



SITE INFORMATION

Work Plan

Raptor West 3 State 2H
Lea County, New Mexico
Incident ID: nAPP2327550031
Unit P Sec 03 T19S R34E
32.6830063°, -103.542717°

Crude Oil

Point of Release: Failed Sight Glass on Separator
Release Date: 10/02/23
Volume Released: 136.8 Barrels of Crude Oil
Volume Recovered: 130 Barrels of Crude Oil

CARMONA RESOURCES



Prepared for:

Marathon Oil Corporation
990 Town and Country Blvd,
Houston, Texas 77024

Prepared by:

Carmona Resources, LLC
310 West Wall Street
Suite 500
Midland, Texas 79701



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November 2, 2023

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

**Re: Work Plan
Raptor West 3 State 2H
Marathon Oil Corporation
Incident ID: nAPP2327550031
Site Location: Unit P, S03, T19S, R34E
(Lat 32.6830063°, Long -103.542717°)
Lea County, New Mexico**

To whom it may concern:

On behalf of Marathon Oil Company, Carmona Resources, LLC has prepared this letter to document site activities for the Raptor West 3 State 2H. The site is located at 32.6830063°, -103.542717° within Unit P, S03, T19S, R34E, in Lea 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 October 2, 2023, caused by a sight glass failure on the separator. The incident resulted in the release of one hundred thirty-six point eight (136.8) barrels of crude oil, with one hundred thirty (130) barrels recovered. Refer to Figure 3. The initial C-141 form is attached in Appendix C.

2.0 Site Characterization and Groundwater

The site is located within a low karst area. Based on a review of the New Mexico Office of State Engineers and USGS databases, two known water sources are within a 0.50-mile radius of the location. The nearest identified well is located approximately 0.12 miles northwest of the site in S03, T19S, R34E, and was drilled in 1981. The well has a reported depth to groundwater of 104.90' below ground surface (ft bgs). A copy of the associated Summary report is attached in Appendix D.

3.0 NMAC Regulatory Criteria

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

- Benzene: 10 milligrams per kilogram (mg/kg).
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg.
- TPH: 100 mg/kg (GRO + DRO + MRO).
- Chloride: 600 mg/kg.

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



4.0 Site Assessment Activities

Initial Assessment

On October 10, 2023, Carmona Resources, LLC was onsite to perform an initial assessment to evaluate soil impacts stemming from the release. A total of eight (8) sample points (S-1 through S-8) and eight (8) horizontal samples (H-1 through H-8) were advanced to depths ranging from the surface to 2' bgs within and surrounding the release to assess the vertical and horizontal extent. See Figure 3 for the sample locations. For chemical analysis, the soil samples were collected and placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins Laboratories in Midland, Texas. The samples were analyzed for total petroleum hydrocarbons (TPH) by EPA method 8015, modified benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B, and chloride by EPA method 300.0. The laboratory reports, including analytical methods, results, and chain-of-custody documents, are attached in Appendix E. See Table 1 for the analytical results.

Vertical Delineation

Vertical delineation was achieved for all sample points. Refer to Table 1.

Horizontal Delineation

All horizontal locations were below the regulatory limits for benzene, total BTEX, TPH, and chloride concentrations. Refer to Table 1.

5.0 Proposed Work Plan

Based on the analytical data of the detected TPH and chloride concentrations, Marathon proposes to remediate the areas shown in Figure 4 and highlighted (blue) in Table 1.

- The areas of S-1, S-2, and S-3 will be excavated to a depth of 2.0' below the surface and backfilled with clean material to surface grade.
- The area of S-4 will be excavated to a depth of 1.5' below the surface and backfilled with clean material to surface grade.
- The areas of S-7 and S-8 will undergo in-situ remediation in the pasture to address the surface staining.
- An estimated 1,490 cubic yards will be removed and hauled to the nearest disposal based on the maximum depth.
- A variance is requested per 19.15.29.14.A NMAC, for five-point composite bottom hole floor, and sidewall samples to be collected every 500 square feet to represent the release area.
- The remediation will be implemented 90 days after the work plan is approved.

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- Impacted soil around oil and gas equipment, structures, or lines may not be removed during remediation activities due to safety concerns for the onsite personnel. However, Marathon will excavate the impacted soil to the maximum extent possible.

6.0 Conclusions

Upon completion, a final closure report describing the remediation activities will be presented to the New Mexico Oil Conservation Division (NMOCD). If you have any questions regarding this report or need additional information, please contact us at 432-813-1992.

Sincerely,

Carmona Resources, LLC

Clinton Merritt
Sr. Project Manager

Devin Dominguez
Sr. Project Manager

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

FIGURES

CARMONA RESOURCES





OVERVIEW MAP
MARATHON OIL CORPORATION
RAPTOR WEST 3 STATE 2H
LEA COUNTY, NEW MEXICO
32.6830063°, -103.542717°



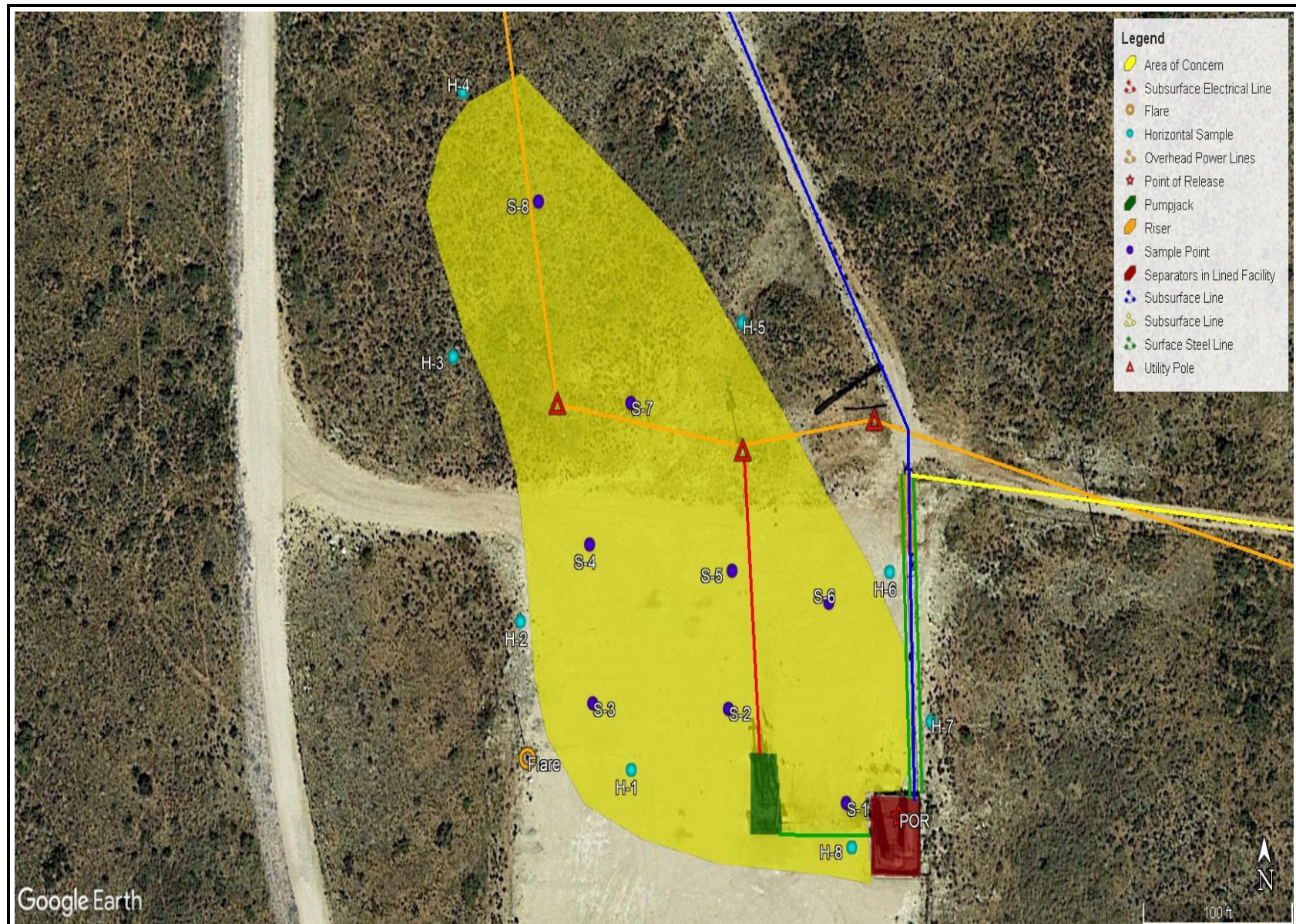
FIGURE 1



TOPOGRAPHIC MAP
 MARATHON OIL CORPORATION
 RAPTOR WEST 3 STATE 2H
 LEA COUNTY, NEW MEXICO
 32.6830063°, -103.542717°



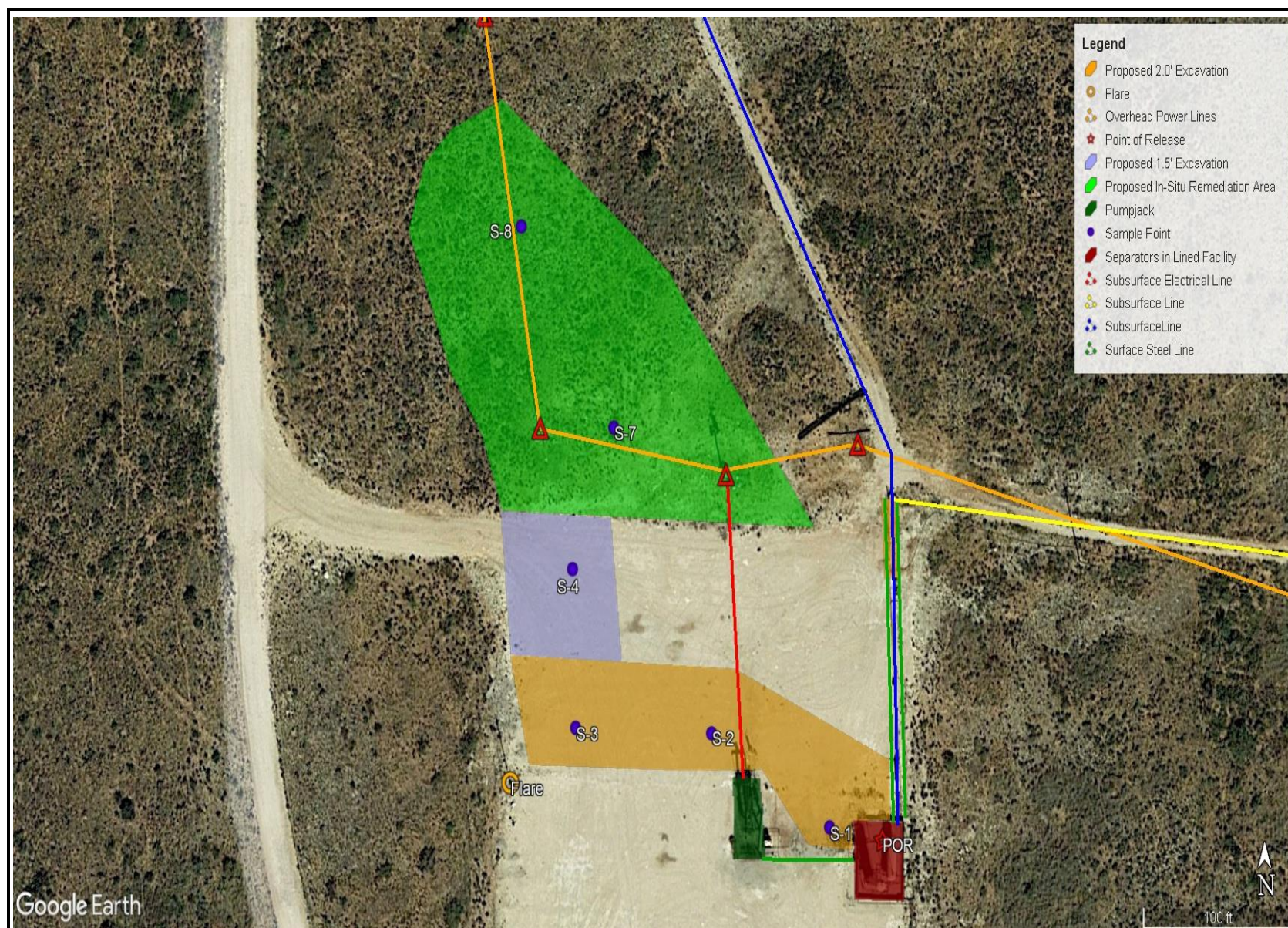
FIGURE 2



SAMPLE LOCATION MAP
 MARATHON OIL CORPORATION
 RAPTOR WEST 3 STATE 2H
 LEA COUNTY, NEW MEXICO
 32.6830063°, -103.542717°



FIGURE 3



PROPOSED EXCAVATION MAP
 MARATHON OIL CORPORATION
 RAPTOR WEST 3 STATE 2H
 LEA COUNTY, NEW MEXICO
 32.6830063°, -103.542717°



