24 00:00	06/19/24 16:40	
880-45012-18	SW-5 (0-6")	Solid	06/19/24 00:00	06/19/24 16:40	
880-45012-19	SW-6 (0-6")	Solid	06/19/24 00:00	06/19/24 16:40	
880-45012-20	SW-7 (0-6")	Solid	06/19/24 00:00	06/19/24 16:40	
880-45012-21	SW-8 (0-6")	Solid	06/19/24 00:00	06/19/24 16:40	
880-45012-22	SW-9 (0-6")	Solid	06/19/24 00:00	06/19/24 16:40	
880-45012-23	SW-10 (0-6")	Solid	06/19/24 00:00	06/19/24 16:40	

## Chain of Custody



880-45012 Chain of Custody

Page 1 of 3

## Work Order Comments

Project Manager:	Clinton Merritt	Bill to: (if different)	Isaac Castro
Company Name:	Carmona Resources	Company Name:	Marathon Oil Corporation
Address:	310 W Wall St Ste 500	Address:	990 Town and Country Blvd
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Houston, TX 77024
Phone:		Email:	<a href="mailto:icastro@marathonoil.com">icastro@marathonoil.com</a>

Program: UST/PST	<input checked="" type="checkbox"/>	PRP	<input type="checkbox"/>	Brownfields	<input type="checkbox"/>	IRC	<input type="checkbox"/>	Operfund	<input type="checkbox"/>
State of Project:									
Reporting Level:	<input type="checkbox"/>	Level II	<input type="checkbox"/>	Level III	<input type="checkbox"/>	SURVEY	<input type="checkbox"/>	RRP	<input type="checkbox"/>
Deliverables:	EDD	<input type="checkbox"/>	AdaPT	<input type="checkbox"/>	Other:				

ANALYSIS REQUEST				Preservative Codes											
Project Name:	Cypress 2H 4H CTB	Turn Around		None: NO	DI Water: H <sub>2</sub> O	Cool: Cool	MeOH: Me	HCl: HC	HNO <sub>3</sub> : HN	H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub>	H <sub>3</sub> PO <sub>4</sub> : HP	NaHSO <sub>4</sub> : NABIS	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>	Zn Acetate+NaOH: Zn	NaOH+Ascorbic Acid: SAPC
Project Number:	2377	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush	Pres. Code											
Project Location:	Eddy County, New Mexico	Due Date:	5 day												
Sampler's Name:	CCM														
PO#:	CL-24.01580														
<b>SAMPLE RECEIPT</b>	Temp Blank:	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Wet Ice:	Yes <input checked="" type="radio"/>	No <input type="radio"/>									
Received Intact:	<input checked="" type="radio"/> Yes	<input type="radio"/> No <del>NA</del>		Thermometer ID:	<del>123456</del>										
Cooler Custody Seals:	Yes <input checked="" type="radio"/>	No <input type="radio"/>		Correction Factor:	<del>1.00</del>										
Sample Custody/Seals:	Yes <input checked="" type="radio"/>	No <input type="radio"/> <del>NA</del>		Temperature Reading:	-2 - 3										
Total Containers:				Corrected Temperature:	-2 - 3										

ANALYSIS REQUEST										Preservative Codes								
Sample Identification	Date	Time	Soil	Water	Grav/ Comp	# of Cont	None: NO	DI Water: H <sub>2</sub> O	Cool: Cool	MeOH: Me	HCl: HC	HNO <sub>3</sub> : HN	H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub>	H <sub>3</sub> PO <sub>4</sub> : HP	NaHSO <sub>4</sub> : NABIS	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>	Zn Acetate+NaOH: Zn	NaOH+Ascorbic Acid: SAPC
CS-1 (1')	6/19/2024		X	Comp	1	X X X												
CS-2 (1')	6/19/2024		X	Comp	1	X X X												
CS-3 (1')	6/19/2024		X	Comp	1	X X X												
CS-4 (0-6")	6/19/2024		X	Comp	1	X X X												
CS-5 (0-6")	6/19/2024		X	Comp	1	X X X												
CS-6 (0-6")	6/19/2024		X	Comp	1	X X X												
CS-7 (0-6")	6/19/2024		X	Comp	1	X X X												
CS-8 (0-6")	6/19/2024		X	Comp	1	X X X												
CS-9 (0-6")	6/19/2024		X	Comp	1	X X X												
CS-10 (0-6")	6/19/2024		X	Comp	1	X X X												

