

CARMONA RESOURCES



SITE INFORMATION

Closure Report
Black River 374 State Tank Battery
Eddy County, New Mexico
Incident #: NAPP2315050079
Unit N Sec 15 T24S R27E
32.211541°, -104.174294°

Produced Water
Point of Release: Pinhole on Water Header
Release Date: 05/30/23
Volume Released: 11.89 Barrels of Produced Water
Volume Recovered: 0 barrels of Produced Water

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 415
Midland TX, 79701
432.813.1992



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June 26, 2023

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

**Re: Closure Report
Black River 374 State Tank Battery
Marathon Oil Corporation
Incident ID NAPP2315050079
Site Location: Unit N, S15, T24S, R27E
(Lat 32.211541°, Long -104.174294°)
Eddy County, New Mexico**

Mr. Bratcher:

On behalf of Marathon Oil Corporation (Marathon), Carmona Resources, LLC has prepared this letter to document Black River 374 State Tank Battery site activities. The site is located at 32.211541°, -104.17427° within Unit N, S15, T24S, R27E, in Eddy County, New Mexico (Figures 1 and 2).

1.0 Site Information and Background

Based on the initial C-141 obtained from the New Mexico Oil Conservation Division (NMOCD), the release was discovered on May 30, 2023, due to a pinhole leak on the bottom of the valve body on the header. It resulted in approximately eleven-point-eight-nine (11.89) barrels of produced water and zero (0) barrels of crude oil recovered. See Figure 3. The initial C-141 form is attached in Appendix B.

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, no known water source within a 0.50-mile radius of the location. The closest well is located approximately 0.66 miles Southwest of the site in S22, T24S, R27E and was drilled in 1971. The well has a reported depth to groundwater of 70' feet below the ground surface (ft bgs). A copy of the associated point of diversion is attached in Appendix C.

3.0 Site Characterization and Groundwater

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: 100 mg/kg (GRO + DRO + MRO).
- Chloride: 600 mg/kg.

4.0 Site Assessment Activities

Initial Assessment

On May 30, 2023, Carmona Resources, LLC performed a site assessment during emergency response activities to evaluate soil impacts stemming from the release. A total of three (3) sample points (S-1 through S-3), four (4) horizontal sample points (H-1 through H-4), and two (2) background sample points were installed to total depths ranging from surface to 1.5' bgs inside and around the release area. 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.

5.0 Remediation Activities

Carmona Resources personnel were on site to guide the remediation activities and return to collect confirmation samples. Before collecting composite confirmation samples, the NMOCD division office was notified via email on June 2, 2023, per Subsection D of 19.15.29.12 NMAC. See Appendix C. A total of five (5) floor confirmation samples were collected (CS-1 through CS-5), and twelve (12) sidewall samples (SW-1 through SW-12) 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 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 4.

All final confirmation samples were below the regulatory and reclamation 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 80 cubic yards of material were excavated and transported offsite for proper disposal.

6.0 Conclusions

Based on the assessment 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. If you have any questions regarding this report or need additional information, please get in touch with us at 432-813-1992.