FIGURE 4

APPENDIX A

CARMONA RESOURCES



Table 1
Marathon Oil Corporation
Raptor West 3 State 2H
Lea County, New Mexico

Sample ID	Date	Depth (ft)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	Total						
S-1	10/10/2023	0-1	<49.9	119	<49.9	119	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	392
	"	1.5	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	986
	"	2	<49.6	<49.6	<49.6	<49.6	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	112
S-2	10/10/2023	0-1	<50.3	1,280	76.2	1,360	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	1,240
	"	1.5	<50.2	105	<50.2	105	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	833
	"	2	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	117
S-3	10/10/2023	0-1	<50.2	1,790	143	1,930	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	263
	"	1.5	<50.1	90.5	<50.1	90.5	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	995
	"	2	<50.5	<50.5	<50.5	<50.5	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	129
S-4	10/10/2023	0-1	<49.8	239	<49.8	239	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	211
	"	1.5	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	133
	"	2	<50.1	<50.1	<50.1	<50.1	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	136
S-5	10/10/2023	0-1	<49.9	60.5	<49.9	60.5	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	112
	"	1.5	<50.3	<50.3	<50.3	<50.3	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	131
	"	2	<50.5	<50.5	<50.5	<50.5	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	126
S-6	10/10/2023	0-1	<50.1	<50.1	<50.1	<50.1	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	275
	"	1.5	<50.1	<50.1	<50.1	<50.1	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	124
	"	2	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	147
S-7	10/10/2023	0-1	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	158
	"	1.5	<50.3	<50.3	<50.3	<50.3	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	102
S-8	10/10/2023	0-1	<50.1	<50.1	<50.1	<50.1	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	104
	"	1.5	<50.5	<50.5	<50.5	<50.5	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	113
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) Sample Point

 Proposed Excavation

Table 1
Marathon Oil Corporation
Raptor West 3 State 2H
Lea County, New Mexico

Sample ID	Date	Depth (ft)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	Total						
H-1	10/10/2023	0-6"	<50.1	<50.1	<50.1	<50.1	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	87.5
H-2	10/10/2023	0-6"	<50.5	<50.5	<50.5	<50.5	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	77.8
H-3	10/10/2023	0-6"	<49.7	<49.7	<49.7	<49.7	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	79.4
H-4	10/10/2023	0-6"	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	104
H-5	10/10/2023	0-6"	<49.6	<49.6	<49.6	<49.6	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	91.5
H-6	10/10/2023	0-6"	<50.3	<50.3	<50.3	<50.3	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	95.9
H-7	10/10/2023	0-6"	<50.5	<50.5	<50.5	<50.5	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	100
H-8	10/10/2023	0-6"	<50.1	<50.1	<50.1	<50.1	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	113
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

(H) Horizontal Sample

APPENDIX B

CARMONA RESOURCES



PHOTOGRAPHIC LOG

Marathon Oil Corporation

Photograph No. 1

Facility: Raptor West 3 State 2H

County: Lea County, New Mexico

Description:

View South, area of S-1.



Photograph No. 2

Facility: Raptor West 3 State 2H

County: Lea County, New Mexico

Description:

View Northwest, area of S-3 through S-4.



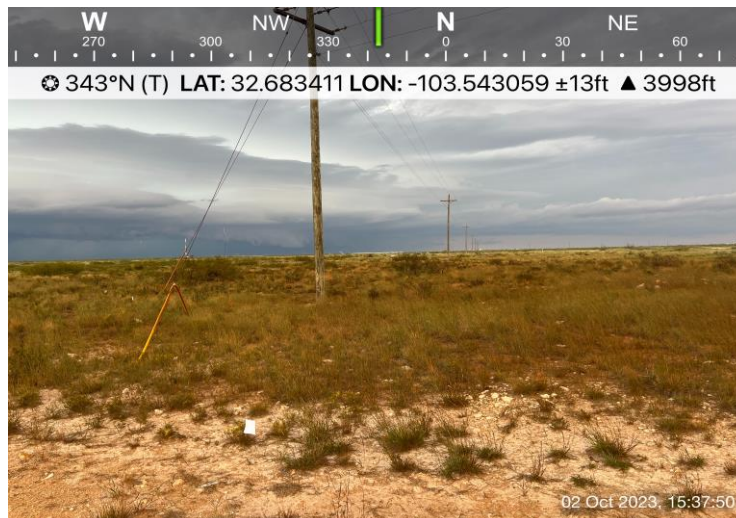
Photograph No. 3

Facility: Raptor West 3 State 2H

County: Lea County, New Mexico

Description:

View North, area of S-7 & S-8.



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	nAPP2327550031
District RP	
Facility ID	
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

Latitude 32.6830063 Longitude -103.542717
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Raptor West 3 State 2H	Site Type Oil & Gas Facility
Date Release Discovered: 10/2/2023	API# (if applicable) 30-025-41186

Unit Letter	Section	Township	Range	County
P	03	19S	34E	Lea

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 136.8	Volume Recovered (bbls) 130
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

HES tech arrived on location to an active leak/overspray from a failed sight glass on the separator. The source of the leak has been isolated and standing fluids are being recovered from the separator's secondary containment.

130 bbl. of fluid within the lined, secondary containment.
4.97 bbl. of dark overspray on the pad and approx.
1.88 bbl. of light overspray in the pasture to the North of the pad.

Standing fluid is actively being recovered and the impacted areas remediated.

Incident ID	nAPP2327550031
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes – NOR submitted 10/2	

Initial Response

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

☒ The source of the release has been stopped. ☒ The impacted area has been secured to protect human health and the environment. ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. ☒ All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <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>10/6/2023</u>
email: <u>msanjari@marathonoil.com</u>	Telephone: <u>575-988-8753</u>
<u>OCD Only</u>	
Received by: <u>Shelly Wells</u>	Date: <u>10/6/2023</u>

MRO Spill Calculation Tool

Standing Liquid Inputs:

	Length (ft.)	Width (ft.)	Avg. Liquid Depth (in.)	% Oil	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)
Inherent - From Vac Ticket					130.00	130.00	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:					130.00	130.00	0.00

Saturated Soil Inputs:

Soil Type: Gravel Loam

	Length (ft.)	Width (ft.)	Avg. Saturated Depth (in.)	% Oil	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)
Pad	100	160	0.0625		2.37	2.37	0.00
Pad	50	100	0.25		2.60	2.60	0.00
Pasture	156	93	0.0625		1.88	1.88	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					6.86	6.86	0.00

	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)
Total Spill Volume (bbls):	136.86	136.86	0.00
Total Spill Volume (gals):	5747.97	5747.97	0.00

Comments:

Color Key:

Required Input Cells

Supplemental Input Cells

No Input (Calculations)

No Input

Ground/Vegetation Overspray

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



CC: 29517900
43611
PO Box 1253
Lovington, NM 88260
Office (575) 396-0934
Fax (575) 396-0449
Email dukeoilfieldllc@gmail.com

Oil _____
Disposal _____
Salt Water _____
Fresh Water _____

DATE: 10-2-23

COMPANY: Marathon

RIG: _____

LEASE: Haptor West 3 state 2H ORDER BY: James Guyard

Description of Service	Hours
Drive to yard to location and Back	
hauled 5 bbls of waste water to disposal and wash out truck	
Work In location clean split and transfer 130 bbls crude oil in same location	

Work done by: Daniel Cervantes Unit #: 123

Accepted:

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 273218

CONDITIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 273218
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	10/6/2023

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

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

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

- ☐ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☐ Data table of soil contaminant concentration data
- ☐ 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: 11/3/2023

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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 OnlyReceived by: Shelly Wells Date: 11/3/2023☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral ApprovedSignature: Nelson Velez Date: 02/21/2024

APPENDIX D

CARMONA RESOURCES



Nearest water well

Marathon Oil Permian LLC

Legend

 0.12 Miles

 0.28 Miles

 0.50 Mile Radius

 1.08 Miles

 NMSEO Water Well

 Raptor West 3 State #2H (10.02.2023)

 USGS Water Well



105' - Drilled 1962

104.90' - Drilled 1981

Raptor West 3 State #2H (10.02.2023)

123' - Drilled 1961



3000 ft

Low Karst

Marathon Oil Permian LLC

Legend

-  Low
-  Raptor West 3 State #2H (10.02.2023)

Raptor West 3 State #2H (10.02.2023)



3000 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 Q Q					X	Y	Distance	Depth Well	Depth Water	Water Column	
	64				16	4	Sec	Tws	Rng							
L 04723	L	LE	1	1	1	11	19S	34E	637026	3616880*		450	145	123	22	
L 10347	L	LE	2	3	03	19S	34E	635909	3617566*		862	130				
L 12103 POD1	L	LE	3	3	4	02	19S	34E	637920	3617173		1298	120			
CP 00806 POD1	CP	LE	4	4	04	19S	34E	635109	3617151*		1516	50				
L 04995	L	LE	4	4	34	18S	34E	636700	3618828*		1745	179	105	74		
L 10380	L	LE	4	4	4	02	19S	34E	638428	3617102*		1804	153	100	53	
L 11934 POD1	L	LE	3	3	4	35	18S	34E	637806	3618744*		2037	160	105	55	
CP 00811 POD1	CP	LE	4	4	09	19S	34E	635132	3615542*		2145	50				
L 04059	L	LE	4	1	12	19S	34E	639146	3616412*		2609	125	60	65		
L 05851	L	LE	1	34	18S	34E	635681	3619816*		2890	240	85	155			
L 09576	L	LE	1	1	35	18S	34E	637082	3620041*		2992	180	130	50		
L 12633 POD1	L	LE	2	2	2	34	18S	34E	636852	3620203		3128	180	117	63	
L 06731	L	LE	3	2	2	12	19S	34E	639844	3616727*		3239	120	80	40	
L 10236	L	LE	3	3	27	18S	34E	635466	3620420*		3531					
L 10344 POD2	L	LE	3	3	27	18S	34E	635466	3620420*		3531	142	112	30		
L 10202	L	LE	4	4	28	18S	34E	635065	3620414*		3676	70	50	20		
L 03145	L	LE	1	1	07	19S	35E	640347	3616866*		3729	97	45	52		
L 04211	L	LE	1	3	06	19S	35E	640337	3617672*		3759	130	60	70		

Average Depth to Water: **90 feet**

Minimum Depth: **45 feet**

Maximum Depth: **130 feet**

Record Count: 18

UTMNAD83 Radius Search (in meters):

Easting (X): 636624

Northing (Y): 3617084

Radius: 4000

*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.

10/4/23 6:49 AM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:
Groundwater

Geographic Area:
New Mexico

GO

Click to hideNews Bulletins

- Explore the NEW [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 324103103323901

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 324103103323901 19S.34E.03.41213

Lea County, New Mexico
Latitude 32°41'03", Longitude 103°32'39" NAD27
Land-surface elevation 3,989 feet above NAVD88
This well is completed in the High Plains aquifer (N100HGHLN) national aquifer.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement
1961-03-08			D 62610		3882.15	NGVD29	1	Z		
1961-03-08			D 62611		3883.81	NAVD88	1	Z		
1961-03-08			D 72019	105.19			1	Z		
1966-02-08			D 62610		3875.65	NGVD29	P	Z		
1966-02-08			D 62611		3877.31	NAVD88	P	Z		
1966-02-08			D 72019	111.69			P	Z		
1971-01-27			D 62610		3880.92	NGVD29	P	Z		
1971-01-27			D 62611		3882.58	NAVD88	P	Z		
1971-01-27			D 72019	106.42			P	Z		
1976-01-28			D 62610		3885.22	NGVD29	1	Z		
1976-01-28			D 62611		3886.88	NAVD88	1	Z		
1976-01-28			D 72019	102.12			1	Z		
1981-01-28			D 62610		3882.44	NGVD29	1	Z		
1981-01-28			D 62611		3884.10	NAVD88	1	Z		
1981-01-28			D 72019	104.90			1	Z		

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Status	P	Pumping
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

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Title: Groundwater for New Mexico: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?>



Page Contact Information: [New Mexico Water Data Maintainer](#)

Page Last Modified: 2023-10-04 08:54:03 EDT

0.28 0.24 nadww01



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
L	04723	1	1	1	11 19S 34E 637026 3616880*
Driller License: 137		Driller Company: ROBERTS, GRADY			
Driller Name:					
Drill Start Date: 09/22/1961		Drill Finish Date: 09/24/1961		Plug Date: 10/30/1961	
Log File Date: 10/16/1961		PCW Rcv Date:		Source: Shallow	
Pump Type:		Pipe Discharge Size:		Estimated Yield:	
Casing Size: 6.63		Depth Well: 145 feet		Depth Water: 123 feet	
Water Bearing Stratifications:		Top	Bottom	Description	
		130	139	Sandstone/Gravel/Conglomerate	
		139	144	Sandstone/Gravel/Conglomerate	
		144	145	Sandstone/Gravel/Conglomerate	
Casing Perforations:		Top	Bottom		
		120	145		

*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.