Comments: Email results to Mike Carmona [mcarmona@carmonaresources.com](mailto:mcarmona@carmonaresources.com), Conner Moehring [cmoehring@carmonaresources.com](mailto:cmoehring@carmonaresources.com), Clint Merritt [MerrittC@carmonaresources.com](mailto:MerrittC@carmonaresources.com)

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
<i>Tom McAllen</i>	6/19/2024	<i>John P. Moehring</i>	6/19/2024

Work Order No: 45012

Page 2 of 3

## Work Order Comments

 UST/PST  PRP  Brownfields  IRC  Perfund 

State of Project:

 Reporting Level II  Level III  STS/STU  RRP  Level IV Deliverables: EDD  ADAPT  Other:

Project Manager:	Clinton Merritt	Bill to: (if different)	Isaac Castro
Company Name:	Carmona Resources	Company Name:	Marathon Oil Corporation
Address:	310 W Wall St Site 500	Address:	980 Town and Country Blvd
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Houston, TX 77024
Phone:		Email:	<a href="mailto:icastro@marathonoil.com">icastro@marathonoil.com</a>

ANALYSIS REQUEST				Preservative Codes	
Project Name:	Cypress 2H 4H CTB	Turn Around	Time:	None: NO	DI Water: H <sub>2</sub> O
Project Number:	2377	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush	Cool: Cool	MeOH: Me
Project Location:	Eddy County, New Mexico	Due Date:	5 day	HCl: HC	HNO <sub>3</sub> : HN
Sampler's Name:	CCM			H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub>	NaOH: Na
PO#:	CL24.01580			H <sub>3</sub> PO <sub>4</sub> : HP	
<b>SAMPLE RECEIPT</b>		Temp Blank:	Yes No	NaHSO <sub>4</sub> : NABIS	
Received Intact:		Yes No	Wet/Ice:	Na <sub>2</sub> SO <sub>4</sub> : NaSO <sub>4</sub>	
Cooler Custody Seals:		Yes No	Thermometer ID:	Zn Acetate+NaOH: Zn	
Sample Custody Seals:		Yes No	Correction Factor:	NaOH+Ascorbic Acid: SACP	
Total Containers:		Temperature Reading:			
		Corrected Temperature:			
Sample Identification	Date	Time	Soil	Water	Grab/Comp
CS-11 (0-6")	6/19/2024		X	Comp	# of Cont
CS-12 (0-6")	6/19/2024		X	Comp	1
CS-13 (0-6")	6/19/2024		X	Comp	1
SW-1 (1")	6/19/2024		X	Comp	1
SW-2 (1")	6/19/2024		X	Comp	1
SW-3 (1")	6/19/2024		X	Comp	1
SW-4 (1")	6/19/2024		X	Comp	1
SW-5 (0-6")	6/19/2024		X	Comp	1
SW-6 (0-6")	6/19/2024		X	Comp	1
SW-7 (0-6")	6/19/2024		X	Comp	1

Comments: Email results to Mike Carmona [mcarmona@carmonaresources.com](mailto:mcarmona@carmonaresources.com), Conner Moehring [cmoehring@carmonaresources.com](mailto:cmoehring@carmonaresources.com), Clint Merritt [MerrittC@carmonaresources.com](mailto:MerrittC@carmonaresources.com)

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
	6/19/2024		6/19/2024

## Chain of Custody

1  
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Work Order No: 45012Page \_\_\_\_\_ of \_\_\_\_\_  
3 3