Sincerely,

Carmona Resources, LLC

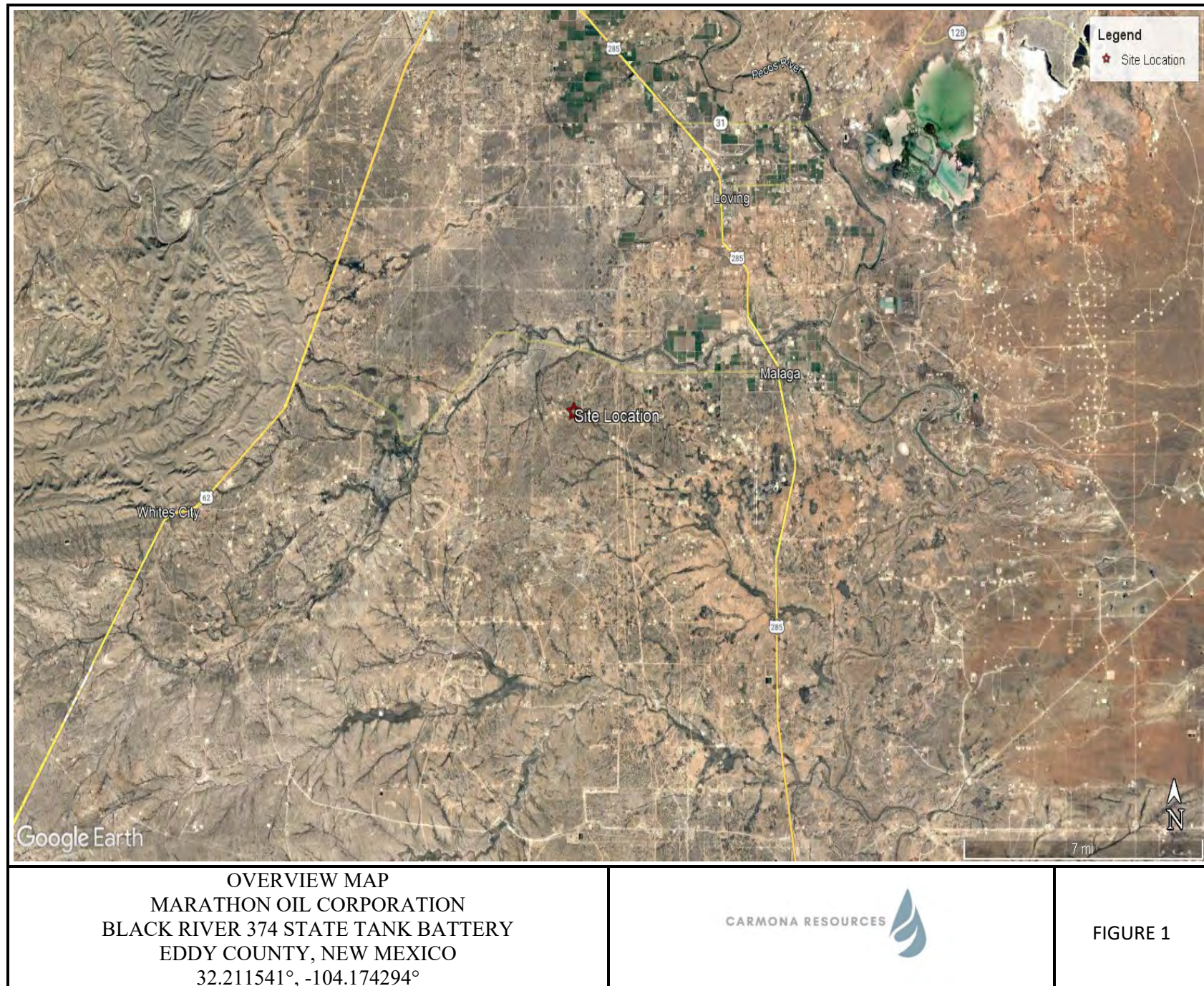
Mike Carmona
Environmental Manager

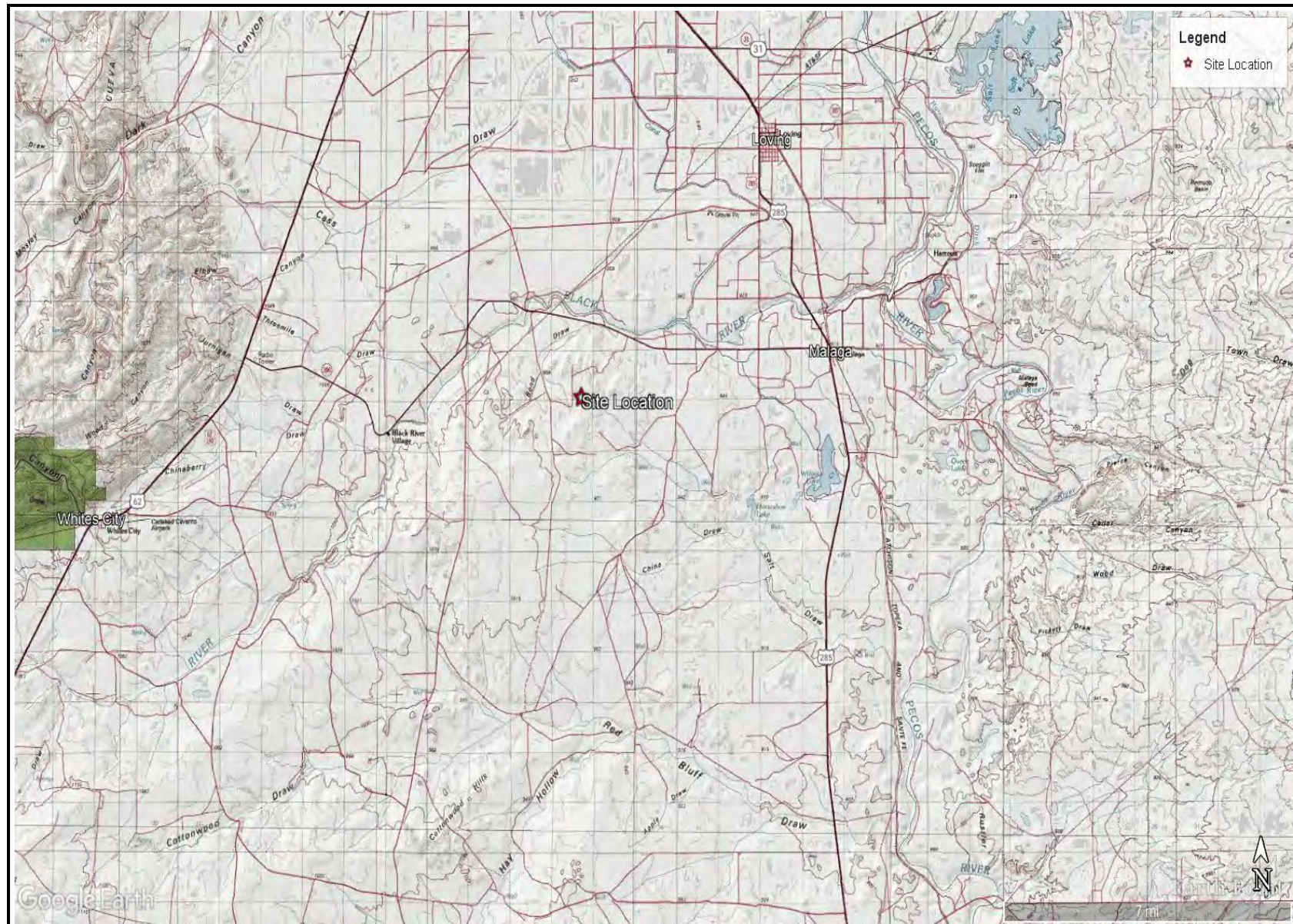
Clinton Merritt
Sr. Project Manager

FIGURES

CARMONA RESOURCES



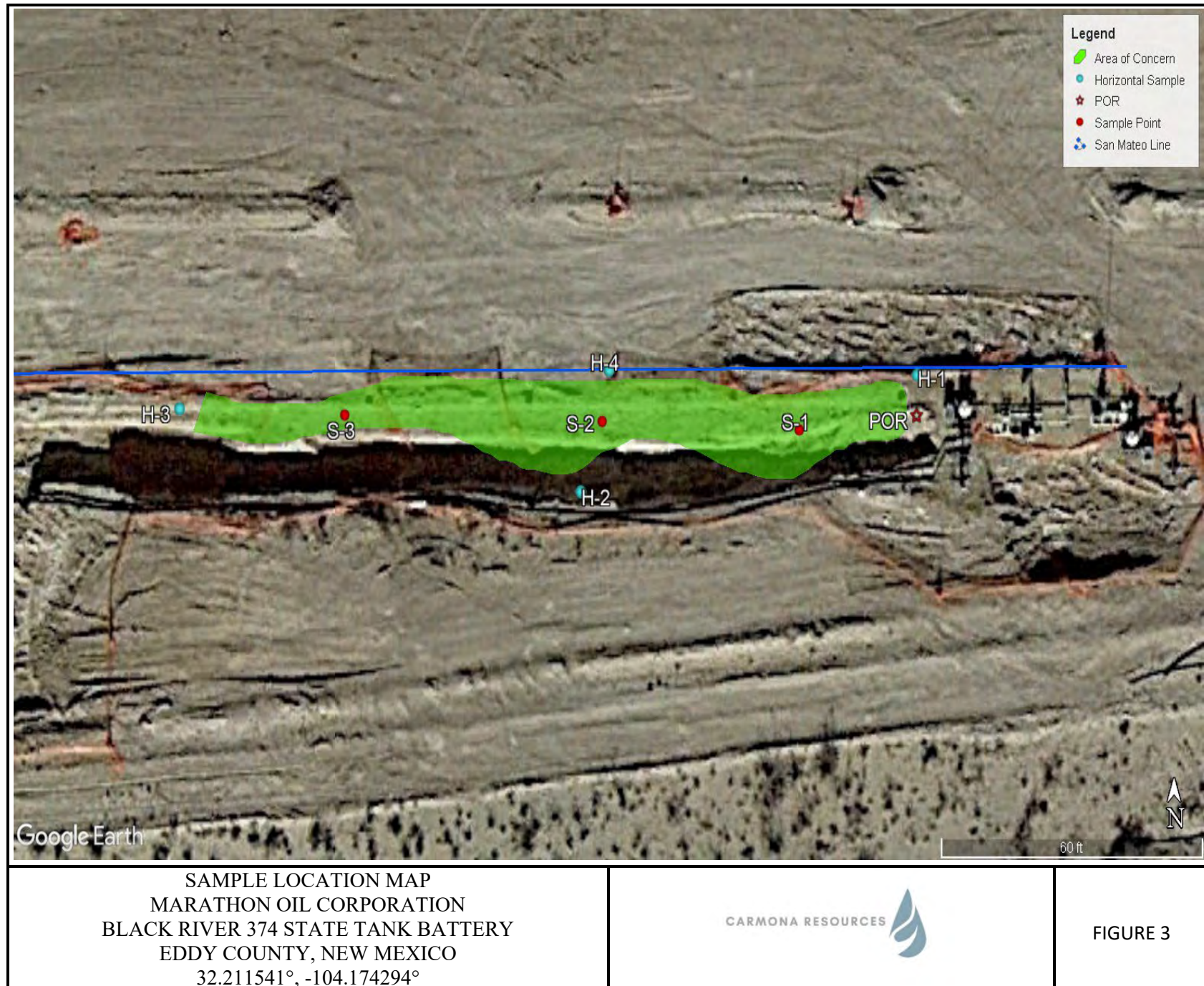


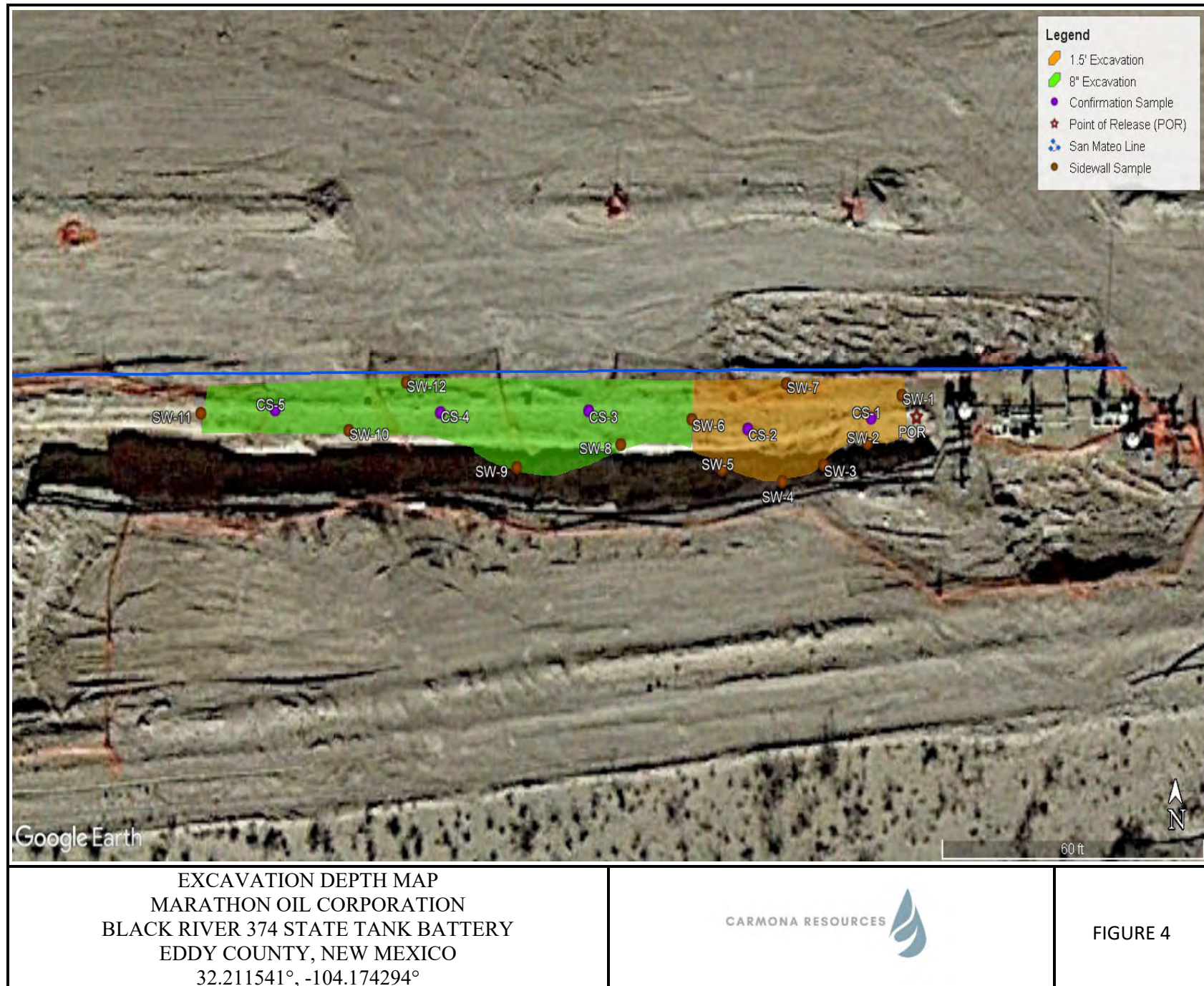


TOPOGRAPHIC MAP
 MARATHON OIL CORPORATION
 BLACK RIVER 374 STATE TANK BATTERY
 EDDY COUNTY, NEW MEXICO
 32.211541°, -104.174294°



FIGURE 2





APPENDIX A

CARMONA RESOURCES



Table 1
Marathon Oil Corporation
Black River 374 State Tank Battery
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	5/30/2023	0-6"	<49.9	76.7	<49.9	76.7	<0.00200	0.00316	<0.00200	0.0240	0.0271	13,500
	"	6"-1'	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	0.00429	0.00429	75.6
	"	1-1.5'	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	52.2
S-2	5/30/2023	0-6"	<50.0	<50.0	<50.0	<50.0	<0.00201	0.00225	0.00340	0.0220	0.0277	19,400
	"	6"-1'	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	65.4
	"	1-1.5'	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	62.4
S-3	5/30/2023	0-6"	<50.0	53.5	<50.0	53.5	<0.00200	0.00264	<0.00200	0.0275	0.0301	12,100
	"	6"-1'	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	87.5
	"	1-1.5'	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	64.2
H-1	5/30/2023	0-0.05	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	52.3
H-2	5/30/2023	0-0.05	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	35.9
H-3	5/30/2023	0-0.05	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	61.8
H-4	5/30/2023	0-0.05	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	60.2
BG-1	5/30/2023	0-0.05	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	0.00920	0.00920	43.7
BG-2	5/30/2023	0-0.05	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	44.5
Regulatory Criteria^A							100 mg/kg	10 mg/kg			50 mg/kg	600 mg/kg

(-) Not Analyzed

^A – Table 1 - 19.15.29 NMAC

mg/kg - milligram per kilogram

TPH- Total Petroleum Hydrocarbons

ft-feet

(S) Soil Sample

(H) Horizontal Sample

(BG) Background Sample

Removed

Table 2
Marathon Oil Corporation
Black River 374 State Tank Battery
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	6/2/2023	1.5'	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	228
CS-2	6/2/2023	1.5'	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	184
CS-3	6/2/2023	8"	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	87.8
CS-4	6/2/2023	8"	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	117
CS-5	6/2/2023	8"	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	40.0
SW-1	6/2/2023	1.5'	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	139
SW-2	6/2/2023	1.5'	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	48.5
SW-3	6/2/2023	1.5'	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	161
SW-4	6/2/2023	1.5'	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	0.00864	0.00864	56.6
SW-5	6/2/2023	1.5'	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	134
SW-6	6/2/2023	1.5'	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	81.6
SW-7	6/2/2023	1.5'	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	115
SW-8	6/2/2023	8"	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	40.7
SW-9	6/2/2023	8"	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	37.1
SW-10	6/2/2023	8"	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	50.5
SW-11	6/2/2023	8"	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	57.2
SW-12	6/2/2023	8"	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	75.6
Regulatory Criteria ^A						100 mg/kg	10 mg/kg				50 mg/kg	600 mg/kg

(-) Not Analyzed

^A – Table 1 - 19.15.29 NMAC

mg/kg - milligram per kilogram

TPH- Total Petroleum Hydrocarbons

ft-feet

(CS) Confirmation Sample

(SW) Sidewall sample

APPENDIX B

CARMONA RESOURCES



PHOTOGRAPHIC LOG

Marathon Oil Corporation

Photograph No. 1

Facility: Black River 374 State Tank Battery

County: Eddy County, New Mexico

Description:

View East, area of sample point S-1.



Photograph No. 2

Facility: Black River 374 State Tank Battery

County: Eddy County, New Mexico

Description:

View West, area of sample point S-2.



Photograph No. 3

Facility: Black River 374 State Tank Battery

County: Eddy County, New Mexico

Description:

View East, area of sample point S-1 and S-2.



PHOTOGRAPHIC LOG**Marathon Oil Corporation****Photograph No. 4****Facility:** Black River 374 State Tank Battery**County:** Eddy County, New Mexico**Description:**

View West, area of confirmation samples (2 - 5).

**Photograph No. 5****Facility:** Black River 374 State Tank Battery**County:** Eddy County, New Mexico**Description:**

View Southeast, area of confirmation samples (1-5).

**Photograph No. 6****Facility:** Black River 374 State Tank Battery**County:** Eddy County, New Mexico**Description:**

View Northeast, area of confirmation samples (1-3).



APPENDIX C

CARMONA RESOURCES



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

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

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

Incident ID	nAPP2315050079
District RP	
Facility ID	fAPP2125238645
Application ID	

Release Notification

Responsible Party

Responsible Party Marathon Oil Permian LLC	OGRID 372098
Contact Name Melodie Sanjari	Contact Telephone 575-988-8753
Contact email msanjari@marathonoil.com	Incident # (assigned by OCD)
Contact mailing address 4111 S. Tidwell Rd., Carlsbad, NM 8220	

Location of Release Source – NOT ORIGINATING FACILITY

Latitude 32.211631N Longitude -104.174635W
(NAD 83 in decimal degrees to 5 decimal places)

Site Name BLACK RIVER 374 STATE TB	Site Type Oil & Gas Facility
Date Release Discovered: 5/30/2023	API# (if applicable)

Unit Letter	Section	Township	Range	County
N	15	24S	27E	Eddy

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

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 11.89	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Operator reported an active release coming from Marathon's side of the custody transfer on the ROWs to the North of the facility. Once on site, the Env. Operator confirmed that there was a 1/4" pinhole hole in the bottom of the valve body on the header. The line and pump were successfully isolated, but not before approx.. ~12 bbl. of produced water was released onto San Mateo's ROW. There was no standing fluid and a one call has been placed to remove the most saturated material prior to characterization.