10/4/23 6:50 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
L	04995	4	4	34	18S	34E	636700	3618828*	
Driller License: 46		Driller Company:		ABBOTT BROTHERS COMPANY					
Driller Name:		MURRELL ABBOTT							
Drill Start Date: 10/21/1962		Drill Finish Date:		10/21/1962		Plug Date:			
Log File Date: 10/29/1962		PCW Rcv Date:				Source: Shallow			
Pump Type:		Pipe Discharge Size:				Estimated Yield:			
Casing Size: 7.00		Depth Well:		179 feet		Depth Water: 105 feet			
Water Bearing Stratifications:		Top	Bottom	Description					
		105	179	Sandstone/Gravel/Conglomerate					
Casing Perforations:		Top	Bottom						
		105	179						

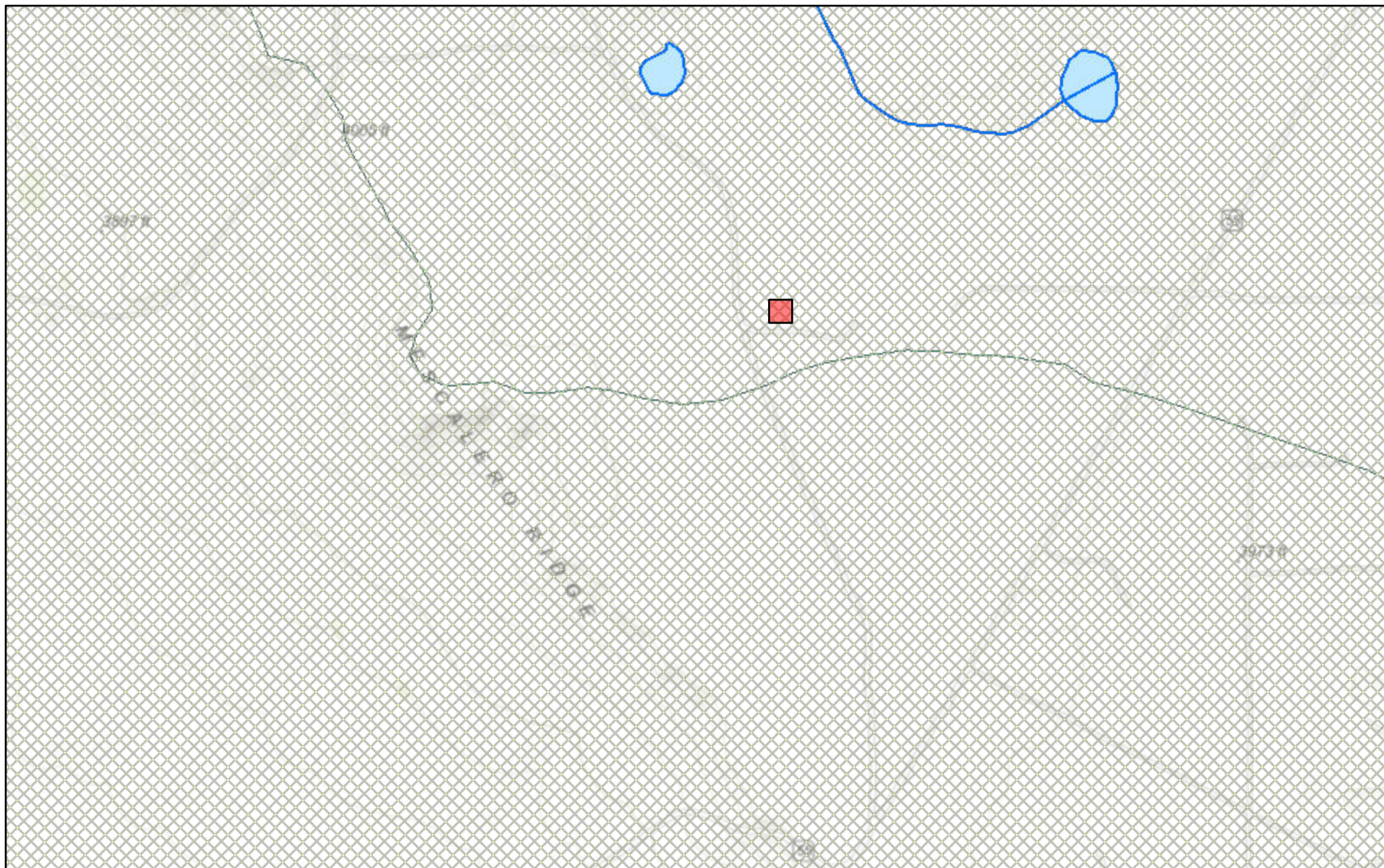
*UTM location was derived from PLSS - see Help

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.

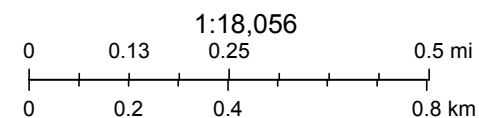
10/4/23 6:52 AM

POINT OF DIVERSION SUMMARY

New Mexico NFHL Data



October 4, 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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APPENDIX E

CARMONA RESOURCES





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 10/16/2023 2:50:48 PM

JOB DESCRIPTION

Raptor West 3 State #2H
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34311-1

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
10/16/2023 2:50:48 PM

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

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Laboratory Job ID: 880-34311-1
SDG: Lea County, New Mexico

Table of Contents

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34311-1
SDG: Lea County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34311-1
SDG: Lea County, New Mexico

Job ID: 880-34311-1

Laboratory: Eurofins Midland

Narrative**Job Narrative
880-34311-1**

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

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

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

Receipt

The samples were received on 10/11/2023 2:19 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 -7.4°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: S-1 (0-1') (880-34311-1), S-1 (1.5') (880-34311-2) and S-1 (2') (880-34311-3).

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: S-1 (0-1') (880-34311-1) and S-1 (2') (880-34311-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: S-1 (0-1') (880-34311-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: S-1 (2') (880-34311-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-64569 and analytical batch 880-64695 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34311-1
SDG: Lea County, New Mexico

Client Sample ID: S-1 (0-1')

Lab Sample ID: 880-34311-1

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 15:04	10/12/23 19:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 19:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 19:18	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		10/11/23 15:04	10/12/23 19:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 19:18	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		10/11/23 15:04	10/12/23 19:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	10/11/23 15:04	10/12/23 19:18	1
1,4-Difluorobenzene (Surr)	66	S1-	70 - 130	10/11/23 15:04	10/12/23 19:18	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			10/12/23 19:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	119		49.9		mg/Kg			10/12/23 13:30	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		10/11/23 15:46	10/12/23 13:30	1
Diesel Range Organics (Over C10-C28)	119		49.9		mg/Kg		10/11/23 15:46	10/12/23 13:30	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/11/23 15:46	10/12/23 13:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130	10/11/23 15:46	10/12/23 13:30	1
o-Terphenyl	131	S1+	70 - 130	10/11/23 15:46	10/12/23 13:30	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	392		5.00		mg/Kg			10/15/23 15:58	1

Client Sample ID: S-1 (1.5')

Lab Sample ID: 880-34311-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 15:04	10/12/23 12:06	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/11/23 15:04	10/12/23 12:06	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/11/23 15:04	10/12/23 12:06	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/11/23 15:04	10/12/23 12:06	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/11/23 15:04	10/12/23 12:06	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/11/23 15:04	10/12/23 12:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76		70 - 130	10/11/23 15:04	10/12/23 12:06	1
1,4-Difluorobenzene (Surr)	94		70 - 130	10/11/23 15:04	10/12/23 12:06	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34311-1
SDG: Lea County, New Mexico

Client Sample ID: S-1 (1.5')

Lab Sample ID: 880-34311-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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			10/12/23 12:06	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			10/12/23 13:52	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		10/11/23 15:46	10/12/23 13:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 13:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 13:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130				10/11/23 15:46	10/12/23 13:52	1
o-Terphenyl	129		70 - 130				10/11/23 15:46	10/12/23 13:52	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	986		5.00		mg/Kg			10/15/23 16:03	1

Client Sample ID: S-1 (2')

Lab Sample ID: 880-34311-3

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 15:04	10/12/23 12:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 12:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 12:26	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/11/23 15:04	10/12/23 12:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 12:26	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/11/23 15:04	10/12/23 12:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130				10/11/23 15:04	10/12/23 12:26	1
1,4-Difluorobenzene (Surr)	69	S1-	70 - 130				10/11/23 15:04	10/12/23 12:26	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			10/12/23 12:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			10/12/23 14:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		10/11/23 15:46	10/12/23 14:14	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		10/11/23 15:46	10/12/23 14:14	1

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Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34311-1
SDG: Lea County, New Mexico

Client Sample ID: S-1 (2')
Date Collected: 10/10/23 00:00
Date Received: 10/11/23 14:19

Lab Sample ID: 880-34311-3
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		10/11/23 15:46	10/12/23 14:14	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	131	S1+	70 - 130				10/11/23 15:46	10/12/23 14:14	1	
o-Terphenyl	141	S1+	70 - 130				10/11/23 15:46	10/12/23 14:14	1	

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	112		4.99		mg/Kg			10/15/23 16:09	1	

Surrogate Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34311-1
SDG: Lea 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)
880-34311-1	S-1 (0-1')	87	66 S1-
880-34311-1 MS	S-1 (0-1')	122	100
880-34311-1 MSD	S-1 (0-1')	115	104
880-34311-2	S-1 (1.5')	76	94
880-34311-3	S-1 (2')	87	69 S1-
LCS 880-64502/1-A	Lab Control Sample	128	109
LCSD 880-64502/2-A	Lab Control Sample Dup	128	101
MB 880-64502/5-A	Method Blank	80	91
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)
880-34290-A-4-E MS	Matrix Spike	97	92
880-34290-A-4-F MSD	Matrix Spike Duplicate	97	91
880-34311-1	S-1 (0-1')	124	131 S1+
880-34311-2	S-1 (1.5')	120	129
880-34311-3	S-1 (2')	131 S1+	141 S1+
LCS 880-64505/2-A	Lab Control Sample	97	103
LCSD 880-64505/3-A	Lab Control Sample Dup	84	90
MB 880-64505/1-A	Method Blank	96	109
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34311-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64502/5-A

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64502

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/11/23 15:04	10/12/23 11:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130	10/11/23 15:04	10/12/23 11:23	1
1,4-Difluorobenzene (Surr)	91		70 - 130	10/11/23 15:04	10/12/23 11:23	1

Lab Sample ID: LCS 880-64502/1-A

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07857		mg/Kg		79	70 - 130
Toluene	0.100	0.07926		mg/Kg		79	70 - 130
Ethylbenzene	0.100	0.09043		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	0.200	0.1946		mg/Kg		97	70 - 130
o-Xylene	0.100	0.09961		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-64502/2-A

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08430		mg/Kg		84	70 - 130	7	35
Toluene	0.100	0.07828		mg/Kg		78	70 - 130	1	35
Ethylbenzene	0.100	0.08874		mg/Kg		89	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1787		mg/Kg		89	70 - 130	9	35
o-Xylene	0.100	0.1040		mg/Kg		104	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-34311-1 MS

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: S-1 (0-1')

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0996	0.09524		mg/Kg		96	70 - 130
Toluene	<0.00200	U	0.0996	0.09387		mg/Kg		94	70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34311-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34311-1 MS

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: S-1 (0-1')

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.0996	0.1043		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.199	0.2282		mg/Kg		115	70 - 130
o-Xylene	<0.00200	U	0.0996	0.1141		mg/Kg		115	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	122		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-34311-1 MSD

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: S-1 (0-1')

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.08499		mg/Kg		86	70 - 130	11	35
Toluene	<0.00200	U	0.0990	0.08138		mg/Kg		82	70 - 130	14	35
Ethylbenzene	<0.00200	U	0.0990	0.08808		mg/Kg		89	70 - 130	17	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1873		mg/Kg		95	70 - 130	20	35
o-Xylene	<0.00200	U	0.0990	0.09482		mg/Kg		96	70 - 130	18	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

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

Lab Sample ID: MB 880-64505/1-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64505