		Work Order Comments			
Project Manager:	Clinton Merritt	Bill to: (if different)	Isaac Castro		
Company Name:	Carmona Resources	Company Name:	Marathon Oil Corporation		
Address:	310 W Wall St Site 500	Address:	990 Town and Country Blvd		
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Houston, TX 77024		
Phone:		Email:	<a href="mailto:icastro@marathonoil.com">icastro@marathonoil.com</a>		
ANALYSIS REQUEST					
Project Name:	Cypress 2H 4H CTB	Turn Around			
Project Number:	2377	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code		
Project Location:	Eddy County, New Mexico	Due Date:	5 day		
Sampler's Name:	CCM				
PO #:	CL24.01580				
SAMPLE RECEIPT		Parameters			
Received Intact:	Yes No N/A	Temp Blank:	Yes No	Wet Ice:	Yes No
Cooler Custody Seals:	Yes No N/A	Correction Factor:			
Sample Custody Seals:	Yes No N/A	Temperature Reading:			
Total Containers:		Corrected Temperature:			
Preservative Codes					
None: NO					
DI Water: H <sub>2</sub> O					
Cool: Cool					
MeOH: Me					
HCl: HC					
H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub>					
HNO <sub>3</sub> : HN					
NaOH: Na					
H <sub>3</sub> PO <sub>4</sub> : HP					
NaHSO <sub>4</sub> : NABIS					
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>					
Zn Acetate+NaOH: Zn					
NaOH+Ascorbic Acid: SAPC					
Sample Comments					
Sample Identification	Date	Time	Soil	Water	Grav/ Comp
SW-8 (0-6")	6/19/2024		X	Comp	1 X X X
SW-9 (0-6")	6/19/2024		X	Comp	1 X X X
SW-10 (0-6")	6/19/2024		X	Comp	1 X X X

Comments: Email results to Mike Carmona [mcarmona@carmonaresources.com](mailto:mcarmona@carmonaresources.com), Conner Moehring [cmoehring@carmonaresources.com](mailto:cmoehring@carmonaresources.com), Clint Merritt [MerrittC@carmonaresources.com](mailto:MerrittC@carmonaresources.com)

Relinquished by: (Signature) <u>Conner Moehring</u>			Date/Time <u>6/19/24</u>	Received by: (Signature) <u>Conner Moehring</u>	Date/Time <u>6/19/24</u>
---	--	--	--------------------------	---	--------------------------

## Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-45012-1

SDG Number: Eddy County NM

**Login Number: 45012****List Source: Eurofins Midland****List Number: 1****Creator: Kramer, Jessica**

Question	Answer	Comment	
The cooler's custody seal, if present, is intact.	N/A		1
Sample custody seals, if present, are intact.	N/A		2
The cooler or samples do not appear to have been compromised or tampered with.	True		3
Samples were received on ice.	True		4
Cooler Temperature is acceptable.	True		5
Cooler Temperature is recorded.	True		6
COC is present.	True		7
COC is filled out in ink and legible.	True		8
COC is filled out with all pertinent information.	True		9
Is the Field Sampler's name present on COC?	True		10
There are no discrepancies between the containers received and the COC.	True		11
Samples are received within Holding Time (excluding tests with immediate HTs)	True		12
Sample containers have legible labels.	True		13
Containers are not broken or leaking.	True		14
Sample collection date/times are provided.	True		
Appropriate sample containers are used.	True		
Sample bottles are completely filled.	True		
Sample Preservation Verified.	True		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A		

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

QUESTIONS

Action 364636

**QUESTIONS**

Operator:  MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 364636
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2413458189
Incident Name	NAPP2413458189 CYPRESS FEE 2,4 TB @ 0
Incident Type	Oil Release
Incident Status	Remediation Closure Report Received
Incident Facility	[fAPP2125247655] CYPRESS FEE 24 TB

**Location of Release Source***Please answer all the questions in this group.*

Site Name	CYPRESS FEE 2,4 TB
Date Release Discovered	05/13/2024
Surface Owner	Private

**Incident Details***Please answer all the questions in this group.*

Incident Type	Oil Release
Did this release result in a fire or is the result of a fire	No
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: Equipment Failure   Gasket   Crude Oil   Released: 11 BBL   Recovered: 11 BBL   Lost: 0 BBL.
Produced Water Released (bbls) Details	Not answered.
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)	Approximately 9.5 bbls contained inside lined secondary containment and approximately 1.05 bbls over sprayed onto the pad. Spill was caused due to 2H separator manway gasket failure.

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QUESTIONS, Page 2

Action 364636

**QUESTIONS (continued)**

Operator:  MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 364636
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**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	No
Reasons why this would be considered a submission for a notification of a major release	Unavailable.