Incident ID	nAPP2315050079
District RP	
Facility ID	fAPP2125238645
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? Volume.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, SLO ECO notification and NOR complete.	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped.	
<input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Melodie Sanjari</u>	Title: <u>Environmental Professional</u>
Signature: <u>Melodie Sanjari</u>	Date: <u>5/30/2023</u>
email: <u>msanjari@marathonoil.com</u>	Telephone: <u>575-988-8753</u>
<u>OCD Only</u>	
Received by: _____	Date: _____

MRO Spill Calculation Tool

Standing Liquid Inputs:

	Length (ft.)	Width (ft.) (Tank Displacement)	Avg. Liquid Depth (in.)	% Oil	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)
Rectangle Area #1	90	5	0.5		3.34	3.34	0.00
Rectangle Area #2					0.00	0.00	0.00
Rectangle Area #3					0.00	0.00	0.00
Rectangle Area #4					0.00	0.00	0.00
Rectangle Area #5					0.00	0.00	0.00
Rectangle Area #6					0.00	0.00	0.00
Vessel Displacement					0.00	0.00	0.00
Vessel Displacement					0.00	0.00	0.00
Liquid Volume:					3.34	3.34	0.00

Saturated Soil Inputs:Soil Type: **Gravel or Sand**

	Length (ft.)	Width (ft.)	Avg. Saturated Depth (in.)	% Oil	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)
Rectangle Area #1	180	5	8		8.55	8.55	0.00
Rectangle Area #2					0.00	0.00	0.00
Rectangle Area #3					0.00	0.00	0.00
Rectangle Area #4					0.00	0.00	0.00
Rectangle Area #5					0.00	0.00	0.00
Rectangle Area #6					0.00	0.00	0.00
Rectangle Area #7					0.00	0.00	0.00
Rectangle Area #8					0.00	0.00	0.00
Saturated Volume					8.55	8.55	0.00

	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)
Total Spill Volume (bbls):	11.89	11.89	0.00
Total Spill Volume (gals):	499.32	499.32	0.00

Comments:

Color Key:

Required Input Cells	Supplemental Input Cells	No Input (Calculations)	No Input
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Ground/Vegetation Overspray

Cover Type	Microns	Approximate Depth (in)
Ground		
Dull Color	10	0.00003281
Dark Color	50	0.00016404

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

- ☐ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☐ Data table of soil contaminant concentration data
- ☐ Depth to water determination
- ☐ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☐ Photographs including date and GIS information
- ☐ Topographic/Aerial maps
- ☐ Laboratory data including chain of custody

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: Shelly Wells Date: 7/5/2023

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: Shelly Wells Date: 7/5/2023

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Ashley Maxwell Date: _____

Printed Name: _____ Title: _____

APPENDIX D

CARMONA RESOURCES



Nearest water well

Marathon Oil Permian LLC

Legend

- 0.50 Mile Radius
- 0.66 Miles
- 1.60 Miles
- 1.66 Miles
- BLACK RIVER 374 STATE TB
- NMSEO Water Well



Medium Karst

Marathon Oil Permian LLC

Legend

- BLACK RIVER 374 STATE TB
- High
- Medium

BLACK RIVER 374 STATE TB



4000 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	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 01452	C	ED					22	24S	27E	577435	3563175*	1074	95	70	25
C 00347	CUB	ED		1	1	13	24S	27E	580010	3565479*	2573	60	30		30
C 03147	C	ED		3	3	3	12	24S	27E	579885	3565715	2596	140		
C 04147 POD1	CUB	ED		4	1	3	24	24S	27E	580101	3562969	2621	35		
C 01943	C	ED			1	13	24S	27E	580221	3565275*	2668	30	25		5
C 00342	C CUB	ED		4	1	13	24S	27E	580432	3565080*	2794	2565			
C 03260 POD1	C	ED		3	3	3	12	24S	27E	579995	3565935	2816	80	56	24
C 03260 POD2	O C	ED		1	3	3	12	24S	27E	580100	3565984	2929	80	56	24
C 00850	C	ED		2	3	09	24S	27E	575595	3566223*	2984	108	35		73
C 03145	C	ED		3	1	4	13	24S	27E	580749	3564579*	2992	103	40	63
C 00821	C	ED		3	2	09	24S	27E	575996	3566635*	3025	97	50		47
C 01721	C	ED			1	25	24S	27E	580271	3562033*	3295	170			
C 00364	C CUB	ED		1	2	09	24S	27E	575997	3567043*	3363	2270			
C 02976	C	ED		4	2	3	12	24S	27E	580519	3566195*	3391	57	27	30
C 03037	C	ED		4	3	4	12	24S	27E	580930	3565795*	3532	116	25	91
C 01366	CUB	ED			4	08	24S	27E	574590	3566003*	3669	60	35		25
C 00631	C	ED		3	3	4	08	24S	27E	574288	3565701*	3805	50	24	26
C 03740 POD1	C	ED		4	4	4	12	24S	27E	581283	3565795	3850	340		
C 00516	CUB	ED		1	3	4	08	24S	27E	574288	3565901*	3889	105	36	69
C 00516 CLW201016	O CUB	ED		1	3	4	08	24S	27E	574288	3565901*	3889	62		
C 00516 CLW308590	O CUB	ED		1	3	4	08	24S	27E	574288	3565901*	3889	105	36	69
C 00516 S	CUB	ED		1	3	4	08	24S	27E	574288	3565901	3889	50	17	33

*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: 37 feet
Minimum Depth: 17 feet
Maximum Depth: 70 feet

Record Count: 22

UTMNAD83 Radius Search (in meters):

Easting (X): 577781.71 Northing (Y): 3564192.43 Radius: 4000



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)				(NAD83 UTM in meters)			
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
C	01452				22	24S	27E	577435	3563175*
<hr/>									
Driller License: 30		Driller Company:		BARRON, EMMETT					
Driller Name:		BARRON, EMMETT							
Drill Start Date: 07/21/1971		Drill Finish Date:		07/23/1971		Plug Date:			
Log File Date: 08/02/1971		PCW Rev Date:				Source:		Shallow	
Pump Type:		Pipe Discharge Size:				Estimated Yield:			
Casing Size: 7.00		Depth Well:		95 feet		Depth Water:		70 feet	
<hr/>									
Water Bearing Stratifications:		Top	Bottom	Description					
		60	70	Sandstone/Gravel/Conglomerate					
<hr/>									

*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.

5/31/23 7:40 AM


POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
C	00347	1	1	13	24S	27E	580010	3565479*	

x

Driller License:	24	Driller Company:	BRININSTOOL, M.D.		
Driller Name:	BRININSTOOL, M.D.				
Drill Start Date:	07/02/1974	Drill Finish Date:	06/25/1976	Plug Date:	
Log File Date:	07/01/1976	PCW Rev Date:		Source:	Shallow
Pump Type:		Pipe Discharge Size:		Estimated Yield:	100 GPM
Casing Size:	4.25	Depth Well:	60 feet	Depth Water:	30 feet

x

Water Bearing Stratifications:	Top	Bottom	Description
	48	54	Other/Unknown

x

*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.

5/31/23 7:43 AM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)				(NAD83 UTM in meters)			
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
C	01943			1	13	24S	27E	580221	3565275*

Driller License: 961 **Driller Company:** MAVERICK DRILLING

Driller Name: DON THOMPSON

Drill Start Date: 09/15/1981 **Drill Finish Date:** 09/25/1981 **Plug Date:**

Log File Date: 06/11/1982 **PCW Rev Date:** **Source:**

Pump Type: **Pipe Discharge Size:** **Estimated Yield:** 2 GPM

Casing Size: **Depth Well:** 30 feet **Depth Water:** 25 feet

Water Bearing Stratifications:	Top	Bottom	Description
	0	10	Shallow Alluvium/Basin Fill
	10	25	Other/Unknown
	25	30	Sandstone/Gravel/Conglomerate

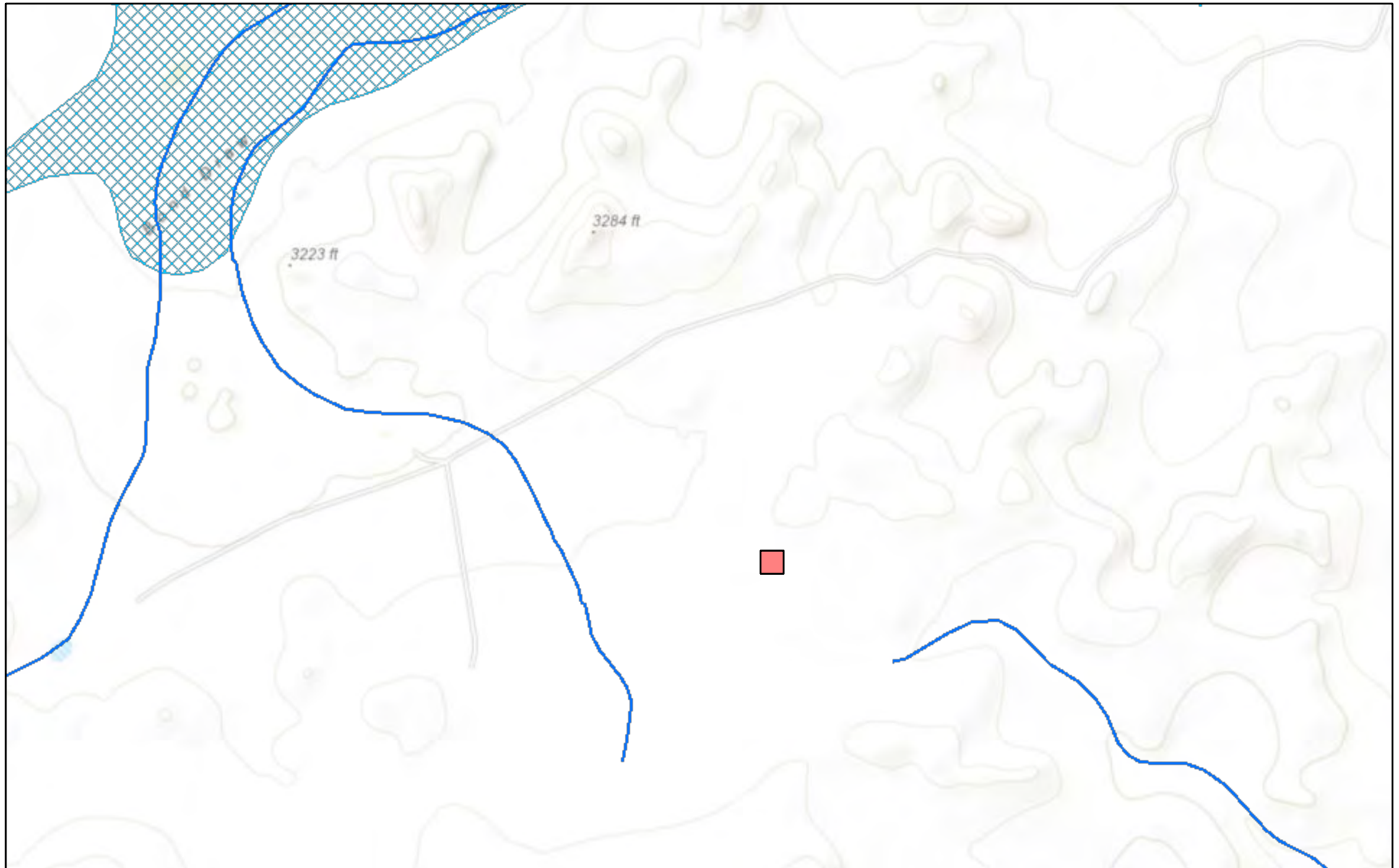
*UTM location was derived from PLSS - see Help

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.

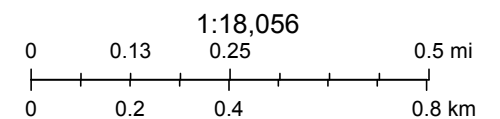
5/31/23 7:45 AM

POINT OF DIVERSION SUMMARY

New Mexico NFHL Data



May 31, 2023



FEMA, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey,

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This is a non-regulatory product for informational use only. Please consult your local floodplain administrator for further information.

From: Sanjari, Melodie (MRO)
Sent: Wednesday, May 31, 2023 8:39 AM
To: eco@slo.state.nm.us; Enviro, OCD, EMNRD
Cc: Clint Merritt; Mike Carmona
Subject: Marathon Oil Company - Sampling Notice - Release on ROW north of Black River 3H 8H 10H CTB - nAPP2315050079

Good Morning,

Please let this email serve as the required notification prior to the collection of closure confirmation samples concerning incident nAPP2315050079. The sampling event is expected to take place at 12pm MTN time this coming Friday the 2nd of June.

Thank you very much.

Melodie Sanjari

Environmental Professional
Permian & Oklahoma
~~575-988-8753~~



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 6/5/2023 2:31:37 PM

JOB DESCRIPTION

Black River 3H 8H 10H CTB
SDG NUMBER Eddy County, New Mexico

JOB NUMBER

880-28960-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

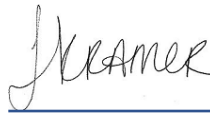
Eurofins Midland

Job Notes

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

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

Authorization



Generated
6/5/2023 2:31:37 PM

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

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Laboratory Job ID: 880-28960-1
SDG: Eddy County, New Mexico

Table of Contents

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28960-1
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
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/Site: Black River 3H 8H 10H CTB

Job ID: 880-28960-1
SDG: Eddy County, New Mexico

Job ID: 880-28960-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-28960-1****Receipt**

The samples were received on 5/31/2023 3:24 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 2.1°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: H-1 (0-0.5') (880-28960-1), H-2 (0-0.5') (880-28960-2), H-3 (0-0.5') (880-28960-3), H-4 (0-0.5') (880-28960-4), BG-1 (0-0.5') (880-28960-5) and BG-2 (0-0.5') (880-28960-6).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-54510 and analytical batch 880-54672 was outside the upper control limits.