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		10/11/23 15:46	10/12/23 08:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 08:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 08:09	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	10/11/23 15:46	10/12/23 08:09	1
o-Terphenyl	109		70 - 130	10/11/23 15:46	10/12/23 08:09	1

Lab Sample ID: LCS 880-64505/2-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64505

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	952.4		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	1000	912.6		mg/Kg		91	70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34311-1
SDG: Lea County, New Mexico

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

Lab Sample ID: LCS 880-64505/2-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64505

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: LCSD 880-64505/3-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64505

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	856.3		mg/Kg		86	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	786.7		mg/Kg		79	70 - 130	15	20

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

Lab Sample ID: 880-34290-A-4-E MS

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64505

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	994	1158		mg/Kg		113	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	994	889.8		mg/Kg		87	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: 880-34290-A-4-F MSD

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 64505

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	994	1187		mg/Kg		116	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	994	893.7		mg/Kg		87	70 - 130	0	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	91		70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34311-1
SDG: Lea County, New Mexico

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64569/1-A

Matrix: Solid

Analysis Batch: 64695

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			10/15/23 15:18	1

Lab Sample ID: LCS 880-64569/2-A

Matrix: Solid

Analysis Batch: 64695

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	274.9		mg/Kg		110	90 - 110

Lab Sample ID: LCSD 880-64569/3-A

Matrix: Solid

Analysis Batch: 64695

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	273.8		mg/Kg		110	90 - 110	0	20

Lab Sample ID: 880-34310-A-1-C MSD

Matrix: Solid

Analysis Batch: 64695

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	104	F1	249	390.0	F1	mg/Kg		115	90 - 110	0	20

Lab Sample ID: 880-34310-A-1-D MS

Matrix: Solid

Analysis Batch: 64695

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	104	F1	249	391.2	F1	mg/Kg		116	90 - 110

QC Association Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34311-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34311-1	S-1 (0-1')	Total/NA	Solid	5035	
880-34311-2	S-1 (1.5')	Total/NA	Solid	5035	
880-34311-3	S-1 (2')	Total/NA	Solid	5035	
MB 880-64502/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64502/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64502/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34311-1 MS	S-1 (0-1')	Total/NA	Solid	5035	
880-34311-1 MSD	S-1 (0-1')	Total/NA	Solid	5035	

Analysis Batch: 64523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34311-1	S-1 (0-1')	Total/NA	Solid	8021B	64502
880-34311-2	S-1 (1.5')	Total/NA	Solid	8021B	64502
880-34311-3	S-1 (2')	Total/NA	Solid	8021B	64502
MB 880-64502/5-A	Method Blank	Total/NA	Solid	8021B	64502
LCS 880-64502/1-A	Lab Control Sample	Total/NA	Solid	8021B	64502
LCSD 880-64502/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64502
880-34311-1 MS	S-1 (0-1')	Total/NA	Solid	8021B	64502
880-34311-1 MSD	S-1 (0-1')	Total/NA	Solid	8021B	64502

Analysis Batch: 64675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34311-1	S-1 (0-1')	Total/NA	Solid	Total BTEX	
880-34311-2	S-1 (1.5')	Total/NA	Solid	Total BTEX	
880-34311-3	S-1 (2')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 64505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34311-1	S-1 (0-1')	Total/NA	Solid	8015NM Prep	
880-34311-2	S-1 (1.5')	Total/NA	Solid	8015NM Prep	
880-34311-3	S-1 (2')	Total/NA	Solid	8015NM Prep	
MB 880-64505/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-64505/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-64505/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-34290-A-4-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-34290-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34311-1	S-1 (0-1')	Total/NA	Solid	8015B NM	64505
880-34311-2	S-1 (1.5')	Total/NA	Solid	8015B NM	64505
880-34311-3	S-1 (2')	Total/NA	Solid	8015B NM	64505
MB 880-64505/1-A	Method Blank	Total/NA	Solid	8015B NM	64505
LCS 880-64505/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	64505
LCSD 880-64505/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	64505
880-34290-A-4-E MS	Matrix Spike	Total/NA	Solid	8015B NM	64505
880-34290-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	64505

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QC Association Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34311-1
SDG: Lea County, New Mexico

GC Semi VOA

Analysis Batch: 64714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34311-1	S-1 (0-1')	Total/NA	Solid	8015 NM	
880-34311-2	S-1 (1.5')	Total/NA	Solid	8015 NM	
880-34311-3	S-1 (2')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34311-1	S-1 (0-1')	Soluble	Solid	DI Leach	
880-34311-2	S-1 (1.5')	Soluble	Solid	DI Leach	
880-34311-3	S-1 (2')	Soluble	Solid	DI Leach	
MB 880-64569/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64569/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64569/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-34310-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
880-34310-A-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	

Analysis Batch: 64695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34311-1	S-1 (0-1')	Soluble	Solid	300.0	64569
880-34311-2	S-1 (1.5')	Soluble	Solid	300.0	64569
880-34311-3	S-1 (2')	Soluble	Solid	300.0	64569
MB 880-64569/1-A	Method Blank	Soluble	Solid	300.0	64569
LCS 880-64569/2-A	Lab Control Sample	Soluble	Solid	300.0	64569
LCSD 880-64569/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64569
880-34310-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	64569
880-34310-A-1-D MS	Matrix Spike	Soluble	Solid	300.0	64569

Lab Chronicle

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34311-1
SDG: Lea County, New Mexico

Client Sample ID: S-1 (0-1')

Lab Sample ID: 880-34311-1

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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	64502	10/11/23 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64523	10/12/23 19:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64675	10/12/23 19:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			64714	10/12/23 13:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	64505	10/11/23 15:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64518	10/12/23 13:30	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	64569	10/12/23 14:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64695	10/15/23 15:58	CH	EET MID

Client Sample ID: S-1 (1.5')

Lab Sample ID: 880-34311-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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	64502	10/11/23 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64523	10/12/23 12:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64675	10/12/23 12:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			64714	10/12/23 13:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	64505	10/11/23 15:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64518	10/12/23 13:52	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	64569	10/12/23 14:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64695	10/15/23 16:03	CH	EET MID

Client Sample ID: S-1 (2')

Lab Sample ID: 880-34311-3

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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	64502	10/11/23 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64523	10/12/23 12:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64675	10/12/23 12:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			64714	10/12/23 14:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	64505	10/11/23 15:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64518	10/12/23 14:14	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	64569	10/12/23 14:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64695	10/15/23 16:09	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: Raptor West 3 State #2H

Job ID: 880-34311-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
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Method Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34311-1
SDG: Lea 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

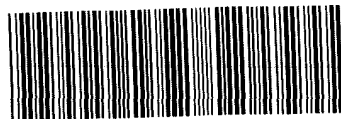
Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34311-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34311-1	S-1 (0-1')	Solid	10/10/23 00:00	10/11/23 14:19
880-34311-2	S-1 (1.5')	Solid	10/10/23 00:00	10/11/23 14:19
880-34311-3	S-1 (2')	Solid	10/10/23 00:00	10/11/23 14:19

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10/16/2023



880-34311 Chain of Custody

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/PST ☐ PRP ☐ Brownfields ☐ RC ☐ perfund ☐
State of Project:	
Reporting Level II	☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐
Deliverables	EDD ☐ ADaPT ☐ Other

Project Name		Raptor West 3 State #2H		Turn Around				ANALYSIS REQUEST																Preservative Codes							
Project Number		2154		☒ Routine ☐ Rush		Pres. Code																		None NO DI Water H ₂ O							
Project Location		Lea County New Mexico		Due Date		5 day																		Cool Cool MeOH Me							
Sampler's Name		CCM																						HCL HC HNO ₃ HN							
PO #:																								H ₂ SO ₄ H ₂ NaOH Na							
SAMPLE RECEIPT		Temp Blank		Yes ☒ No ☐		Wet Ice		Yes ☐ No ☒																		H ₃ PO ₄ HP					
Received Intact:		Yes ☒ No ☐		Thermometer ID		F-20																		NaHSO ₄ NABIS							
Cooler Custody Seals		Yes ☐ No ☒ N/A		Correction Factor		-7.8																		Na ₂ S ₂ O ₃ NaSO ₃							
Sample Custody Seals		Yes ☐ No ☒ N/A		Temperature Reading		-7.6																		Zn Acetate+NaOH Zn							
Total Containers				Corrected Temperature		-7.4																		NaOH+Ascorbic Acid SAPC							
Sample Identification		Date		Time		Soil		Water		Grab/Comp		# of Cont																		Sample Comments	
S-1 (0-1')		10/10/2023				X				G		1		X X X																	
S-1 (1-5')		10/10/2023				X				G		1		X X X																	
S-1 (2')		10/10/2023				X				G		1		X X X																	

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	
		10-11-23 1419					

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-34311-1

SDG Number: Lea County, New Mexico

Login Number: 34311

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 10/16/2023 2:51:13 PM

JOB DESCRIPTION

Raptor West 3 State #2H
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34312-1

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
10/16/2023 2:51:13 PM

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

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Laboratory Job ID: 880-34312-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34312-1
SDG: Lea 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
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34312-1
SDG: Lea County, New Mexico

Job ID: 880-34312-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-34312-1**

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

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

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

Receipt

The samples were received on 10/11/2023 2:19 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 -7.6°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: S-2 (0-1') (880-34312-1), S-2 (1.5') (880-34312-2) and S-2 (2') (880-34312-3).

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-34311-A-1-C). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: S-2 (1.5') (880-34312-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-64518 recovered below the lower control limit for Diesel Range Organics (Over C10-C28). An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-64518/47).

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-64569 and analytical batch 880-64695 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34312-1
SDG: Lea County, New Mexico

Client Sample ID: S-2 (0-1')

Lab Sample ID: 880-34312-1

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 15:04	10/12/23 12:47	1
Toluene	<0.00201	U	0.00201		mg/Kg		10/11/23 15:04	10/12/23 12:47	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/11/23 15:04	10/12/23 12:47	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		10/11/23 15:04	10/12/23 12:47	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/11/23 15:04	10/12/23 12:47	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/11/23 15:04	10/12/23 12:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	10/11/23 15:04	10/12/23 12:47	1
1,4-Difluorobenzene (Surr)	108		70 - 130	10/11/23 15:04	10/12/23 12:47	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			10/12/23 12:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1360		50.3		mg/Kg			10/12/23 14:58	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	<50.3	U	50.3		mg/Kg		10/11/23 15:46	10/12/23 14:58	1
Diesel Range Organics (Over C10-C28)	1280		50.3		mg/Kg		10/11/23 15:46	10/12/23 14:58	1
Oil Range Organics (Over C28-C36)	76.2		50.3		mg/Kg		10/11/23 15:46	10/12/23 14:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	10/11/23 15:46	10/12/23 14:58	1
o-Terphenyl	99		70 - 130	10/11/23 15:46	10/12/23 14:58	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1240		4.98		mg/Kg			10/15/23 16:26	1

Client Sample ID: S-2 (1.5')

Lab Sample ID: 880-34312-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 15:04	10/12/23 13:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 13:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 13:07	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		10/11/23 15:04	10/12/23 13:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 13:07	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		10/11/23 15:04	10/12/23 13:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130	10/11/23 15:04	10/12/23 13:07	1
1,4-Difluorobenzene (Surr)	82		70 - 130	10/11/23 15:04	10/12/23 13:07	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34312-1
SDG: Lea County, New Mexico

Client Sample ID: S-2 (1.5')

Lab Sample ID: 880-34312-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			10/12/23 13:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	105		50.2		mg/Kg			10/12/23 15:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		10/11/23 15:46	10/12/23 15:42	1
Diesel Range Organics (Over C10-C28)	105		50.2		mg/Kg		10/11/23 15:46	10/12/23 15:42	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		10/11/23 15:46	10/12/23 15:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130				10/11/23 15:46	10/12/23 15:42	1
o-Terphenyl	132	S1+	70 - 130				10/11/23 15:46	10/12/23 15:42	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	833		5.02		mg/Kg			10/15/23 16:32	1

Client Sample ID: S-2 (2')

Lab Sample ID: 880-34312-3

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 15:04	10/12/23 13:28	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/11/23 15:04	10/12/23 13:28	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/11/23 15:04	10/12/23 13:28	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/11/23 15:04	10/12/23 13:28	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/11/23 15:04	10/12/23 13:28	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/11/23 15:04	10/12/23 13:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130				10/11/23 15:04	10/12/23 13:28	1
1,4-Difluorobenzene (Surr)	93		70 - 130				10/11/23 15:04	10/12/23 13:28	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			10/12/23 13:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/12/23 16:04	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		10/11/23 15:46	10/12/23 16:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/11/23 15:46	10/12/23 16:04	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34312-1
SDG: Lea County, New Mexico

Client Sample ID: S-2 (2')
Date Collected: 10/10/23 00:00
Date Received: 10/11/23 14:19