*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.*

<b>Initial Response</b>	
<i>The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.</i>	
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	True
If all the actions described above have not been undertaken, explain why	Not answered.

*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.*

<p>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.</p>	
I hereby agree and sign off to the above statement	Name: Isaac Castro Email: icastro@marathonoil.com Date: 07/18/2024

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QUESTIONS, Page 3

Action 364636

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

**QUESTIONS (continued)**

Operator:  MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID:  372098
	Action Number:  364636
	Action Type:  [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**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 500 and 1000 (ft.)
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	Between 1 and 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 1000 (ft.) and ½ (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	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Medium
A 100-year floodplain	Between 500 and 1000 (ft.)
Did the release impact areas not on an exploration, development, production, or storage site	No

**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
<i>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.</i>	
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)	671
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	1150
GRO+DRO	(EPA SW-846 Method 8015M)	1090
BTEX	(EPA SW-846 Method 8021B or 8260B)	0.1
Benzene	(EPA SW-846 Method 8021B or 8260B)	0.1

*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	06/19/2024
On what date will (or did) the final sampling or liner inspection occur	05/28/2024
On what date will (or was) the remediation complete(d)	06/19/2024
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	2400
What is the estimated volume (in cubic yards) that will be remediated	30

*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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**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

QUESTIONS, Page 4

Action 364636

**QUESTIONS (continued)**

Operator:  MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID:  372098
	Action Number:  364636
	Action Type:  [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS****Remediation Plan (continued)**

*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.*

**This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:**

(Select all answers below that apply.)

(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	<b>Yes</b>
Which OCD approved facility will be used for <b>off-site</b> disposal	<b>HALFWAY DISPOSAL AND LANDFILL [fEEM0112334510]</b>
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	<i>Not answered.</i>
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	<i>Not answered.</i>
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	<i>Not answered.</i>
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	<b>No</b>
(In Situ) Soil Vapor Extraction	<b>No</b>
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	<b>No</b>
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	<b>No</b>
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	<b>No</b>
Ground Water Abatement pursuant to 19.15.30 NMAC	<b>No</b>
OTHER (Non-listed remedial process)	<b>No</b>

*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 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: Isaac Castro Email: icastro@marathonoil.com Date: 07/18/2024
--	--

*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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QUESTIONS, Page 5

Action 364636

**QUESTIONS (continued)**

Operator:  MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID:  372098
	Action Number:  364636
	Action Type:  [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**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
--	----

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QUESTIONS, Page 6

Action 364636

**QUESTIONS (continued)**

Operator:  MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID:  372098
	Action Number:  364636
	Action Type:  [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Sampling Event Information</b>	
Last sampling notification (C-141N) recorded	354811
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	06/19/2024
What was the (estimated) number of samples that were to be gathered	23
What was the sampling surface area in square feet	2400

<b>Remediation Closure Request</b>	
<i>Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.</i>	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	2400
What was the total volume (cubic yards) remediated	30
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	0
What was the total volume (in cubic yards) reclaimed	0
Summarize any additional remediation activities not included by answers (above)	Based on the assessment of the liner inside the facility, the results and the analytical data, no further actions are required at the site. The final C-141 is attached, and Marathon formally requests the closure of the spill.

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

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

I hereby agree and sign off to the above statement	Name: Isaac Castro Email: icasa@marathonoil.com Date: 07/18/2024
--	--

**District I**

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

**District II**

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**District III**

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 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, Page 7

Action 364636

**QUESTIONS (continued)**

Operator:  MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID:  372098
	Action Number:  364636
	Action Type:  [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS****Reclamation Report**

*Only answer the questions in this group if all reclamation steps have been completed.*

Requesting a reclamation approval with this submission	<input type="checkbox"/> No
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CONDITIONS

Action 364636

**CONDITIONS**

Operator:  MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID:  372098
	Action Number:  364636
	Action Type:  [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**CONDITIONS**

Created By	Condition	Condition Date
scott.rodgers	Remediation has met 19.15.29 NMAC requirements. Soil impacts exceeding the reclamation standards have been left in place and are required to meet 19.15.29.13D (1) NMAC once the site is no longer reasonably needed for production or subsequent drilling operations.	8/6/2024
scott.rodgers	The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	8/6/2024