Method 8021B: CCV biased low for Benzene and Toluene however an acceptable CCV was ran within the 12 hour window therefore the data have been qualified and reported.(CCV 880-54672/51)

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-54539 and analytical batch 880-54534 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: H-3 (0-0.5') (880-28960-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The method blank for preparation batch 880-54539 and analytical batch 880-54534 contained Diesel Range Organics (Over C10-C28) and Oil Range Organics (Over C28-C36) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-54539 and analytical batch 880-54534 was outside control limits. Sample non-homogeneity is suspected.

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

HPLC/IC

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

Client Sample Results

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28960-1
SDG: Eddy County, New Mexico

Client Sample ID: H-1 (0-0.5')

Lab Sample ID: 880-28960-1

Date Collected: 05/30/23 15:45

Matrix: Solid

Date Received: 05/31/23 15:24

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		05/31/23 15:52	06/03/23 19:31	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/31/23 15:52	06/03/23 19:31	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/31/23 15:52	06/03/23 19:31	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/31/23 15:52	06/03/23 19:31	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/31/23 15:52	06/03/23 19:31	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/31/23 15:52	06/03/23 19:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	05/31/23 15:52	06/03/23 19:31	1
1,4-Difluorobenzene (Surr)	81		70 - 130	05/31/23 15:52	06/03/23 19:31	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			06/05/23 13:40	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			06/02/23 09:50	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		06/01/23 07:59	06/01/23 15:19	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/01/23 07:59	06/01/23 15:19	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/01/23 07:59	06/01/23 15:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130	06/01/23 07:59	06/01/23 15:19	1
o-Terphenyl	123		70 - 130	06/01/23 07:59	06/01/23 15:19	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	52.3		4.98		mg/Kg			06/01/23 15:16	1

Client Sample ID: H-2 (0-0.5')

Lab Sample ID: 880-28960-2

Date Collected: 05/30/23 15:50

Matrix: Solid

Date Received: 05/31/23 15:24

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		05/31/23 15:52	06/03/23 19:52	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/31/23 15:52	06/03/23 19:52	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/31/23 15:52	06/03/23 19:52	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/31/23 15:52	06/03/23 19:52	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/31/23 15:52	06/03/23 19:52	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/31/23 15:52	06/03/23 19:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	05/31/23 15:52	06/03/23 19:52	1
1,4-Difluorobenzene (Surr)	83		70 - 130	05/31/23 15:52	06/03/23 19:52	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28960-1
SDG: Eddy County, New Mexico

Client Sample ID: H-2 (0-0.5')

Lab Sample ID: 880-28960-2

Date Collected: 05/30/23 15:50

Matrix: Solid

Date Received: 05/31/23 15:24

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			06/05/23 13:40	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			06/02/23 09:50	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		06/01/23 07:59	06/01/23 16:27	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/01/23 07:59	06/01/23 16:27	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/01/23 07:59	06/01/23 16:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130				06/01/23 07:59	06/01/23 16:27	1
o-Terphenyl	124		70 - 130				06/01/23 07:59	06/01/23 16:27	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35.9		4.95		mg/Kg			06/01/23 15:32	1

Client Sample ID: H-3 (0-0.5')

Lab Sample ID: 880-28960-3

Date Collected: 05/30/23 15:55

Matrix: Solid

Date Received: 05/31/23 15:24

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		05/31/23 15:52	06/03/23 20:12	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/31/23 15:52	06/03/23 20:12	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/31/23 15:52	06/03/23 20:12	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/31/23 15:52	06/03/23 20:12	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/31/23 15:52	06/03/23 20:12	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/31/23 15:52	06/03/23 20:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130				05/31/23 15:52	06/03/23 20:12	1
1,4-Difluorobenzene (Surr)	81		70 - 130				05/31/23 15:52	06/03/23 20:12	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			06/05/23 13:40	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			06/02/23 09:50	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		06/01/23 07:59	06/01/23 17:15	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/01/23 07:59	06/01/23 17:15	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28960-1
SDG: Eddy County, New Mexico

Client Sample ID: H-3 (0-0.5')

Lab Sample ID: 880-28960-3

Date Collected: 05/30/23 15:55

Matrix: Solid

Date Received: 05/31/23 15:24

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)	<49.9	U	49.9		mg/Kg		06/01/23 07:59	06/01/23 17:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	225	S1+	70 - 130				06/01/23 07:59	06/01/23 17:15	1
o-Terphenyl	239	S1+	70 - 130				06/01/23 07:59	06/01/23 17:15	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	61.8		4.97		mg/Kg			06/01/23 15:37	1

Client Sample ID: H-4 (0-0.5')

Lab Sample ID: 880-28960-4

Date Collected: 05/30/23 16:00

Matrix: Solid

Date Received: 05/31/23 15:24

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		05/31/23 15:52	06/03/23 20:33	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/31/23 15:52	06/03/23 20:33	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/31/23 15:52	06/03/23 20:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/31/23 15:52	06/03/23 20:33	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/31/23 15:52	06/03/23 20:33	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/31/23 15:52	06/03/23 20:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130				05/31/23 15:52	06/03/23 20:33	1
1,4-Difluorobenzene (Surr)	84		70 - 130				05/31/23 15:52	06/03/23 20:33	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			06/05/23 13:40	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			06/02/23 09:50	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		06/01/23 07:59	06/01/23 17:36	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/01/23 07:59	06/01/23 17:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/01/23 07:59	06/01/23 17:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				06/01/23 07:59	06/01/23 17:36	1
o-Terphenyl	105		70 - 130				06/01/23 07:59	06/01/23 17:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	60.2		5.04		mg/Kg			06/01/23 15:43	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28960-1
SDG: Eddy County, New Mexico

Client Sample ID: BG-1 (0-0.5')

Lab Sample ID: 880-28960-5

Date Collected: 05/30/23 16:05

Matrix: Solid

Date Received: 05/31/23 15:24

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		05/31/23 15:52	06/03/23 20:53	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/31/23 15:52	06/03/23 20:53	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/31/23 15:52	06/03/23 20:53	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		05/31/23 15:52	06/03/23 20:53	1
o-Xylene	0.00920		0.00198		mg/Kg		05/31/23 15:52	06/03/23 20:53	1
Xylenes, Total	0.00920		0.00396		mg/Kg		05/31/23 15:52	06/03/23 20:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	05/31/23 15:52	06/03/23 20:53	1
1,4-Difluorobenzene (Surr)	77		70 - 130	05/31/23 15:52	06/03/23 20:53	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00920		0.00396		mg/Kg			06/05/23 13:40	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			06/02/23 09:50	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		06/01/23 07:59	06/01/23 17:58	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/01/23 07:59	06/01/23 17:58	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/01/23 07:59	06/01/23 17:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	06/01/23 07:59	06/01/23 17:58	1
o-Terphenyl	107		70 - 130	06/01/23 07:59	06/01/23 17:58	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43.7		4.97		mg/Kg			06/01/23 15:48	1

Client Sample ID: BG-2 (0-0.5')

Lab Sample ID: 880-28960-6

Date Collected: 05/30/23 16:10

Matrix: Solid

Date Received: 05/31/23 15:24

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		05/31/23 15:52	06/03/23 22:16	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/31/23 15:52	06/03/23 22:16	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/31/23 15:52	06/03/23 22:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/31/23 15:52	06/03/23 22:16	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/31/23 15:52	06/03/23 22:16	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/31/23 15:52	06/03/23 22:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	05/31/23 15:52	06/03/23 22:16	1
1,4-Difluorobenzene (Surr)	93		70 - 130	05/31/23 15:52	06/03/23 22:16	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28960-1
SDG: Eddy County, New Mexico

Client Sample ID: BG-2 (0-0.5')

Lab Sample ID: 880-28960-6

Date Collected: 05/30/23 16:10

Matrix: Solid

Date Received: 05/31/23 15:24

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			06/05/23 13:40	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			06/02/23 09:50	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		06/01/23 07:59	06/01/23 18:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/01/23 07:59	06/01/23 18:20	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/01/23 07:59	06/01/23 18:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130				06/01/23 07:59	06/01/23 18:20	1
o-Terphenyl	118		70 - 130				06/01/23 07:59	06/01/23 18:20	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44.5		4.99		mg/Kg			06/01/23 15:53	1

Surrogate Summary

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28960-1
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)
880-28960-1	H-1 (0-0.5')	105	81
880-28960-2	H-2 (0-0.5')	100	83
880-28960-3	H-3 (0-0.5')	104	81
880-28960-4	H-4 (0-0.5')	101	84
880-28960-5	BG-1 (0-0.5')	100	77
880-28960-6	BG-2 (0-0.5')	100	93
890-4749-A-1-C MS	Matrix Spike	110	110
890-4749-A-1-D MSD	Matrix Spike Duplicate	108	110
LCS 880-54510/1-A	Lab Control Sample	109	109
LCSD 880-54510/2-A	Lab Control Sample Dup	113	96
MB 880-54510/5-A	Method Blank	70	104
MB 880-54575/5-A	Method Blank	70	104
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)
880-28960-1	H-1 (0-0.5')	117	123
880-28960-2	H-2 (0-0.5')	117	124
880-28960-3	H-3 (0-0.5')	225 S1+	239 S1+
880-28960-4	H-4 (0-0.5')	96	105
880-28960-5	BG-1 (0-0.5')	97	107
880-28960-6	BG-2 (0-0.5')	111	118
880-28961-A-1-F MS	Matrix Spike	119	125
880-28961-A-1-G MSD	Matrix Spike Duplicate	105	111
LCS 880-54539/2-A	Lab Control Sample	90	104
LCSD 880-54539/3-A	Lab Control Sample Dup	92	104
MB 880-54539/1-A	Method Blank	119	136 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28960-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-54510/5-A

Matrix: Solid

Analysis Batch: 54672

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 54510

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/31/23 13:57	06/03/23 17:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/31/23 13:57	06/03/23 17:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/31/23 13:57	06/03/23 17:27	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/31/23 13:57	06/03/23 17:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/31/23 13:57	06/03/23 17:27	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/31/23 13:57	06/03/23 17:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	70		70 - 130	05/31/23 13:57	06/03/23 17:27	1
1,4-Difluorobenzene (Surr)	104		70 - 130	05/31/23 13:57	06/03/23 17:27	1

Lab Sample ID: LCS 880-54510/1-A

Matrix: Solid

Analysis Batch: 54672

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 54510

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1212		mg/Kg		121	70 - 130
Toluene	0.100	0.1062		mg/Kg		106	70 - 130
Ethylbenzene	0.100	0.1001		mg/Kg		100	70 - 130
m-Xylene & p-Xylene	0.200	0.2105		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1040		mg/Kg		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-54510/2-A

Matrix: Solid

Analysis Batch: 54672

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 54510

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1178		mg/Kg		118	70 - 130	3	35
Toluene	0.100	0.1032		mg/Kg		103	70 - 130	3	35
Ethylbenzene	0.100	0.1009		mg/Kg		101	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.2116		mg/Kg		106	70 - 130	1	35
o-Xylene	0.100	0.1042		mg/Kg		104	70 - 130	0	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-4749-A-1-C MS

Matrix: Solid

Analysis Batch: 54672

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 54510

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0996	0.1113		mg/Kg		112	70 - 130
Toluene	<0.00202	U	0.0996	0.09570		mg/Kg		96	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28960-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 890-4749-A-1-C MS

Matrix: Solid

Analysis Batch: 54672

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 54510

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.0996	0.09212		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1906		mg/Kg		96	70 - 130
o-Xylene	<0.00202	U	0.0996	0.09288		mg/Kg		93	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: 890-4749-A-1-D MSD

Matrix: Solid

Analysis Batch: 54672

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 54510

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0990	0.1108		mg/Kg		112	70 - 130	0	35
Toluene	<0.00202	U	0.0990	0.09657		mg/Kg		98	70 - 130	1	35
Ethylbenzene	<0.00202	U	0.0990	0.09400		mg/Kg		95	70 - 130	2	35
m-Xylene & p-Xylene	<0.00403	U	0.198	0.1939		mg/Kg		98	70 - 130	2	35
o-Xylene	<0.00202	U	0.0990	0.09458		mg/Kg		96	70 - 130	2	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: MB 880-54575/5-A