Lab Sample ID: 880-34312-3
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/11/23 15:46	10/12/23 16:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130				10/11/23 15:46	10/12/23 16:04	1
o-Terphenyl	122		70 - 130				10/11/23 15:46	10/12/23 16:04	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	117		5.03		mg/Kg			10/15/23 16:37	1

Surrogate Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34312-1
SDG: Lea 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)
880-34311-A-1-A MS	Matrix Spike	122	100
880-34311-A-1-B MSD	Matrix Spike Duplicate	115	104
880-34312-1	S-2 (0-1')	113	108
880-34312-2	S-2 (1.5')	81	82
880-34312-3	S-2 (2')	83	93
LCS 880-64502/1-A	Lab Control Sample	128	109
LCSD 880-64502/2-A	Lab Control Sample Dup	128	101
MB 880-64502/5-A	Method Blank	80	91
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)
880-34290-A-4-E MS	Matrix Spike	97	92
880-34290-A-4-F MSD	Matrix Spike Duplicate	97	91
880-34312-1	S-2 (0-1')	99	99
880-34312-2	S-2 (1.5')	124	132 S1+
880-34312-3	S-2 (2')	107	122
LCS 880-64505/2-A	Lab Control Sample	97	103
LCSD 880-64505/3-A	Lab Control Sample Dup	84	90
MB 880-64505/1-A	Method Blank	96	109
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34312-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64502/5-A

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64502

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/11/23 15:04	10/12/23 11:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130	10/11/23 15:04	10/12/23 11:23	1
1,4-Difluorobenzene (Surr)	91		70 - 130	10/11/23 15:04	10/12/23 11:23	1

Lab Sample ID: LCS 880-64502/1-A

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07857		mg/Kg		79	70 - 130
Toluene	0.100	0.07926		mg/Kg		79	70 - 130
Ethylbenzene	0.100	0.09043		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	0.200	0.1946		mg/Kg		97	70 - 130
o-Xylene	0.100	0.09961		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-64502/2-A

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08430		mg/Kg		84	70 - 130	7	35
Toluene	0.100	0.07828		mg/Kg		78	70 - 130	1	35
Ethylbenzene	0.100	0.08874		mg/Kg		89	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1787		mg/Kg		89	70 - 130	9	35
o-Xylene	0.100	0.1040		mg/Kg		104	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-34311-A-1-A MS

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0996	0.09524		mg/Kg		96	70 - 130
Toluene	<0.00200	U	0.0996	0.09387		mg/Kg		94	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34312-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34311-A-1-A MS

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.0996	0.1043		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.199	0.2282		mg/Kg		115	70 - 130
o-Xylene	<0.00200	U	0.0996	0.1141		mg/Kg		115	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	122		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-34311-A-1-B MSD

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.08499		mg/Kg		86	70 - 130	11	35
Toluene	<0.00200	U	0.0990	0.08138		mg/Kg		82	70 - 130	14	35
Ethylbenzene	<0.00200	U	0.0990	0.08808		mg/Kg		89	70 - 130	17	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1873		mg/Kg		95	70 - 130	20	35
o-Xylene	<0.00200	U	0.0990	0.09482		mg/Kg		96	70 - 130	18	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

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

Lab Sample ID: MB 880-64505/1-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64505

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		10/11/23 15:46	10/12/23 08:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 08:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 08:09	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	10/11/23 15:46	10/12/23 08:09	1
o-Terphenyl	109		70 - 130	10/11/23 15:46	10/12/23 08:09	1

Lab Sample ID: LCS 880-64505/2-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64505

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	952.4		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	1000	912.6		mg/Kg		91	70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34312-1
SDG: Lea County, New Mexico

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

Lab Sample ID: LCS 880-64505/2-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64505

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: LCSD 880-64505/3-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64505

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	856.3		mg/Kg		86	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	786.7		mg/Kg		79	70 - 130	15	20

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

Lab Sample ID: 880-34290-A-4-E MS

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64505

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	994	1158		mg/Kg		113	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	994	889.8		mg/Kg		87	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: 880-34290-A-4-F MSD

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 64505

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	994	1187		mg/Kg		116	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	994	893.7		mg/Kg		87	70 - 130	0	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	91		70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34312-1
SDG: Lea County, New Mexico

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64569/1-A Matrix: Solid Analysis Batch: 64695										Client Sample ID: Method Blank Prep Type: Soluble		
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analized	Dil Fac			
Chloride	<5.00	U	5.00		mg/Kg			10/15/23 15:18	1			

Lab Sample ID: LCS 880-64569/2-A Matrix: Solid Analysis Batch: 64695										Client Sample ID: Lab Control Sample Prep Type: Soluble		
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits			
Chloride			250	274.9		mg/Kg		110	90 - 110			

Lab Sample ID: LCSD 880-64569/3-A Matrix: Solid Analysis Batch: 64695										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	273.8		mg/Kg		110	90 - 110	0	20	

Lab Sample ID: 880-34310-A-1-C MSD Matrix: Solid Analysis Batch: 64695										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	104	F1	249	390.0	F1	mg/Kg		115	90 - 110	0	20	

Lab Sample ID: 880-34310-A-1-D MS Matrix: Solid Analysis Batch: 64695										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	104	F1	249	391.2	F1	mg/Kg		116	90 - 110			

QC Association Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34312-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34312-1	S-2 (0-1')	Total/NA	Solid	5035	
880-34312-2	S-2 (1.5')	Total/NA	Solid	5035	
880-34312-3	S-2 (2')	Total/NA	Solid	5035	
MB 880-64502/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64502/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64502/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34311-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-34311-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34312-1	S-2 (0-1')	Total/NA	Solid	8021B	64502
880-34312-2	S-2 (1.5')	Total/NA	Solid	8021B	64502
880-34312-3	S-2 (2')	Total/NA	Solid	8021B	64502
MB 880-64502/5-A	Method Blank	Total/NA	Solid	8021B	64502
LCS 880-64502/1-A	Lab Control Sample	Total/NA	Solid	8021B	64502
LCSD 880-64502/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64502
880-34311-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	64502
880-34311-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64502

Analysis Batch: 64676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34312-1	S-2 (0-1')	Total/NA	Solid	Total BTEX	
880-34312-2	S-2 (1.5')	Total/NA	Solid	Total BTEX	
880-34312-3	S-2 (2')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 64505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34312-1	S-2 (0-1')	Total/NA	Solid	8015NM Prep	
880-34312-2	S-2 (1.5')	Total/NA	Solid	8015NM Prep	
880-34312-3	S-2 (2')	Total/NA	Solid	8015NM Prep	
MB 880-64505/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-64505/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-64505/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-34290-A-4-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-34290-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34312-1	S-2 (0-1')	Total/NA	Solid	8015B NM	64505
880-34312-2	S-2 (1.5')	Total/NA	Solid	8015B NM	64505
880-34312-3	S-2 (2')	Total/NA	Solid	8015B NM	64505
MB 880-64505/1-A	Method Blank	Total/NA	Solid	8015B NM	64505
LCS 880-64505/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	64505
LCSD 880-64505/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	64505
880-34290-A-4-E MS	Matrix Spike	Total/NA	Solid	8015B NM	64505
880-34290-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	64505

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QC Association Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34312-1
SDG: Lea County, New Mexico

GC Semi VOA

Analysis Batch: 64716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34312-1	S-2 (0-1')	Total/NA	Solid	8015 NM	
880-34312-2	S-2 (1.5')	Total/NA	Solid	8015 NM	
880-34312-3	S-2 (2')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34312-1	S-2 (0-1')	Soluble	Solid	DI Leach	
880-34312-2	S-2 (1.5')	Soluble	Solid	DI Leach	
880-34312-3	S-2 (2')	Soluble	Solid	DI Leach	
MB 880-64569/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64569/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64569/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-34310-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
880-34310-A-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	

Analysis Batch: 64695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34312-1	S-2 (0-1')	Soluble	Solid	300.0	64569
880-34312-2	S-2 (1.5')	Soluble	Solid	300.0	64569
880-34312-3	S-2 (2')	Soluble	Solid	300.0	64569
MB 880-64569/1-A	Method Blank	Soluble	Solid	300.0	64569
LCS 880-64569/2-A	Lab Control Sample	Soluble	Solid	300.0	64569
LCSD 880-64569/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64569
880-34310-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	64569
880-34310-A-1-D MS	Matrix Spike	Soluble	Solid	300.0	64569

Lab Chronicle

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34312-1
SDG: Lea County, New Mexico

Client Sample ID: S-2 (0-1')

Lab Sample ID: 880-34312-1

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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	64502	10/11/23 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64523	10/12/23 12:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64676	10/12/23 12:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			64716	10/12/23 14:58	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	64505	10/11/23 15:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64518	10/12/23 14:58	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	64569	10/12/23 14:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64695	10/15/23 16:26	CH	EET MID

Client Sample ID: S-2 (1.5')

Lab Sample ID: 880-34312-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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	64502	10/11/23 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64523	10/12/23 13:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64676	10/12/23 13:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			64716	10/12/23 15:42	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	64505	10/11/23 15:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64518	10/12/23 15:42	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	64569	10/12/23 14:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64695	10/15/23 16:32	CH	EET MID

Client Sample ID: S-2 (2')

Lab Sample ID: 880-34312-3

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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	64502	10/11/23 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64523	10/12/23 13:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64676	10/12/23 13:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			64716	10/12/23 16:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	64505	10/11/23 15:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64518	10/12/23 16:04	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	64569	10/12/23 14:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64695	10/15/23 16:37	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: Raptor West 3 State #2H

Job ID: 880-34312-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
- 2
- 3
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Method Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34312-1
SDG: Lea 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

Eurofins Midland

Sample Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34312-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34312-1	S-2 (0-1')	Solid	10/10/23 00:00	10/11/23 14:19
880-34312-2	S-2 (1.5')	Solid	10/10/23 00:00	10/11/23 14:19
880-34312-3	S-2 (2')	Solid	10/10/23 00:00	10/11/23 14:19

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[illegible]

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-34312-1

SDG Number: Lea County, New Mexico

Login Number: 34312

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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 10/16/2023 2:52:04 PM

JOB DESCRIPTION

Raptor West 3 State #2H
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34313-1

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



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10/16/2023 2:52:04 PM

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

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Laboratory Job ID: 880-34313-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34313-1
SDG: Lea 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
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
SQL	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: Raptor West 3 State #2H

Job ID: 880-34313-1
SDG: Lea County, New Mexico

Job ID: 880-34313-1

Laboratory: Eurofins Midland

Narrative**Job Narrative
880-34313-1**

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

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

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

Receipt

The samples were received on 10/11/2023 2:19 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 -7.6°C

Receipt Exceptions**GC VOA**

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-34311-A-1-C). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-64518 recovered below the lower control limit for Diesel Range Organics (Over C10-C28). An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-64518/47).

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: Raptor West 3 State #2H

Job ID: 880-34313-1
SDG: Lea County, New Mexico

Client Sample ID: S-3 (0-1')

Lab Sample ID: 880-34313-1

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 15:04	10/12/23 13:48	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/11/23 15:04	10/12/23 13:48	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/11/23 15:04	10/12/23 13:48	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/11/23 15:04	10/12/23 13:48	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/11/23 15:04	10/12/23 13:48	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/11/23 15:04	10/12/23 13:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	10/11/23 15:04	10/12/23 13:48	1
1,4-Difluorobenzene (Surr)	96		70 - 130	10/11/23 15:04	10/12/23 13:48	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			10/12/23 13:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1930		50.2		mg/Kg			10/12/23 14:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		10/11/23 15:46	10/12/23 14:36	1
Diesel Range Organics (Over C10-C28)	1790		50.2		mg/Kg		10/11/23 15:46	10/12/23 14:36	1
Oil Range Organics (Over C28-C36)	143		50.2		mg/Kg		10/11/23 15:46	10/12/23 14:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	10/11/23 15:46	10/12/23 14:36	1
o-Terphenyl	101		70 - 130	10/11/23 15:46	10/12/23 14:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	263		5.05		mg/Kg			10/15/23 16:43	1

Client Sample ID: S-3 (1.5')

Lab Sample ID: 880-34313-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 15:04	10/12/23 14:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 14:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 14:09	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/11/23 15:04	10/12/23 14:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 14:09	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/11/23 15:04	10/12/23 14:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	10/11/23 15:04	10/12/23 14:09	1
1,4-Difluorobenzene (Surr)	74		70 - 130	10/11/23 15:04	10/12/23 14:09	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34313-1
SDG: Lea County, New Mexico

Client Sample ID: S-3 (1.5')

Lab Sample ID: 880-34313-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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			10/12/23 14:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	90.5		50.1		mg/Kg			10/12/23 16:26	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	<50.1	U	50.1		mg/Kg		10/11/23 15:46	10/12/23 16:26	1
Diesel Range Organics (Over C10-C28)	90.5		50.1		mg/Kg		10/11/23 15:46	10/12/23 16:26	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		10/11/23 15:46	10/12/23 16:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				10/11/23 15:46	10/12/23 16:26	1
o-Terphenyl	111		70 - 130				10/11/23 15:46	10/12/23 16:26	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	995		5.04		mg/Kg			10/15/23 16:48	1

Client Sample ID: S-3 (2')

Lab Sample ID: 880-34313-3

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 15:04	10/12/23 14:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 14:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 14:29	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		10/11/23 15:04	10/12/23 14:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 14:29	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		10/11/23 15:04	10/12/23 14:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				10/11/23 15:04	10/12/23 14:29	1
1,4-Difluorobenzene (Surr)	72		70 - 130				10/11/23 15:04	10/12/23 14:29	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			10/12/23 14:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			10/12/23 16:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		10/11/23 15:46	10/12/23 16:48	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		10/11/23 15:46	10/12/23 16:48	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34313-1
SDG: Lea County, New Mexico

Client Sample ID: S-3 (2')
Date Collected: 10/10/23 00:00
Date Received: 10/11/23 14:19

Lab Sample ID: 880-34313-3
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		10/11/23 15:46	10/12/23 16:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130				10/11/23 15:46	10/12/23 16:48	1
o-Terphenyl	116		70 - 130				10/11/23 15:46	10/12/23 16:48	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	129		4.98		mg/Kg			10/15/23 16:54	1

Surrogate Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34313-1
SDG: Lea 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)
880-34311-A-1-A MS	Matrix Spike	122	100
880-34311-A-1-B MSD	Matrix Spike Duplicate	115	104
880-34313-1	S-3 (0-1')	88	96
880-34313-2	S-3 (1.5')	85	74
880-34313-3	S-3 (2')	88	72
LCS 880-64502/1-A	Lab Control Sample	128	109
LCSD 880-64502/2-A	Lab Control Sample Dup	128	101
MB 880-64502/5-A	Method Blank	80	91
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)
880-34290-A-4-E MS	Matrix Spike	97	92
880-34290-A-4-F MSD	Matrix Spike Duplicate	97	91
880-34313-1	S-3 (0-1')	103	101
880-34313-2	S-3 (1.5')	105	111
880-34313-3	S-3 (2')	108	116
LCS 880-64505/2-A	Lab Control Sample	97	103
LCSD 880-64505/3-A	Lab Control Sample Dup	84	90
MB 880-64505/1-A	Method Blank	96	109
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34313-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64502/5-A

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64502

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/11/23 15:04	10/12/23 11:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130	10/11/23 15:04	10/12/23 11:23	1
1,4-Difluorobenzene (Surr)	91		70 - 130	10/11/23 15:04	10/12/23 11:23	1

Lab Sample ID: LCS 880-64502/1-A

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07857		mg/Kg		79	70 - 130
Toluene	0.100	0.07926		mg/Kg		79	70 - 130
Ethylbenzene	0.100	0.09043		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	0.200	0.1946		mg/Kg		97	70 - 130
o-Xylene	0.100	0.09961		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-64502/2-A

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08430		mg/Kg		84	70 - 130	7	35
Toluene	0.100	0.07828		mg/Kg		78	70 - 130	1	35
Ethylbenzene	0.100	0.08874		mg/Kg		89	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1787		mg/Kg		89	70 - 130	9	35
o-Xylene	0.100	0.1040		mg/Kg		104	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-34311-A-1-A MS

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0996	0.09524		mg/Kg		96	70 - 130
Toluene	<0.00200	U	0.0996	0.09387		mg/Kg		94	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34313-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34311-A-1-A MS

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.0996	0.1043		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.199	0.2282		mg/Kg		115	70 - 130
o-Xylene	<0.00200	U	0.0996	0.1141		mg/Kg		115	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	122		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-34311-A-1-B MSD

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.08499		mg/Kg		86	70 - 130	11	35
Toluene	<0.00200	U	0.0990	0.08138		mg/Kg		82	70 - 130	14	35
Ethylbenzene	<0.00200	U	0.0990	0.08808		mg/Kg		89	70 - 130	17	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1873		mg/Kg		95	70 - 130	20	35
o-Xylene	<0.00200	U	0.0990	0.09482		mg/Kg		96	70 - 130	18	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

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

Lab Sample ID: MB 880-64505/1-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64505

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		10/11/23 15:46	10/12/23 08:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 08:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 08:09	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	10/11/23 15:46	10/12/23 08:09	1
o-Terphenyl	109		70 - 130	10/11/23 15:46	10/12/23 08:09	1

Lab Sample ID: LCS 880-64505/2-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64505

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	952.4		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	1000	912.6		mg/Kg		91	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34313-1
SDG: Lea County, New Mexico

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

Lab Sample ID: LCS 880-64505/2-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64505

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: LCSD 880-64505/3-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64505

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	856.3		mg/Kg		86	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	786.7		mg/Kg		79	70 - 130	15	20

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

Lab Sample ID: 880-34290-A-4-E MS

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64505

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	994	1158		mg/Kg		113	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	994	889.8		mg/Kg		87	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: 880-34290-A-4-F MSD

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 64505

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	994	1187		mg/Kg		116	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	994	893.7		mg/Kg		87	70 - 130	0	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	91		70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34313-1
SDG: Lea County, New Mexico

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64569/1-A
Matrix: Solid
Analysis Batch: 64695

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			10/15/23 15:18	1

Lab Sample ID: LCS 880-64569/2-A
Matrix: Solid
Analysis Batch: 64695

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	274.9		mg/Kg		110	90 - 110

Lab Sample ID: LCSD 880-64569/3-A
Matrix: Solid
Analysis Batch: 64695

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	273.8		mg/Kg		110	90 - 110	0	20

Lab Sample ID: 880-34313-3 MS
Matrix: Solid
Analysis Batch: 64695

Client Sample ID: S-3 (2')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	129		249	403.0		mg/Kg		110	90 - 110

Lab Sample ID: 880-34313-3 MSD
Matrix: Solid
Analysis Batch: 64695

Client Sample ID: S-3 (2')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	129		249	402.6		mg/Kg		110	90 - 110	0	20

QC Association Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34313-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34313-1	S-3 (0-1')	Total/NA	Solid	5035	
880-34313-2	S-3 (1.5')	Total/NA	Solid	5035	
880-34313-3	S-3 (2')	Total/NA	Solid	5035	
MB 880-64502/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64502/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64502/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34311-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-34311-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34313-1	S-3 (0-1')	Total/NA	Solid	8021B	64502
880-34313-2	S-3 (1.5')	Total/NA	Solid	8021B	64502
880-34313-3	S-3 (2')	Total/NA	Solid	8021B	64502
MB 880-64502/5-A	Method Blank	Total/NA	Solid	8021B	64502
LCS 880-64502/1-A	Lab Control Sample	Total/NA	Solid	8021B	64502
LCSD 880-64502/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64502
880-34311-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	64502
880-34311-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64502

Analysis Batch: 64677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34313-1	S-3 (0-1')	Total/NA	Solid	Total BTEX	
880-34313-2	S-3 (1.5')	Total/NA	Solid	Total BTEX	
880-34313-3	S-3 (2')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 64505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34313-1	S-3 (0-1')	Total/NA	Solid	8015NM Prep	
880-34313-2	S-3 (1.5')	Total/NA	Solid	8015NM Prep	
880-34313-3	S-3 (2')	Total/NA	Solid	8015NM Prep	
MB 880-64505/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-64505/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-64505/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-34290-A-4-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-34290-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34313-1	S-3 (0-1')	Total/NA	Solid	8015B NM	64505
880-34313-2	S-3 (1.5')	Total/NA	Solid	8015B NM	64505
880-34313-3	S-3 (2')	Total/NA	Solid	8015B NM	64505
MB 880-64505/1-A	Method Blank	Total/NA	Solid	8015B NM	64505
LCS 880-64505/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	64505
LCSD 880-64505/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	64505
880-34290-A-4-E MS	Matrix Spike	Total/NA	Solid	8015B NM	64505
880-34290-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	64505

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34313-1
SDG: Lea County, New Mexico

GC Semi VOA

Analysis Batch: 64715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34313-1	S-3 (0-1')	Total/NA	Solid	8015 NM	
880-34313-2	S-3 (1.5')	Total/NA	Solid	8015 NM	
880-34313-3	S-3 (2')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34313-1	S-3 (0-1')	Soluble	Solid	DI Leach	
880-34313-2	S-3 (1.5')	Soluble	Solid	DI Leach	
880-34313-3	S-3 (2')	Soluble	Solid	DI Leach	
MB 880-64569/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64569/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64569/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-34313-3 MS	S-3 (2')	Soluble	Solid	DI Leach	
880-34313-3 MSD	S-3 (2')	Soluble	Solid	DI Leach	

Analysis Batch: 64695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34313-1	S-3 (0-1')	Soluble	Solid	300.0	64569
880-34313-2	S-3 (1.5')	Soluble	Solid	300.0	64569
880-34313-3	S-3 (2')	Soluble	Solid	300.0	64569
MB 880-64569/1-A	Method Blank	Soluble	Solid	300.0	64569
LCS 880-64569/2-A	Lab Control Sample	Soluble	Solid	300.0	64569
LCSD 880-64569/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64569
880-34313-3 MS	S-3 (2')	Soluble	Solid	300.0	64569
880-34313-3 MSD	S-3 (2')	Soluble	Solid	300.0	64569

Lab Chronicle

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34313-1
SDG: Lea County, New Mexico

Client Sample ID: S-3 (0-1')

Lab Sample ID: 880-34313-1

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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	64502	10/11/23 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64523	10/12/23 13:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64677	10/12/23 13:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			64715	10/12/23 14:36	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	64505	10/11/23 15:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64518	10/12/23 14:36	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	64569	10/12/23 14:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64695	10/15/23 16:43	CH	EET MID

Client Sample ID: S-3 (1.5')

Lab Sample ID: 880-34313-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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	64502	10/11/23 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64523	10/12/23 14:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64677	10/12/23 14:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			64715	10/12/23 16:26	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	64505	10/11/23 15:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64518	10/12/23 16:26	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	64569	10/12/23 14:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64695	10/15/23 16:48	CH	EET MID

Client Sample ID: S-3 (2')

Lab Sample ID: 880-34313-3

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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	64502	10/11/23 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64523	10/12/23 14:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64677	10/12/23 14:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			64715	10/12/23 16:48	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	64505	10/11/23 15:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64518	10/12/23 16:48	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	64569	10/12/23 14:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64695	10/15/23 16:54	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: Raptor West 3 State #2H

Job ID: 880-34313-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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

Method Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34313-1
SDG: Lea 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: Raptor West 3 State #2H

Job ID: 880-34313-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34313-1	S-3 (0-1')	Solid	10/10/23 00:00	10/11/23 14:19
880-34313-2	S-3 (1.5')	Solid	10/10/23 00:00	10/11/23 14:19
880-34313-3	S-3 (2')	Solid	10/10/23 00:00	10/11/23 14:19

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

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
	10-11-23 1419		

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-34313-1

SDG Number: Lea County, New Mexico

Login Number: 34313

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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

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

ANALYTICAL REPORT

PREPARED FOR

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

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JOB DESCRIPTION

Raptor West 3 State #2H
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34314-1

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



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Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Laboratory Job ID: 880-34314-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34314-1
SDG: Lea 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
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: Raptor West 3 State #2H

Job ID: 880-34314-1
SDG: Lea County, New Mexico

Job ID: 880-34314-1

Laboratory: Eurofins Midland

Narrative**Job Narrative
880-34314-1**

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

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

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

Receipt

The samples were received on 10/11/2023 2:19 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 -7.6°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: S-4 (0-1') (880-34314-1), S-4 (1.5') (880-34314-2) and S-4 (2') (880-34314-3).

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-34311-A-1-C). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: S-4 (0-1') (880-34314-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-64518 recovered below the lower control limit for Diesel Range Organics (Over C10-C28). An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-64518/47).