Matrix: Solid

Analysis Batch: 54672

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 54575

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/01/23 11:30	06/03/23 06:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/01/23 11:30	06/03/23 06:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/01/23 11:30	06/03/23 06:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/01/23 11:30	06/03/23 06:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/01/23 11:30	06/03/23 06:24	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/01/23 11:30	06/03/23 06:24	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	70		70 - 130	06/01/23 11:30	06/03/23 06:24	1
1,4-Difluorobenzene (Surr)	104		70 - 130	06/01/23 11:30	06/03/23 06:24	1

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

Lab Sample ID: MB 880-54539/1-A

Matrix: Solid

Analysis Batch: 54534

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 54539

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		06/01/23 07:59	06/01/23 08:40	1

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28960-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: MB 880-54539/1-A

Matrix: Solid

Analysis Batch: 54534

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 54539

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/01/23 07:59	06/01/23 08:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/01/23 07:59	06/01/23 08:40	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130				06/01/23 07:59	06/01/23 08:40	1
o-Terphenyl	136	S1+	70 - 130				06/01/23 07:59	06/01/23 08:40	1

Lab Sample ID: LCS 880-54539/2-A

Matrix: Solid

Analysis Batch: 54534

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 54539

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1220		mg/Kg		122	70 - 130
Diesel Range Organics (Over C10-C28)	1000	964.2		mg/Kg		96	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	90		70 - 130				
o-Terphenyl	104		70 - 130				

Lab Sample ID: LCSD 880-54539/3-A

Matrix: Solid

Analysis Batch: 54534

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 54539

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1113		mg/Kg		111	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	1000	830.6		mg/Kg		83	70 - 130	15	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	92		70 - 130						
o-Terphenyl	104		70 - 130						

Lab Sample ID: 880-28961-A-1-F MS

Matrix: Solid

Analysis Batch: 54534

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 54539

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F2	1000	1224		mg/Kg		119	70 - 130
Diesel Range Organics (Over C10-C28)	76.7		1000	1132		mg/Kg		106	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	119		70 - 130						
o-Terphenyl	125		70 - 130						

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28960-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-28961-A-1-G MSD

Matrix: Solid

Analysis Batch: 54534

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 54539

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F2	999	952.7	F2	mg/Kg		92	70 - 130	25	20
Diesel Range Organics (Over C10-C28)	76.7		999	996.8		mg/Kg		92	70 - 130	13	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	105		70 - 130								
o-Terphenyl	111		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-54523/1-A

Matrix: Solid

Analysis Batch: 54580

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			06/01/23 14:28	1

Lab Sample ID: LCS 880-54523/2-A

Matrix: Solid

Analysis Batch: 54580

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	250.3		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-54523/3-A

Matrix: Solid

Analysis Batch: 54580

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	250.6		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 880-28957-A-1-B MS

Matrix: Solid

Analysis Batch: 54580

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	63.5		251	313.2		mg/Kg		100	90 - 110

Lab Sample ID: 880-28957-A-1-C MSD

Matrix: Solid

Analysis Batch: 54580

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	63.5		251	313.6		mg/Kg		100	90 - 110	0	20

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28960-1
SDG: Eddy County, New Mexico

GC VOA

Prep Batch: 54510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28960-1	H-1 (0-0.5')	Total/NA	Solid	5035	
880-28960-2	H-2 (0-0.5')	Total/NA	Solid	5035	
880-28960-3	H-3 (0-0.5')	Total/NA	Solid	5035	
880-28960-4	H-4 (0-0.5')	Total/NA	Solid	5035	
880-28960-5	BG-1 (0-0.5')	Total/NA	Solid	5035	
880-28960-6	BG-2 (0-0.5')	Total/NA	Solid	5035	
MB 880-54510/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-54510/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-54510/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4749-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-4749-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 54575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-54575/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 54672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28960-1	H-1 (0-0.5')	Total/NA	Solid	8021B	54510
880-28960-2	H-2 (0-0.5')	Total/NA	Solid	8021B	54510
880-28960-3	H-3 (0-0.5')	Total/NA	Solid	8021B	54510
880-28960-4	H-4 (0-0.5')	Total/NA	Solid	8021B	54510
880-28960-5	BG-1 (0-0.5')	Total/NA	Solid	8021B	54510
880-28960-6	BG-2 (0-0.5')	Total/NA	Solid	8021B	54510
MB 880-54510/5-A	Method Blank	Total/NA	Solid	8021B	54510
MB 880-54575/5-A	Method Blank	Total/NA	Solid	8021B	54575
LCS 880-54510/1-A	Lab Control Sample	Total/NA	Solid	8021B	54510
LCSD 880-54510/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	54510
890-4749-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	54510
890-4749-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	54510

Analysis Batch: 54768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28960-1	H-1 (0-0.5')	Total/NA	Solid	Total BTEX	
880-28960-2	H-2 (0-0.5')	Total/NA	Solid	Total BTEX	
880-28960-3	H-3 (0-0.5')	Total/NA	Solid	Total BTEX	
880-28960-4	H-4 (0-0.5')	Total/NA	Solid	Total BTEX	
880-28960-5	BG-1 (0-0.5')	Total/NA	Solid	Total BTEX	
880-28960-6	BG-2 (0-0.5')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 54534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28960-1	H-1 (0-0.5')	Total/NA	Solid	8015B NM	54539
880-28960-2	H-2 (0-0.5')	Total/NA	Solid	8015B NM	54539
880-28960-3	H-3 (0-0.5')	Total/NA	Solid	8015B NM	54539
880-28960-4	H-4 (0-0.5')	Total/NA	Solid	8015B NM	54539
880-28960-5	BG-1 (0-0.5')	Total/NA	Solid	8015B NM	54539
880-28960-6	BG-2 (0-0.5')	Total/NA	Solid	8015B NM	54539
MB 880-54539/1-A	Method Blank	Total/NA	Solid	8015B NM	54539

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28960-1
SDG: Eddy County, New Mexico

GC Semi VOA (Continued)

Analysis Batch: 54534 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-54539/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	54539
LCSD 880-54539/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	54539
880-28961-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	54539
880-28961-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	54539

Prep Batch: 54539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28960-1	H-1 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-28960-2	H-2 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-28960-3	H-3 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-28960-4	H-4 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-28960-5	BG-1 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-28960-6	BG-2 (0-0.5')	Total/NA	Solid	8015NM Prep	
MB 880-54539/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-54539/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-54539/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-28961-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-28961-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 54632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28960-1	H-1 (0-0.5')	Total/NA	Solid	8015 NM	
880-28960-2	H-2 (0-0.5')	Total/NA	Solid	8015 NM	
880-28960-3	H-3 (0-0.5')	Total/NA	Solid	8015 NM	
880-28960-4	H-4 (0-0.5')	Total/NA	Solid	8015 NM	
880-28960-5	BG-1 (0-0.5')	Total/NA	Solid	8015 NM	
880-28960-6	BG-2 (0-0.5')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 54523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28960-1	H-1 (0-0.5')	Soluble	Solid	DI Leach	
880-28960-2	H-2 (0-0.5')	Soluble	Solid	DI Leach	
880-28960-3	H-3 (0-0.5')	Soluble	Solid	DI Leach	
880-28960-4	H-4 (0-0.5')	Soluble	Solid	DI Leach	
880-28960-5	BG-1 (0-0.5')	Soluble	Solid	DI Leach	
880-28960-6	BG-2 (0-0.5')	Soluble	Solid	DI Leach	
MB 880-54523/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-54523/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-54523/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-28957-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-28957-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 54580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28960-1	H-1 (0-0.5')	Soluble	Solid	300.0	54523
880-28960-2	H-2 (0-0.5')	Soluble	Solid	300.0	54523
880-28960-3	H-3 (0-0.5')	Soluble	Solid	300.0	54523
880-28960-4	H-4 (0-0.5')	Soluble	Solid	300.0	54523
880-28960-5	BG-1 (0-0.5')	Soluble	Solid	300.0	54523

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28960-1
SDG: Eddy County, New Mexico

HPLC/IC (Continued)

Analysis Batch: 54580 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28960-6	BG-2 (0-0.5')	Soluble	Solid	300.0	54523
MB 880-54523/1-A	Method Blank	Soluble	Solid	300.0	54523
LCS 880-54523/2-A	Lab Control Sample	Soluble	Solid	300.0	54523
LCSD 880-54523/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	54523
880-28957-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	54523
880-28957-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	54523

Lab Chronicle

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28960-1
SDG: Eddy County, New Mexico

Client Sample ID: H-1 (0-0.5')

Lab Sample ID: 880-28960-1

Date Collected: 05/30/23 15:45

Matrix: Solid

Date Received: 05/31/23 15:24

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	54510	05/31/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54672	06/03/23 19:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54768	06/05/23 13:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			54632	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	54539	06/01/23 07:59	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/01/23 15:19	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	54523	05/31/23 15:38	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54580	06/01/23 15:16	CH	EET MID

Client Sample ID: H-2 (0-0.5')

Lab Sample ID: 880-28960-2

Date Collected: 05/30/23 15:50

Matrix: Solid

Date Received: 05/31/23 15:24

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	54510	05/31/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54672	06/03/23 19:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54768	06/05/23 13:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			54632	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	54539	06/01/23 07:59	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/01/23 16:27	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	54523	05/31/23 15:38	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54580	06/01/23 15:32	CH	EET MID

Client Sample ID: H-3 (0-0.5')

Lab Sample ID: 880-28960-3

Date Collected: 05/30/23 15:55

Matrix: Solid

Date Received: 05/31/23 15:24

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	54510	05/31/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54672	06/03/23 20:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54768	06/05/23 13:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			54632	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	54539	06/01/23 07:59	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/01/23 17:15	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	54523	05/31/23 15:38	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54580	06/01/23 15:37	CH	EET MID

Client Sample ID: H-4 (0-0.5')

Lab Sample ID: 880-28960-4

Date Collected: 05/30/23 16:00

Matrix: Solid

Date Received: 05/31/23 15:24

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	54510	05/31/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54672	06/03/23 20:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54768	06/05/23 13:40	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28960-1
SDG: Eddy County, New Mexico

Client Sample ID: H-4 (0-0.5')

Lab Sample ID: 880-28960-4

Date Collected: 05/30/23 16:00

Matrix: Solid

Date Received: 05/31/23 15:24

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			54632	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	54539	06/01/23 07:59	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/01/23 17:36	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	54523	05/31/23 15:38	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54580	06/01/23 15:43	CH	EET MID

Client Sample ID: BG-1 (0-0.5')

Lab Sample ID: 880-28960-5

Date Collected: 05/30/23 16:05

Matrix: Solid

Date Received: 05/31/23 15:24

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	54510	05/31/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54672	06/03/23 20:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54768	06/05/23 13:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			54632	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	54539	06/01/23 07:59	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/01/23 17:58	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	54523	05/31/23 15:38	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54580	06/01/23 15:48	CH	EET MID

Client Sample ID: BG-2 (0-0.5')

Lab Sample ID: 880-28960-6

Date Collected: 05/30/23 16:10

Matrix: Solid

Date Received: 05/31/23 15:24

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	54510	05/31/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54672	06/03/23 22:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54768	06/05/23 13:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			54632	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	54539	06/01/23 07:59	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/01/23 18:20	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	54523	05/31/23 15:38	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54580	06/01/23 15:53	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: Black River 3H 8H 10H CTB

Job ID: 880-28960-1
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	T104704400-22-25	06-30-23

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

Method Summary

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28960-1
SDG: Eddy County, New Mexico

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28960-1
SDG: Eddy County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-28960-1	H-1 (0-0.5')	Solid	05/30/23 15:45	05/31/23 15:24
880-28960-2	H-2 (0-0.5')	Solid	05/30/23 15:50	05/31/23 15:24
880-28960-3	H-3 (0-0.5')	Solid	05/30/23 15:55	05/31/23 15:24
880-28960-4	H-4 (0-0.5')	Solid	05/30/23 16:00	05/31/23 15:24
880-28960-5	BG-1 (0-0.5')	Solid	05/30/23 16:05	05/31/23 15:24
880-28960-6	BG-2 (0-0.5')	Solid	05/30/23 16:10	05/31/23 15:24

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



Project Manager	Clinton Merritt	Bill to (if different)	Melodie Sanjari
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	msanjari@marathonoil.com

Work Order Comments	
Program: UST/PT <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project	
Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other	

Work Order No: 285160

[illegible]

Comments: Email results to Mike Carmona mcarmona@carmonaresources.com, Conner Moehring cmoehring@carmonaresources.com, Clint Merritt MerrittC@carmonaresources.com

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
	5-31-23 1524		

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-28960-1
SDG Number: Eddy County, New Mexico

Login Number: 28960

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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



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 6/5/2023 2:33:01 PM

JOB DESCRIPTION

Black River 3H 8H 10H CTB
SDG NUMBER Eddy County, New Mexico

JOB NUMBER

880-28961-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

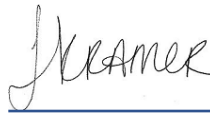
Eurofins Midland

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
6/5/2023 2:33:01 PM

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

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Laboratory Job ID: 880-28961-1
SDG: Eddy County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
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
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/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
SDG: Eddy County, New Mexico

Job ID: 880-28961-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-28961-1

Receipt

The samples were received on 5/31/2023 3:24 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 2.1°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: S-1 (0-6") (880-28961-1), S-1 (6"-1') (880-28961-2), S-1 (1'-1.5') (880-28961-3), S-2 (0-6") (880-28961-4), S-2 (6"-1') (880-28961-5), S-2 (1'-1.5') (880-28961-6), S-3 (0-6") (880-28961-7), S-3 (6"-1') (880-28961-8) and S-3 (1'-1.5') (880-28961-9).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-54510 and analytical batch 880-54672 was outside the upper control limits.