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: Raptor West 3 State #2H

Job ID: 880-34314-1
SDG: Lea County, New Mexico

Client Sample ID: S-4 (0-1')

Lab Sample ID: 880-34314-1

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		10/11/23 15:04	10/12/23 14:50	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/11/23 15:04	10/12/23 14:50	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/11/23 15:04	10/12/23 14:50	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		10/11/23 15:04	10/12/23 14:50	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/11/23 15:04	10/12/23 14:50	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		10/11/23 15:04	10/12/23 14:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	10/11/23 15:04	10/12/23 14:50	1
1,4-Difluorobenzene (Surr)	75		70 - 130	10/11/23 15:04	10/12/23 14:50	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			10/12/23 14:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	239		49.8		mg/Kg			10/12/23 17:10	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		10/11/23 15:46	10/12/23 17:10	1
Diesel Range Organics (Over C10-C28)	239		49.8		mg/Kg		10/11/23 15:46	10/12/23 17:10	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/11/23 15:46	10/12/23 17:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130	10/11/23 15:46	10/12/23 17:10	1
o-Terphenyl	131	S1+	70 - 130	10/11/23 15:46	10/12/23 17:10	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	211		4.99		mg/Kg			10/15/23 17:11	1

Client Sample ID: S-4 (1.5')

Lab Sample ID: 880-34314-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 15:04	10/12/23 16:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/11/23 15:04	10/12/23 16:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/11/23 15:04	10/12/23 16:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/11/23 15:04	10/12/23 16:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/11/23 15:04	10/12/23 16:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/11/23 15:04	10/12/23 16:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	10/11/23 15:04	10/12/23 16:13	1
1,4-Difluorobenzene (Surr)	70		70 - 130	10/11/23 15:04	10/12/23 16:13	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34314-1
SDG: Lea County, New Mexico

Client Sample ID: S-4 (1.5')

Lab Sample ID: 880-34314-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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			10/12/23 16:13	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			10/12/23 17:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/11/23 15:46	10/12/23 17:32	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/11/23 15:46	10/12/23 17:32	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/11/23 15:46	10/12/23 17:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130				10/11/23 15:46	10/12/23 17:32	1
o-Terphenyl	116		70 - 130				10/11/23 15:46	10/12/23 17:32	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	133		5.03		mg/Kg			10/15/23 17:17	1

Client Sample ID: S-4 (2')

Lab Sample ID: 880-34314-3

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 15:04	10/12/23 16:34	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/11/23 15:04	10/12/23 16:34	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/11/23 15:04	10/12/23 16:34	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/11/23 15:04	10/12/23 16:34	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/11/23 15:04	10/12/23 16:34	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/11/23 15:04	10/12/23 16:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				10/11/23 15:04	10/12/23 16:34	1
1,4-Difluorobenzene (Surr)	71		70 - 130				10/11/23 15:04	10/12/23 16:34	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			10/12/23 16:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			10/12/23 17:54	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	<50.1	U	50.1		mg/Kg		10/11/23 15:46	10/12/23 17:54	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		10/11/23 15:46	10/12/23 17:54	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34314-1
SDG: Lea County, New Mexico

Client Sample ID: S-4 (2')
Date Collected: 10/10/23 00:00
Date Received: 10/11/23 14:19

Lab Sample ID: 880-34314-3
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		10/11/23 15:46	10/12/23 17:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				10/11/23 15:46	10/12/23 17:54	1
o-Terphenyl	114		70 - 130				10/11/23 15:46	10/12/23 17:54	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	136		4.97		mg/Kg			10/15/23 17:33	1

Surrogate Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34314-1
SDG: Lea 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)
880-34311-A-1-A MS	Matrix Spike	122	100
880-34311-A-1-B MSD	Matrix Spike Duplicate	115	104
880-34314-1	S-4 (0-1')	89	75
880-34314-2	S-4 (1.5')	86	70
880-34314-3	S-4 (2')	88	71
LCS 880-64502/1-A	Lab Control Sample	128	109
LCSD 880-64502/2-A	Lab Control Sample Dup	128	101
MB 880-64502/5-A	Method Blank	80	91
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)
880-34290-A-4-E MS	Matrix Spike	97	92
880-34290-A-4-F MSD	Matrix Spike Duplicate	97	91
880-34314-1	S-4 (0-1')	121	131 S1+
880-34314-2	S-4 (1.5')	107	116
880-34314-3	S-4 (2')	105	114
LCS 880-64505/2-A	Lab Control Sample	97	103
LCSD 880-64505/3-A	Lab Control Sample Dup	84	90
MB 880-64505/1-A	Method Blank	96	109
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34314-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64502/5-A

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64502

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/11/23 15:04	10/12/23 11:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130	10/11/23 15:04	10/12/23 11:23	1
1,4-Difluorobenzene (Surr)	91		70 - 130	10/11/23 15:04	10/12/23 11:23	1

Lab Sample ID: LCS 880-64502/1-A

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07857		mg/Kg		79	70 - 130
Toluene	0.100	0.07926		mg/Kg		79	70 - 130
Ethylbenzene	0.100	0.09043		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	0.200	0.1946		mg/Kg		97	70 - 130
o-Xylene	0.100	0.09961		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-64502/2-A

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08430		mg/Kg		84	70 - 130	7	35
Toluene	0.100	0.07828		mg/Kg		78	70 - 130	1	35
Ethylbenzene	0.100	0.08874		mg/Kg		89	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1787		mg/Kg		89	70 - 130	9	35
o-Xylene	0.100	0.1040		mg/Kg		104	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-34311-A-1-A MS

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0996	0.09524		mg/Kg		96	70 - 130
Toluene	<0.00200	U	0.0996	0.09387		mg/Kg		94	70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34314-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34311-A-1-A MS

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.0996	0.1043		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.199	0.2282		mg/Kg		115	70 - 130
o-Xylene	<0.00200	U	0.0996	0.1141		mg/Kg		115	70 - 130
Surrogate	MS %Recovery	MS Qualifier	MS Limits						
4-Bromofluorobenzene (Surr)	122		70 - 130						
1,4-Difluorobenzene (Surr)	100		70 - 130						

Lab Sample ID: 880-34311-A-1-B MSD

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.08499		mg/Kg		86	70 - 130	11	35
Toluene	<0.00200	U	0.0990	0.08138		mg/Kg		82	70 - 130	14	35
Ethylbenzene	<0.00200	U	0.0990	0.08808		mg/Kg		89	70 - 130	17	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1873		mg/Kg		95	70 - 130	20	35
o-Xylene	<0.00200	U	0.0990	0.09482		mg/Kg		96	70 - 130	18	35
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	115		70 - 130								
1,4-Difluorobenzene (Surr)	104		70 - 130								

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

Lab Sample ID: MB 880-64505/1-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64505

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		10/11/23 15:46	10/12/23 08:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 08:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 08:09	1
Surrogate	MB %Recovery	MB Qualifier	MB Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				10/11/23 15:46	10/12/23 08:09	1
o-Terphenyl	109		70 - 130				10/11/23 15:46	10/12/23 08:09	1

Lab Sample ID: LCS 880-64505/2-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64505

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	952.4		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	1000	912.6		mg/Kg		91	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34314-1
SDG: Lea County, New Mexico

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

Lab Sample ID: LCS 880-64505/2-A
Matrix: Solid
Analysis Batch: 64518

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 64505

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: LCSD 880-64505/3-A
Matrix: Solid
Analysis Batch: 64518

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 64505

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	856.3		mg/Kg		86	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	786.7		mg/Kg		79	70 - 130	15	20

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

Lab Sample ID: 880-34290-A-4-E MS
Matrix: Solid
Analysis Batch: 64518

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 64505

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	994	1158		mg/Kg		113	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	994	889.8		mg/Kg		87	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: 880-34290-A-4-F MSD
Matrix: Solid
Analysis Batch: 64518

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 64505

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	994	1187		mg/Kg		116	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	994	893.7		mg/Kg		87	70 - 130	0	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	91		70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34314-1
SDG: Lea County, New Mexico

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64569/1-A

Matrix: Solid

Analysis Batch: 64695

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			10/15/23 15:18	1

Lab Sample ID: LCS 880-64569/2-A

Matrix: Solid

Analysis Batch: 64695

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	274.9		mg/Kg		110	90 - 110

Lab Sample ID: LCSD 880-64569/3-A

Matrix: Solid

Analysis Batch: 64695

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	273.8		mg/Kg		110	90 - 110	0	20

Lab Sample ID: 880-34313-A-3-D MS

Matrix: Solid

Analysis Batch: 64695

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	129		249	403.0		mg/Kg		110	90 - 110

Lab Sample ID: 880-34313-A-3-E MSD

Matrix: Solid

Analysis Batch: 64695

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	129		249	402.6		mg/Kg		110	90 - 110	0	20

QC Association Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34314-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34314-1	S-4 (0-1')	Total/NA	Solid	5035	
880-34314-2	S-4 (1.5')	Total/NA	Solid	5035	
880-34314-3	S-4 (2')	Total/NA	Solid	5035	
MB 880-64502/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64502/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64502/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34311-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-34311-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34314-1	S-4 (0-1')	Total/NA	Solid	8021B	64502
880-34314-2	S-4 (1.5')	Total/NA	Solid	8021B	64502
880-34314-3	S-4 (2')	Total/NA	Solid	8021B	64502
MB 880-64502/5-A	Method Blank	Total/NA	Solid	8021B	64502
LCS 880-64502/1-A	Lab Control Sample	Total/NA	Solid	8021B	64502
LCSD 880-64502/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64502
880-34311-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	64502
880-34311-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64502

Analysis Batch: 64678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34314-1	S-4 (0-1')	Total/NA	Solid	Total BTEX	
880-34314-2	S-4 (1.5')	Total/NA	Solid	Total BTEX	
880-34314-3	S-4 (2')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 64505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34314-1	S-4 (0-1')	Total/NA	Solid	8015NM Prep	
880-34314-2	S-4 (1.5')	Total/NA	Solid	8015NM Prep	
880-34314-3	S-4 (2')	Total/NA	Solid	8015NM Prep	
MB 880-64505/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-64505/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-64505/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-34290-A-4-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-34290-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34314-1	S-4 (0-1')	Total/NA	Solid	8015B NM	64505
880-34314-2	S-4 (1.5')	Total/NA	Solid	8015B NM	64505
880-34314-3	S-4 (2')	Total/NA	Solid	8015B NM	64505
MB 880-64505/1-A	Method Blank	Total/NA	Solid	8015B NM	64505
LCS 880-64505/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	64505
LCSD 880-64505/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	64505
880-34290-A-4-E MS	Matrix Spike	Total/NA	Solid	8015B NM	64505
880-34290-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	64505

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34314-1
SDG: Lea County, New Mexico

GC Semi VOA

Analysis Batch: 64717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34314-1	S-4 (0-1')	Total/NA	Solid	8015 NM	
880-34314-2	S-4 (1.5')	Total/NA	Solid	8015 NM	
880-34314-3	S-4 (2')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34314-1	S-4 (0-1')	Soluble	Solid	DI Leach	
880-34314-2	S-4 (1.5')	Soluble	Solid	DI Leach	
880-34314-3	S-4 (2')	Soluble	Solid	DI Leach	
MB 880-64569/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64569/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64569/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-34313-A-3-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-34313-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 64695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34314-1	S-4 (0-1')	Soluble	Solid	300.0	64569
880-34314-2	S-4 (1.5')	Soluble	Solid	300.0	64569
880-34314-3	S-4 (2')	Soluble	Solid	300.0	64569
MB 880-64569/1-A	Method Blank	Soluble	Solid	300.0	64569
LCS 880-64569/2-A	Lab Control Sample	Soluble	Solid	300.0	64569
LCSD 880-64569/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64569
880-34313-A-3-D MS	Matrix Spike	Soluble	Solid	300.0	64569
880-34313-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	64569

Lab Chronicle

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34314-1
SDG: Lea County, New Mexico

Client Sample ID: S-4 (0-1')

Lab Sample ID: 880-34314-1

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	64502	10/11/23 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64523	10/12/23 14:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64678	10/12/23 14:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			64717	10/12/23 17:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	64505	10/11/23 15:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64518	10/12/23 17:10	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	64569	10/12/23 14:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64695	10/15/23 17:11	CH	EET MID

Client Sample ID: S-4 (1.5')

Lab Sample ID: 880-34314-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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	64502	10/11/23 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64523	10/12/23 16:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64678	10/12/23 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			64717	10/12/23 17:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	64505	10/11/23 15:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64518	10/12/23 17:32	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	64569	10/12/23 14:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64695	10/15/23 17:17	CH	EET MID

Client Sample ID: S-4 (2')

Lab Sample ID: 880-34314-3

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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	64502	10/11/23 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64523	10/12/23 16:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64678	10/12/23 16:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			64717	10/12/23 17:54	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	64505	10/11/23 15:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64518	10/12/23 17:54	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	64569	10/12/23 14:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64695	10/15/23 17:33	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: Raptor West 3 State #2H

Job ID: 880-34314-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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

Method Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34314-1
SDG: Lea 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: Raptor West 3 State #2H

Job ID: 880-34314-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34314-1	S-4 (0-1')	Solid	10/10/23 00:00	10/11/23 14:19
880-34314-2	S-4 (1.5')	Solid	10/10/23 00:00	10/11/23 14:19
880-34314-3	S-4 (2')	Solid	10/10/23 00:00	10/11/23 14:19

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- 14

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
	10-11-93 419		

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-34314-1

SDG Number: Lea County, New Mexico

Login Number: 34314

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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 10/16/2023 2:53:54 PM

JOB DESCRIPTION

Raptor West 3 State #2H
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34316-1

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



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

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Laboratory Job ID: 880-34316-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34316-1
SDG: Lea County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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: Raptor West 3 State #2H

Job ID: 880-34316-1
SDG: Lea County, New Mexico

Job ID: 880-34316-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-34316-1**

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

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

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

Receipt

The samples were received on 10/11/2023 2:19 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 -7.4°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: S-5 (0-1') (880-34316-1), S-5 (1.5') (880-34316-2) and S-5 (2') (880-34316-3).