Method 8021B: CCV biased low for Benzene and Toluene however an acceptable CCV was ran within the 12 hour window therefore the data have been qualified and reported.(CCV 880-54672/51)

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-54539 and analytical batch 880-54534 was outside the upper control limits.

Method 8015MOD_NM: The method blank for preparation batch 880-54539 and analytical batch 880-54534 contained Diesel Range Organics (Over C10-C28) and Oil Range Organics (Over C28-C36) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-54539 and analytical batch 880-54534 was outside control limits. Sample non-homogeneity is suspected.

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

HPLC/IC

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

Client Sample Results

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-28961-1

Date Collected: 05/30/23 15:00

Matrix: Solid

Date Received: 05/31/23 15:24

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		05/31/23 15:52	06/03/23 22:37	1
Toluene	0.00316		0.00200		mg/Kg		05/31/23 15:52	06/03/23 22:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/31/23 15:52	06/03/23 22:37	1
m-Xylene & p-Xylene	0.0190		0.00399		mg/Kg		05/31/23 15:52	06/03/23 22:37	1
o-Xylene	0.00497		0.00200		mg/Kg		05/31/23 15:52	06/03/23 22:37	1
Xylenes, Total	0.0240		0.00399		mg/Kg		05/31/23 15:52	06/03/23 22:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	05/31/23 15:52	06/03/23 22:37	1
1,4-Difluorobenzene (Surr)	116		70 - 130	05/31/23 15:52	06/03/23 22:37	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0271		0.00399		mg/Kg			06/05/23 13:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	76.7		49.9		mg/Kg			06/02/23 09:50	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 F2	49.9		mg/Kg		06/01/23 07:59	06/01/23 11:21	1
Diesel Range Organics (Over C10-C28)	76.7		49.9		mg/Kg		06/01/23 07:59	06/01/23 11:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/01/23 07:59	06/01/23 11:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130				06/01/23 07:59	06/01/23 11:21	1
o-Terphenyl	123		70 - 130				06/01/23 07:59	06/01/23 11:21	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13500		100		mg/Kg			06/01/23 15:59	20

Client Sample ID: S-1 (6"-1')

Lab Sample ID: 880-28961-2

Date Collected: 05/30/23 15:05

Matrix: Solid

Date Received: 05/31/23 15:24

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		05/31/23 15:52	06/03/23 22:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/31/23 15:52	06/03/23 22:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/31/23 15:52	06/03/23 22:58	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/31/23 15:52	06/03/23 22:58	1
o-Xylene	0.00429		0.00200		mg/Kg		05/31/23 15:52	06/03/23 22:58	1
Xylenes, Total	0.00429		0.00401		mg/Kg		05/31/23 15:52	06/03/23 22:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	05/31/23 15:52	06/03/23 22:58	1
1,4-Difluorobenzene (Surr)	78		70 - 130	05/31/23 15:52	06/03/23 22:58	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
SDG: Eddy County, New Mexico

Client Sample ID: S-1 (6"-1')

Lab Sample ID: 880-28961-2

Date Collected: 05/30/23 15:05

Matrix: Solid

Date Received: 05/31/23 15:24

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00429		0.00401		mg/Kg			06/05/23 13:40	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			06/02/23 09:50	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		06/01/23 07:59	06/01/23 12:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/01/23 07:59	06/01/23 12:26	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/01/23 07:59	06/01/23 12:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130				06/01/23 07:59	06/01/23 12:26	1
o-Terphenyl	107		70 - 130				06/01/23 07:59	06/01/23 12:26	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	75.6		5.00		mg/Kg			06/01/23 16:15	1

Client Sample ID: S-1 (1'-1.5')

Lab Sample ID: 880-28961-3

Date Collected: 05/30/23 15:10

Matrix: Solid

Date Received: 05/31/23 15:24

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		05/31/23 15:52	06/03/23 23:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/31/23 15:52	06/03/23 23:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/31/23 15:52	06/03/23 23:18	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/31/23 15:52	06/03/23 23:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/31/23 15:52	06/03/23 23:18	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/31/23 15:52	06/03/23 23:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130				05/31/23 15:52	06/03/23 23:18	1
1,4-Difluorobenzene (Surr)	81		70 - 130				05/31/23 15:52	06/03/23 23:18	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			06/05/23 13:40	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			06/02/23 09:50	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		06/01/23 07:59	06/01/23 12:48	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/01/23 07:59	06/01/23 12:48	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
SDG: Eddy County, New Mexico

Client Sample ID: S-1 (1'-1.5')

Lab Sample ID: 880-28961-3

Date Collected: 05/30/23 15:10

Matrix: Solid

Date Received: 05/31/23 15:24

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		06/01/23 07:59	06/01/23 12:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				06/01/23 07:59	06/01/23 12:48	1
o-Terphenyl	113		70 - 130				06/01/23 07:59	06/01/23 12:48	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	52.2		4.95		mg/Kg			06/01/23 16:20	1

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

Lab Sample ID: 880-28961-4

Date Collected: 05/30/23 15:15

Matrix: Solid

Date Received: 05/31/23 15:24

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		05/31/23 15:52	06/03/23 23:39	1
Toluene	0.00225		0.00201		mg/Kg		05/31/23 15:52	06/03/23 23:39	1
Ethylbenzene	0.00340		0.00201		mg/Kg		05/31/23 15:52	06/03/23 23:39	1
m-Xylene & p-Xylene	0.0180		0.00402		mg/Kg		05/31/23 15:52	06/03/23 23:39	1
o-Xylene	0.00401		0.00201		mg/Kg		05/31/23 15:52	06/03/23 23:39	1
Xylenes, Total	0.0220		0.00402		mg/Kg		05/31/23 15:52	06/03/23 23:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				05/31/23 15:52	06/03/23 23:39	1
1,4-Difluorobenzene (Surr)	104		70 - 130				05/31/23 15:52	06/03/23 23:39	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0277		0.00402		mg/Kg			06/05/23 13:40	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			06/02/23 09:50	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		06/01/23 07:59	06/01/23 13:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/01/23 07:59	06/01/23 13:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/01/23 07:59	06/01/23 13:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				06/01/23 07:59	06/01/23 13:10	1
o-Terphenyl	116		70 - 130				06/01/23 07:59	06/01/23 13:10	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19400		99.6		mg/Kg			06/01/23 16:36	20

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
SDG: Eddy County, New Mexico

Client Sample ID: S-2 (6"-1')

Lab Sample ID: 880-28961-5

Date Collected: 05/30/23 15:20

Matrix: Solid

Date Received: 05/31/23 15:24

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		05/31/23 15:52	06/03/23 23:59	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/31/23 15:52	06/03/23 23:59	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/31/23 15:52	06/03/23 23:59	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/31/23 15:52	06/03/23 23:59	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/31/23 15:52	06/03/23 23:59	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/31/23 15:52	06/03/23 23:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	05/31/23 15:52	06/03/23 23:59	1
1,4-Difluorobenzene (Surr)	81		70 - 130	05/31/23 15:52	06/03/23 23:59	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			06/05/23 13:40	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			06/02/23 09:50	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		06/01/23 07:59	06/01/23 13:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/01/23 07:59	06/01/23 13:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/01/23 07:59	06/01/23 13:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	06/01/23 07:59	06/01/23 13:31	1
o-Terphenyl	115		70 - 130	06/01/23 07:59	06/01/23 13:31	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	65.4		4.95		mg/Kg			06/01/23 16:42	1

Client Sample ID: S-2 (1'-1.5')

Lab Sample ID: 880-28961-6

Date Collected: 05/30/23 15:25

Matrix: Solid

Date Received: 05/31/23 15:24

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		05/31/23 15:52	06/04/23 00:20	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/31/23 15:52	06/04/23 00:20	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/31/23 15:52	06/04/23 00:20	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/31/23 15:52	06/04/23 00:20	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/31/23 15:52	06/04/23 00:20	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/31/23 15:52	06/04/23 00:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	05/31/23 15:52	06/04/23 00:20	1
1,4-Difluorobenzene (Surr)	70		70 - 130	05/31/23 15:52	06/04/23 00:20	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
SDG: Eddy County, New Mexico

Client Sample ID: S-2 (1'-1.5')

Lab Sample ID: 880-28961-6

Date Collected: 05/30/23 15:25

Matrix: Solid

Date Received: 05/31/23 15:24

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			06/05/23 13:40	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			06/02/23 09:50	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		06/01/23 07:59	06/01/23 13:53	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/01/23 07:59	06/01/23 13:53	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/01/23 07:59	06/01/23 13:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				06/01/23 07:59	06/01/23 13:53	1
o-Terphenyl	115		70 - 130				06/01/23 07:59	06/01/23 13:53	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62.4		4.96		mg/Kg			06/01/23 16:47	1

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

Lab Sample ID: 880-28961-7

Date Collected: 05/30/23 15:30

Matrix: Solid

Date Received: 05/31/23 15:24

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		05/31/23 15:52	06/04/23 00:40	1
Toluene	0.00264		0.00200		mg/Kg		05/31/23 15:52	06/04/23 00:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/31/23 15:52	06/04/23 00:40	1
m-Xylene & p-Xylene	0.0218		0.00400		mg/Kg		05/31/23 15:52	06/04/23 00:40	1
o-Xylene	0.00570		0.00200		mg/Kg		05/31/23 15:52	06/04/23 00:40	1
Xylenes, Total	0.0275		0.00400		mg/Kg		05/31/23 15:52	06/04/23 00:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130				05/31/23 15:52	06/04/23 00:40	1
1,4-Difluorobenzene (Surr)	93		70 - 130				05/31/23 15:52	06/04/23 00:40	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0301		0.00400		mg/Kg			06/05/23 13:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	53.5		50.0		mg/Kg			06/02/23 09:50	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		06/01/23 07:59	06/01/23 14:15	1
Diesel Range Organics (Over C10-C28)	53.5		50.0		mg/Kg		06/01/23 07:59	06/01/23 14:15	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-28961-7

Date Collected: 05/30/23 15:30

Matrix: Solid

Date Received: 05/31/23 15:24

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		06/01/23 07:59	06/01/23 14:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				06/01/23 07:59	06/01/23 14:15	1
o-Terphenyl	123		70 - 130				06/01/23 07:59	06/01/23 14:15	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12100		101		mg/Kg			06/01/23 16:52	20

Client Sample ID: S-3 (6"-1')

Lab Sample ID: 880-28961-8

Date Collected: 05/30/23 15:35

Matrix: Solid

Date Received: 05/31/23 15:24

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		05/31/23 15:52	06/04/23 01:01	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/31/23 15:52	06/04/23 01:01	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/31/23 15:52	06/04/23 01:01	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/31/23 15:52	06/04/23 01:01	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/31/23 15:52	06/04/23 01:01	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/31/23 15:52	06/04/23 01:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				05/31/23 15:52	06/04/23 01:01	1
1,4-Difluorobenzene (Surr)	73		70 - 130				05/31/23 15:52	06/04/23 01:01	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			06/05/23 13:40	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			06/02/23 09:50	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		06/01/23 07:59	06/01/23 14:36	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/01/23 07:59	06/01/23 14:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/01/23 07:59	06/01/23 14:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				06/01/23 07:59	06/01/23 14:36	1
o-Terphenyl	112		70 - 130				06/01/23 07:59	06/01/23 14:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	87.5		5.01		mg/Kg			06/01/23 16:58	1

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Client Sample Results

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
SDG: Eddy County, New Mexico

Client Sample ID: S-3 (1'-1.5')

Lab Sample ID: 880-28961-9

Date Collected: 05/30/23 15:40

Matrix: Solid

Date Received: 05/31/23 15:24

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		05/31/23 15:52	06/04/23 01:21	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/31/23 15:52	06/04/23 01:21	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/31/23 15:52	06/04/23 01:21	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/31/23 15:52	06/04/23 01:21	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/31/23 15:52	06/04/23 01:21	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/31/23 15:52	06/04/23 01:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	05/31/23 15:52	06/04/23 01:21	1
1,4-Difluorobenzene (Surr)	75		70 - 130	05/31/23 15:52	06/04/23 01:21	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			06/05/23 13:40	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			06/02/23 09:50	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		06/01/23 07:59	06/01/23 14:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/01/23 07:59	06/01/23 14:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/01/23 07:59	06/01/23 14:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	06/01/23 07:59	06/01/23 14:58	1
o-Terphenyl	120		70 - 130	06/01/23 07:59	06/01/23 14:58	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	64.2		4.98		mg/Kg			06/01/23 17:03	1

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Surrogate Summary

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
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	DFBZ1				
		(70-130)	(70-130)				
880-28961-1	S-1 (0-6")	96	116				
880-28961-2	S-1 (6"-1')	99	78				
880-28961-3	S-1 (1'-1.5')	96	81				
880-28961-4	S-2 (0-6")	115	104				
880-28961-5	S-2 (6"-1')	98	81				
880-28961-6	S-2 (1'-1.5')	93	70				
880-28961-7	S-3 (0-6")	123	93				
880-28961-8	S-3 (6"-1')	97	73				
880-28961-9	S-3 (1'-1.5')	104	75				
890-4749-A-1-C MS	Matrix Spike	110	110				
890-4749-A-1-D MSD	Matrix Spike Duplicate	108	110				
LCS 880-54510/1-A	Lab Control Sample	109	109				
LCSD 880-54510/2-A	Lab Control Sample Dup	113	96				
MB 880-54510/5-A	Method Blank	70	104				
MB 880-54575/5-A	Method Blank	70	104				
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	OTPH1				
		(70-130)	(70-130)				
880-28961-1	S-1 (0-6")	108	123				
880-28961-1 MS	S-1 (0-6")	119	125				
880-28961-1 MSD	S-1 (0-6")	105	111				
880-28961-2	S-1 (6"-1')	98	107				
880-28961-3	S-1 (1'-1.5')	102	113				
880-28961-4	S-2 (0-6")	104	116				
880-28961-5	S-2 (6"-1')	104	115				
880-28961-6	S-2 (1'-1.5')	102	115				
880-28961-7	S-3 (0-6")	110	123				
880-28961-8	S-3 (6"-1')	100	112				
880-28961-9	S-3 (1'-1.5')	113	120				
LCS 880-54539/2-A	Lab Control Sample	90	104				
LCSD 880-54539/3-A	Lab Control Sample Dup	92	104				
MB 880-54539/1-A	Method Blank	119	136 S1+				
Surrogate Legend							
1CO = 1-Chlorooctane							
OTPH = o-Terphenyl							

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QC Sample Results

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-54510/5-A

Matrix: Solid

Analysis Batch: 54672

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 54510

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/31/23 13:57	06/03/23 17:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/31/23 13:57	06/03/23 17:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/31/23 13:57	06/03/23 17:27	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/31/23 13:57	06/03/23 17:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/31/23 13:57	06/03/23 17:27	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/31/23 13:57	06/03/23 17:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	70		70 - 130	05/31/23 13:57	06/03/23 17:27	1
1,4-Difluorobenzene (Surr)	104		70 - 130	05/31/23 13:57	06/03/23 17:27	1

Lab Sample ID: LCS 880-54510/1-A

Matrix: Solid

Analysis Batch: 54672

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 54510

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1212		mg/Kg		121	70 - 130
Toluene	0.100	0.1062		mg/Kg		106	70 - 130
Ethylbenzene	0.100	0.1001		mg/Kg		100	70 - 130
m-Xylene & p-Xylene	0.200	0.2105		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1040		mg/Kg		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-54510/2-A

Matrix: Solid

Analysis Batch: 54672

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 54510

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1178		mg/Kg		118	70 - 130	3	35
Toluene	0.100	0.1032		mg/Kg		103	70 - 130	3	35
Ethylbenzene	0.100	0.1009		mg/Kg		101	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.2116		mg/Kg		106	70 - 130	1	35
o-Xylene	0.100	0.1042		mg/Kg		104	70 - 130	0	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-4749-A-1-C MS

Matrix: Solid

Analysis Batch: 54672

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 54510

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0996	0.1113		mg/Kg		112	70 - 130
Toluene	<0.00202	U	0.0996	0.09570		mg/Kg		96	70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 890-4749-A-1-C MS

Matrix: Solid

Analysis Batch: 54672

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 54510

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.0996	0.09212		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1906		mg/Kg		96	70 - 130
o-Xylene	<0.00202	U	0.0996	0.09288		mg/Kg		93	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: 890-4749-A-1-D MSD

Matrix: Solid

Analysis Batch: 54672

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 54510

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0990	0.1108		mg/Kg		112	70 - 130	0	35
Toluene	<0.00202	U	0.0990	0.09657		mg/Kg		98	70 - 130	1	35
Ethylbenzene	<0.00202	U	0.0990	0.09400		mg/Kg		95	70 - 130	2	35
m-Xylene & p-Xylene	<0.00403	U	0.198	0.1939		mg/Kg		98	70 - 130	2	35
o-Xylene	<0.00202	U	0.0990	0.09458		mg/Kg		96	70 - 130	2	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: MB 880-54575/5-A

Matrix: Solid

Analysis Batch: 54672

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 54575

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/01/23 11:30	06/03/23 06:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/01/23 11:30	06/03/23 06:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/01/23 11:30	06/03/23 06:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/01/23 11:30	06/03/23 06:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/01/23 11:30	06/03/23 06:24	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/01/23 11:30	06/03/23 06:24	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	70		70 - 130	06/01/23 11:30	06/03/23 06:24	1
1,4-Difluorobenzene (Surr)	104		70 - 130	06/01/23 11:30	06/03/23 06:24	1

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

Lab Sample ID: MB 880-54539/1-A

Matrix: Solid

Analysis Batch: 54534

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 54539

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		06/01/23 07:59	06/01/23 08:40	1

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: MB 880-54539/1-A

Matrix: Solid

Analysis Batch: 54534

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 54539

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/01/23 07:59	06/01/23 08:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/01/23 07:59	06/01/23 08:40	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130				06/01/23 07:59	06/01/23 08:40	1
o-Terphenyl	136	S1+	70 - 130				06/01/23 07:59	06/01/23 08:40	1

Lab Sample ID: LCS 880-54539/2-A

Matrix: Solid

Analysis Batch: 54534

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 54539

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1220		mg/Kg		122	70 - 130
Diesel Range Organics (Over C10-C28)	1000	964.2		mg/Kg		96	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	90		70 - 130				
o-Terphenyl	104		70 - 130				

Lab Sample ID: LCSD 880-54539/3-A

Matrix: Solid

Analysis Batch: 54534

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 54539

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1113		mg/Kg		111	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	1000	830.6		mg/Kg		83	70 - 130	15	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	92		70 - 130						
o-Terphenyl	104		70 - 130						

Lab Sample ID: 880-28961-1 MS

Matrix: Solid

Analysis Batch: 54534

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

Prep Type: Total/NA

Prep Batch: 54539

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F2	1000	1224		mg/Kg		119	70 - 130
Diesel Range Organics (Over C10-C28)	76.7		1000	1132		mg/Kg		106	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	119		70 - 130						
o-Terphenyl	125		70 - 130						

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-28961-1 MSD

Matrix: Solid

Analysis Batch: 54534

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

Prep Type: Total/NA

Prep Batch: 54539

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F2	999	952.7	F2	mg/Kg		92	70 - 130	25	20
Diesel Range Organics (Over C10-C28)	76.7		999	996.8		mg/Kg		92	70 - 130	13	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	105		70 - 130								
o-Terphenyl	111		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-54523/1-A

Matrix: Solid

Analysis Batch: 54580

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			06/01/23 14:28	1

Lab Sample ID: LCS 880-54523/2-A

Matrix: Solid

Analysis Batch: 54580

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	250.3		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-54523/3-A

Matrix: Solid

Analysis Batch: 54580

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	250.6		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 880-28961-1 MS

Matrix: Solid

Analysis Batch: 54580

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

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	13500		5000	18650		mg/Kg		103	90 - 110

Lab Sample ID: 880-28961-1 MSD

Matrix: Solid

Analysis Batch: 54580

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

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	13500		5000	18680		mg/Kg		103	90 - 110	0	20

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
SDG: Eddy County, New Mexico

GC VOA

Prep Batch: 54510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28961-1	S-1 (0-6")	Total/NA	Solid	5035	
880-28961-2	S-1 (6"-1')	Total/NA	Solid	5035	
880-28961-3	S-1 (1'-1.5')	Total/NA	Solid	5035	
880-28961-4	S-2 (0-6")	Total/NA	Solid	5035	
880-28961-5	S-2 (6"-1')	Total/NA	Solid	5035	
880-28961-6	S-2 (1'-1.5')	Total/NA	Solid	5035	
880-28961-7	S-3 (0-6")	Total/NA	Solid	5035	
880-28961-8	S-3 (6"-1')	Total/NA	Solid	5035	
880-28961-9	S-3 (1'-1.5')	Total/NA	Solid	5035	
MB 880-54510/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-54510/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-54510/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4749-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-4749-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 54575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-54575/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 54672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28961-1	S-1 (0-6")	Total/NA	Solid	8021B	54510
880-28961-2	S-1 (6"-1')	Total/NA	Solid	8021B	54510
880-28961-3	S-1 (1'-1.5')	Total/NA	Solid	8021B	54510
880-28961-4	S-2 (0-6")	Total/NA	Solid	8021B	54510
880-28961-5	S-2 (6"-1')	Total/NA	Solid	8021B	54510
880-28961-6	S-2 (1'-1.5')	Total/NA	Solid	8021B	54510
880-28961-7	S-3 (0-6")	Total/NA	Solid	8021B	54510
880-28961-8	S-3 (6"-1')	Total/NA	Solid	8021B	54510
880-28961-9	S-3 (1'-1.5')	Total/NA	Solid	8021B	54510
MB 880-54510/5-A	Method Blank	Total/NA	Solid	8021B	54510
MB 880-54575/5-A	Method Blank	Total/NA	Solid	8021B	54575
LCS 880-54510/1-A	Lab Control Sample	Total/NA	Solid	8021B	54510
LCSD 880-54510/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	54510
890-4749-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	54510
890-4749-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	54510

Analysis Batch: 54769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28961-1	S-1 (0-6")	Total/NA	Solid	Total BTEX	
880-28961-2	S-1 (6"-1')	Total/NA	Solid	Total BTEX	
880-28961-3	S-1 (1'-1.5')	Total/NA	Solid	Total BTEX	
880-28961-4	S-2 (0-6")	Total/NA	Solid	Total BTEX	
880-28961-5	S-2 (6"-1')	Total/NA	Solid	Total BTEX	
880-28961-6	S-2 (1'-1.5')	Total/NA	Solid	Total BTEX	
880-28961-7	S-3 (0-6")	Total/NA	Solid	Total BTEX	
880-28961-8	S-3 (6"-1')	Total/NA	Solid	Total BTEX	
880-28961-9	S-3 (1'-1.5')	Total/NA	Solid	Total BTEX	

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
SDG: Eddy County, New Mexico

GC Semi VOA

Analysis Batch: 54534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28961-1	S-1 (0-6")	Total/NA	Solid	8015B NM	54539
880-28961-2	S-1 (6"-1')	Total/NA	Solid	8015B NM	54539
880-28961-3	S-1 (1'-1.5')	Total/NA	Solid	8015B NM	54539
880-28961-4	S-2 (0-6")	Total/NA	Solid	8015B NM	54539
880-28961-5	S-2 (6"-1')	Total/NA	Solid	8015B NM	54539
880-28961-6	S-2 (1'-1.5')	Total/NA	Solid	8015B NM	54539
880-28961-7	S-3 (0-6")	Total/NA	Solid	8015B NM	54539
880-28961-8	S-3 (6"-1')	Total/NA	Solid	8015B NM	54539
880-28961-9	S-3 (1'-1.5')	Total/NA	Solid	8015B NM	54539
MB 880-54539/1-A	Method Blank	Total/NA	Solid	8015B NM	54539
LCS 880-54539/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	54539
LCSD 880-54539/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	54539
880-28961-1 MS	S-1 (0-6")	Total/NA	Solid	8015B NM	54539
880-28961-1 MSD	S-1 (0-6")	Total/NA	Solid	8015B NM	54539

Prep Batch: 54539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28961-1	S-1 (0-6")	Total/NA	Solid	8015NM Prep	
880-28961-2	S-1 (6"-1')	Total/NA	Solid	8015NM Prep	
880-28961-3	S-1 (1'-1.5')	Total/NA	Solid	8015NM Prep	
880-28961-4	S-2 (0-6")	Total/NA	Solid	8015NM Prep	
880-28961-5	S-2 (6"-1')	Total/NA	Solid	8015NM Prep	
880-28961-6	S-2 (1'-1.5')	Total/NA	Solid	8015NM Prep	
880-28961-7	S-3 (0-6")	Total/NA	Solid	8015NM Prep	
880-28961-8	S-3 (6"-1')	Total/NA	Solid	8015NM Prep	
880-28961-9	S-3 (1'-1.5')	Total/NA	Solid	8015NM Prep	
MB 880-54539/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-54539/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-54539/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-28961-1 MS	S-1 (0-6")	Total/NA	Solid	8015NM Prep	
880-28961-1 MSD	S-1 (0-6")	Total/NA	Solid	8015NM Prep	

Analysis Batch: 54631

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28961-1	S-1 (0-6")	Total/NA	Solid	8015 NM	
880-28961-2	S-1 (6"-1')	Total/NA	Solid	8015 NM	
880-28961-3	S-1 (1'-1.5')	Total/NA	Solid	8015 NM	
880-28961-4	S-2 (0-6")	Total/NA	Solid	8015 NM	
880-28961-5	S-2 (6"-1')	Total/NA	Solid	8015 NM	
880-28961-6	S-2 (1'-1.5')	Total/NA	Solid	8015 NM	
880-28961-7	S-3 (0-6")	Total/NA	Solid	8015 NM	
880-28961-8	S-3 (6"-1')	Total/NA	Solid	8015 NM	
880-28961-9	S-3 (1'-1.5')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 54523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28961-1	S-1 (0-6")	Soluble	Solid	DI Leach	
880-28961-2	S-1 (6"-1')	Soluble	Solid	DI Leach	
880-28961-3	S-1 (1'-1.5')	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
SDG: Eddy County, New Mexico

HPLC/IC (Continued)

Leach Batch: 54523 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28961-4	S-2 (0-6")	Soluble	Solid	DI Leach	
880-28961-5	S-2 (6"-1')	Soluble	Solid	DI Leach	
880-28961-6	S-2 (1'-1.5')	Soluble	Solid	DI Leach	
880-28961-7	S-3 (0-6")	Soluble	Solid	DI Leach	
880-28961-8	S-3 (6"-1')	Soluble	Solid	DI Leach	
880-28961-9	S-3 (1'-1.5')	Soluble	Solid	DI Leach	
MB 880-54523/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-54523/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-54523/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-28961-1 MS	S-1 (0-6")	Soluble	Solid	DI Leach	
880-28961-1 MSD	S-1 (0-6")	Soluble	Solid	DI Leach	

Analysis Batch: 54580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28961-1	S-1 (0-6")	Soluble	Solid	300.0	54523
880-28961-2	S-1 (6"-1')	Soluble	Solid	300.0	54523
880-28961-3	S-1 (1'-1.5')	Soluble	Solid	300.0	54523
880-28961-4	S-2 (0-6")	Soluble	Solid	300.0	54523
880-28961-5	S-2 (6"-1')	Soluble	Solid	300.0	54523
880-28961-6	S-2 (1'-1.5')	Soluble	Solid	300.0	54523
880-28961-7	S-3 (0-6")	Soluble	Solid	300.0	54523
880-28961-8	S-3 (6"-1')	Soluble	Solid	300.0	54523
880-28961-9	S-3 (1'-1.5')	Soluble	Solid	300.0	54523
MB 880-54523/1-A	Method Blank	Soluble	Solid	300.0	54523
LCS 880-54523/2-A	Lab Control Sample	Soluble	Solid	300.0	54523
LCSD 880-54523/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	54523
880-28961-1 MS	S-1 (0-6")	Soluble	Solid	300.0	54523
880-28961-1 MSD	S-1 (0-6")	Soluble	Solid	300.0	54523

Lab Chronicle

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-28961-1

Date Collected: 05/30/23 15:00

Matrix: Solid

Date Received: 05/31/23 15:24

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	54510	05/31/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54672	06/03/23 22:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54769	06/05/23 13:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			54631	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	54539	06/01/23 07:59	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/01/23 11:21	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	54523	05/31/23 15:38	KS	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	54580	06/01/23 15:59	CH	EET MID

Client Sample ID: S-1 (6"-1')

Lab Sample ID: 880-28961-2

Date Collected: 05/30/23 15:05

Matrix: Solid

Date Received: 05/31/23 15:24

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	54510	05/31/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54672	06/03/23 22:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54769	06/05/23 13:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			54631	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	54539	06/01/23 07:59	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/01/23 12:26	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	54523	05/31/23 15:38	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54580	06/01/23 16:15	CH	EET MID

Client Sample ID: S-1 (1'-1.5')

Lab Sample ID: 880-28961-3

Date Collected: 05/30/23 15:10

Matrix: Solid

Date Received: 05/31/23 15:24

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	54510	05/31/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54672	06/03/23 23:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54769	06/05/23 13:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			54631	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	54539	06/01/23 07:59	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/01/23 12:48	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	54523	05/31/23 15:38	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54580	06/01/23 16:20	CH	EET MID

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

Lab Sample ID: 880-28961-4

Date Collected: 05/30/23 15:15

Matrix: Solid

Date Received: 05/31/23 15:24

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	54510	05/31/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54672	06/03/23 23:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54769	06/05/23 13:40	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-28961-4

Date Collected: 05/30/23 15:15

Matrix: Solid

Date Received: 05/31/23 15:24

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			54631	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54539	06/01/23 07:59	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/01/23 13:10	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	54523	05/31/23 15:38	KS	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	54580	06/01/23 16:36	CH	EET MID

Client Sample ID: S-2 (6"-1')

Lab Sample ID: 880-28961-5

Date Collected: 05/30/23 15:20

Matrix: Solid

Date Received: 05/31/23 15:24

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	54510	05/31/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54672	06/03/23 23:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54769	06/05/23 13:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			54631	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	54539	06/01/23 07:59	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/01/23 13:31	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	54523	05/31/23 15:38	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54580	06/01/23 16:42	CH	EET MID

Client Sample ID: S-2 (1'-1.5')

Lab Sample ID: 880-28961-6

Date Collected: 05/30/23 15:25

Matrix: Solid

Date Received: 05/31/23 15:24

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	54510	05/31/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54672	06/04/23 00:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54769	06/05/23 13:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			54631	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	54539	06/01/23 07:59	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/01/23 13:53	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	54523	05/31/23 15:38	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54580	06/01/23 16:47	CH	EET MID

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

Lab Sample ID: 880-28961-7

Date Collected: 05/30/23 15:30

Matrix: Solid

Date Received: 05/31/23 15:24

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	54510	05/31/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54672	06/04/23 00:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54769	06/05/23 13:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			54631	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54539	06/01/23 07:59	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/01/23 14:15	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-28961-7

Date Collected: 05/30/23 15:30

Matrix: Solid

Date Received: 05/31/23 15:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	54523	05/31/23 15:38	KS	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	54580	06/01/23 16:52	CH	EET MID

Client Sample ID: S-3 (6"-1')

Lab Sample ID: 880-28961-8

Date Collected: 05/30/23 15:35

Matrix: Solid

Date Received: 05/31/23 15:24

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	54510	05/31/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54672	06/04/23 01:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54769	06/05/23 13:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			54631	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	54539	06/01/23 07:59	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/01/23 14:36	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	54523	05/31/23 15:38	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54580	06/01/23 16:58	CH	EET MID

Client Sample ID: S-3 (1'-1.5')

Lab Sample ID: 880-28961-9

Date Collected: 05/30/23 15:40

Matrix: Solid

Date Received: 05/31/23 15:24

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	54510	05/31/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54672	06/04/23 01:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54769	06/05/23 13:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			54631	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	54539	06/01/23 07:59	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/01/23 14:58	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	54523	05/31/23 15:38	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54580	06/01/23 17:03	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
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	T104704400-22-25	06-30-23

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

Method Summary

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
SDG: Eddy County, New Mexico

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Carmona Resources
Project/Site: Black River 3H 8H 10H CTB

Job ID: 880-28961-1
SDG: Eddy County, New Mexico


Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-28961-1	S-1 (0-6")	Solid	05/30/23 15:00	05/31/23 15:24
880-28961-2	S-1 (6"-1')	Solid	05/30/23 15:05	05/31/23 15:24
880-28961-3	S-1 (1'-1.5')	Solid	05/30/23 15:10	05/31/23 15:24
880-28961-4	S-2 (0-6")	Solid	05/30/23 15:15	05/31/23 15:24
880-28961-5	S-2 (6"-1')	Solid	05/30/23 15:20	05/31/23 15:24
880-28961-6	S-2 (1'-1.5')	Solid	05/30/23 15:25	05/31/23 15:24
880-28961-7	S-3 (0-6")	Solid	05/30/23 15:30	05/31/23 15:24
880-28961-8	S-3 (6"-1')	Solid	05/30/23 15:35	05/31/23 15:24
880-28961-9	S-3 (1'-1.5')	Solid	05/30/23 15:40	05/31/23 15:24

Project Manager	Clinton Merritt	Bill to (if different)	Melodie Sanjari
Company Name	Carmiona 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	msanjari@marathonoil.com



Work Order Comments				
Program, UST/PST	<input type="checkbox"/> PRR	<input type="checkbox"/> Brownfields	<input type="checkbox"/> RC	<input type="checkbox"/> Superfund
State of Project:				
Reporting Level II	<input type="checkbox"/> Level III	<input type="checkbox"/> ST/UST	<input type="checkbox"/> RRP	<input type="checkbox"/> Level IV
Deliverables	EDD <input type="checkbox"/>	ADAPT <input type="checkbox"/>	Other: <input type="checkbox"/>	

Page 1 of 1

Work Order No: 28961

Black River 3H 8H 10H CTB				Turn Around		ANALYSIS REQUEST										Preservative Codes	
Project Name																None NO DI Water H ₂ O	
Project Number	2043			<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush											Cool Cool MeOH Me	
Project Location	Eddy County, New Mexico			Due Date	5 Day TAT											HCL HC HNO ₃ HN	
Sampler's Name	CCM															H ₂ SO ₄ H ₂ NaOH Na	
PO #																H ₃ PO ₄ HP	
SAMPLE RECEIPT				Temp Blank	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Well Ice	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>							NaHSO ₄ NABIS			
Received In tact:				Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Thermometer ID							Na ₂ S ₂ O ₃ NaSO ₃					
Cooler Custody Seals:				Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Correction Factor							Zn Acetate+NaOH Zn					
Sample Custody Seals				Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Temperature Reading							NaOH+Ascorbic Acid SAPC					
Total Containers					Corrected Temperature												
Sample Identification		Date	Time	Soil	Water	Grab/Comp	# of Cont							Sample Comments			
S-1 (0-6")		5/30/2023	15 00	X		G	1	X	X	X	402						
S-1 (6"-1')		5/30/2023	15 05	X		G	1	X	X	X							
S-1 (1'-1.5')		5/30/2023	15 10	X		G	1	X	X	X							
S-2 (0-6")		5/30/2023	15 15	X		G	1	X	X	X							
S-2 (6"-1')		5/30/2023	15 20	X		G	1	X	X	X							
S-2 (1'-1.5')		5/30/2023	15 25	X		G	1	X	X	X							
S-3 (0-6")		5/30/2023	15 30	X		G	1	X	X	X							
S-3 (6"-1')		5/30/2023	15 35	X		G	1	X	X	X							
S-3 (1'-1.5')		5/30/2023	15 40	X		G	1	X	X	X							
												880-26961 Chain of Custody					

Comments: Email results to Mike Carmona mcarmona@carmonaresources.com, Conner Moehring cmoehring@carmonaresources.com, Clint Merritt MerrittC@carmonaresources.com

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
	3-31-23 1524		

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-28961-1
SDG Number: Eddy County, New Mexico

Login Number: 28961

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

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

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

CONDITIONS

Action 235806

CONDITIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 235806
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	11/28/2023