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: S-5 (0-1') (880-34316-1), S-5 (2') (880-34316-3) and (880-34311-A-1-C). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-64532 and analytical batch 880-64515 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-64515/5) and (LCS 880-64532/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-34316-A-1-C MS) and (880-34316-A-1-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-64515 recovered above the upper control limit for Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28) due to being inadvertently double spiked. Percent recoveries are based on the amount spiked. The associated sample is impacted: (CCV 880-64515/20).

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: Raptor West 3 State #2H

Job ID: 880-34316-1
SDG: Lea County, New Mexico

Client Sample ID: S-5 (0-1')

Lab Sample ID: 880-34316-1

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		10/11/23 15:04	10/12/23 17:56	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/11/23 15:04	10/12/23 17:56	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/11/23 15:04	10/12/23 17:56	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		10/11/23 15:04	10/12/23 17:56	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/11/23 15:04	10/12/23 17:56	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		10/11/23 15:04	10/12/23 17:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	10/11/23 15:04	10/12/23 17:56	1
1,4-Difluorobenzene (Surr)	68	S1-	70 - 130	10/11/23 15:04	10/12/23 17:56	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			10/12/23 17:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	60.5		49.9		mg/Kg			10/12/23 10:56	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		10/12/23 10:42	10/12/23 10:56	1
Diesel Range Organics (Over C10-C28)	60.5		49.9		mg/Kg		10/12/23 10:42	10/12/23 10:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/12/23 10:42	10/12/23 10:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130	10/12/23 10:42	10/12/23 10:56	1
o-Terphenyl	104		70 - 130	10/12/23 10:42	10/12/23 10:56	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	112		4.99		mg/Kg			10/15/23 17:56	1

Client Sample ID: S-5 (1.5')

Lab Sample ID: 880-34316-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 15:04	10/12/23 18:16	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/11/23 15:04	10/12/23 18:16	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/11/23 15:04	10/12/23 18:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/11/23 15:04	10/12/23 18:16	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/11/23 15:04	10/12/23 18:16	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/11/23 15:04	10/12/23 18:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	10/11/23 15:04	10/12/23 18:16	1
1,4-Difluorobenzene (Surr)	71		70 - 130	10/11/23 15:04	10/12/23 18:16	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34316-1
SDG: Lea County, New Mexico

Client Sample ID: S-5 (1.5')

Lab Sample ID: 880-34316-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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			10/12/23 18:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			10/12/23 12:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		10/12/23 10:42	10/12/23 12:02	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		10/12/23 10:42	10/12/23 12:02	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		10/12/23 10:42	10/12/23 12:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130				10/12/23 10:42	10/12/23 12:02	1
o-Terphenyl	121		70 - 130				10/12/23 10:42	10/12/23 12:02	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	131		4.97		mg/Kg			10/15/23 18:02	1

Client Sample ID: S-5 (2')

Lab Sample ID: 880-34316-3

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 15:04	10/12/23 18:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 18:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 18:37	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/11/23 15:04	10/12/23 18:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 18:37	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/11/23 15:04	10/12/23 18:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				10/11/23 15:04	10/12/23 18:37	1
1,4-Difluorobenzene (Surr)	58	S1-	70 - 130				10/11/23 15:04	10/12/23 18:37	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			10/12/23 18:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			10/12/23 12:24	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	<50.5	U	50.5		mg/Kg		10/12/23 10:42	10/12/23 12:24	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		10/12/23 10:42	10/12/23 12:24	1

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Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34316-1
SDG: Lea County, New Mexico

Client Sample ID: S-5 (2')

Lab Sample ID: 880-34316-3

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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)	<50.5	U	50.5		mg/Kg		10/12/23 10:42	10/12/23 12:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	129		70 - 130	10/12/23 10:42	10/12/23 12:24	1
o-Terphenyl	122		70 - 130	10/12/23 10:42	10/12/23 12:24	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	126		5.04		mg/Kg			10/15/23 18:07	1

Surrogate Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34316-1
SDG: Lea 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)
880-34311-A-1-A MS	Matrix Spike	122	100
880-34311-A-1-B MSD	Matrix Spike Duplicate	115	104
880-34316-1	S-5 (0-1')	86	68 S1-
880-34316-2	S-5 (1.5')	87	71
880-34316-3	S-5 (2')	88	58 S1-
LCS 880-64502/1-A	Lab Control Sample	128	109
LCSD 880-64502/2-A	Lab Control Sample Dup	128	101
MB 880-64502/5-A	Method Blank	80	91

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)
880-34316-1	S-5 (0-1')	112	104
880-34316-1 MS	S-5 (0-1')	137 S1+	115
880-34316-1 MSD	S-5 (0-1')	132 S1+	111
880-34316-2	S-5 (1.5')	127	121
880-34316-3	S-5 (2')	129	122
LCS 880-64532/2-A	Lab Control Sample	117	136 S1+
LCSD 880-64532/3-A	Lab Control Sample Dup	82	88
MB 880-64532/1-A	Method Blank	196 S1+	182 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34316-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64502/5-A

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64502

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/11/23 15:04	10/12/23 11:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130	10/11/23 15:04	10/12/23 11:23	1
1,4-Difluorobenzene (Surr)	91		70 - 130	10/11/23 15:04	10/12/23 11:23	1

Lab Sample ID: LCS 880-64502/1-A

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07857		mg/Kg		79	70 - 130
Toluene	0.100	0.07926		mg/Kg		79	70 - 130
Ethylbenzene	0.100	0.09043		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	0.200	0.1946		mg/Kg		97	70 - 130
o-Xylene	0.100	0.09961		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-64502/2-A

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08430		mg/Kg		84	70 - 130	7	35
Toluene	0.100	0.07828		mg/Kg		78	70 - 130	1	35
Ethylbenzene	0.100	0.08874		mg/Kg		89	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1787		mg/Kg		89	70 - 130	9	35
o-Xylene	0.100	0.1040		mg/Kg		104	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-34311-A-1-A MS

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0996	0.09524		mg/Kg		96	70 - 130
Toluene	<0.00200	U	0.0996	0.09387		mg/Kg		94	70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34316-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34311-A-1-A MS

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.0996	0.1043		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.199	0.2282		mg/Kg		115	70 - 130
o-Xylene	<0.00200	U	0.0996	0.1141		mg/Kg		115	70 - 130
Surrogate	MS %Recovery	MS Qualifier	MS Limits						
4-Bromofluorobenzene (Surr)	122		70 - 130						
1,4-Difluorobenzene (Surr)	100		70 - 130						

Lab Sample ID: 880-34311-A-1-B MSD

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.08499		mg/Kg		86	70 - 130	11	35
Toluene	<0.00200	U	0.0990	0.08138		mg/Kg		82	70 - 130	14	35
Ethylbenzene	<0.00200	U	0.0990	0.08808		mg/Kg		89	70 - 130	17	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1873		mg/Kg		95	70 - 130	20	35
o-Xylene	<0.00200	U	0.0990	0.09482		mg/Kg		96	70 - 130	18	35
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	115		70 - 130								
1,4-Difluorobenzene (Surr)	104		70 - 130								

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

Lab Sample ID: MB 880-64532/1-A

Matrix: Solid

Analysis Batch: 64515

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64532

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		10/12/23 08:00	10/12/23 08:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/12/23 08:00	10/12/23 08:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/12/23 08:00	10/12/23 08:09	1
Surrogate	MB %Recovery	MB Qualifier	MB Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	196	S1+	70 - 130				10/12/23 08:00	10/12/23 08:09	1
o-Terphenyl	182	S1+	70 - 130				10/12/23 08:00	10/12/23 08:09	1

Lab Sample ID: LCS 880-64532/2-A

Matrix: Solid

Analysis Batch: 64515

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64532

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	843.0		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	1000	878.5		mg/Kg		88	70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34316-1
SDG: Lea County, New Mexico

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

Lab Sample ID: LCS 880-64532/2-A
Matrix: Solid
Analysis Batch: 64515

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 64532

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	117		70 - 130
o-Terphenyl	136	S1+	70 - 130

Lab Sample ID: LCSD 880-64532/3-A
Matrix: Solid
Analysis Batch: 64515

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 64532

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	798.2		mg/Kg		80	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	1000	772.7		mg/Kg		77	70 - 130	13	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	82		70 - 130
o-Terphenyl	88		70 - 130

Lab Sample ID: 880-34316-1 MS
Matrix: Solid
Analysis Batch: 64515

Client Sample ID: S-5 (0-1')
Prep Type: Total/NA
Prep Batch: 64532

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	991	946.5		mg/Kg		94	70 - 130		
Diesel Range Organics (Over C10-C28)	60.5		991	1320		mg/Kg		127	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	137	S1+	70 - 130
o-Terphenyl	115		70 - 130

Lab Sample ID: 880-34316-1 MSD
Matrix: Solid
Analysis Batch: 64515

Client Sample ID: S-5 (0-1')
Prep Type: Total/NA
Prep Batch: 64532

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	991	919.0		mg/Kg		91	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	60.5		991	1278		mg/Kg		123	70 - 130	3	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	132	S1+	70 - 130
o-Terphenyl	111		70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34316-1
SDG: Lea County, New Mexico

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64569/1-A
Matrix: Solid
Analysis Batch: 64695

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			10/15/23 15:18	1

Lab Sample ID: LCS 880-64569/2-A
Matrix: Solid
Analysis Batch: 64695

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	274.9		mg/Kg		110	90 - 110

Lab Sample ID: LCSD 880-64569/3-A
Matrix: Solid
Analysis Batch: 64695

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	273.8		mg/Kg		110	90 - 110	0	20

Lab Sample ID: 880-34313-A-3-D MS
Matrix: Solid
Analysis Batch: 64695

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	129		249	403.0		mg/Kg		110	90 - 110

Lab Sample ID: 880-34313-A-3-E MSD
Matrix: Solid
Analysis Batch: 64695

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	129		249	402.6		mg/Kg		110	90 - 110	0	20

QC Association Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34316-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34316-1	S-5 (0-1')	Total/NA	Solid	5035	
880-34316-2	S-5 (1.5')	Total/NA	Solid	5035	
880-34316-3	S-5 (2')	Total/NA	Solid	5035	
MB 880-64502/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64502/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64502/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34311-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-34311-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34316-1	S-5 (0-1')	Total/NA	Solid	8021B	64502
880-34316-2	S-5 (1.5')	Total/NA	Solid	8021B	64502
880-34316-3	S-5 (2')	Total/NA	Solid	8021B	64502
MB 880-64502/5-A	Method Blank	Total/NA	Solid	8021B	64502
LCS 880-64502/1-A	Lab Control Sample	Total/NA	Solid	8021B	64502
LCSD 880-64502/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64502
880-34311-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	64502
880-34311-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64502

Analysis Batch: 64680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34316-1	S-5 (0-1')	Total/NA	Solid	Total BTEX	
880-34316-2	S-5 (1.5')	Total/NA	Solid	Total BTEX	
880-34316-3	S-5 (2')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 64515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34316-1	S-5 (0-1')	Total/NA	Solid	8015B NM	64532
880-34316-2	S-5 (1.5')	Total/NA	Solid	8015B NM	64532
880-34316-3	S-5 (2')	Total/NA	Solid	8015B NM	64532
MB 880-64532/1-A	Method Blank	Total/NA	Solid	8015B NM	64532
LCS 880-64532/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	64532
LCSD 880-64532/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	64532
880-34316-1 MS	S-5 (0-1')	Total/NA	Solid	8015B NM	64532
880-34316-1 MSD	S-5 (0-1')	Total/NA	Solid	8015B NM	64532

Prep Batch: 64532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34316-1	S-5 (0-1')	Total/NA	Solid	8015NM Prep	
880-34316-2	S-5 (1.5')	Total/NA	Solid	8015NM Prep	
880-34316-3	S-5 (2')	Total/NA	Solid	8015NM Prep	
MB 880-64532/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-64532/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-64532/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-34316-1 MS	S-5 (0-1')	Total/NA	Solid	8015NM Prep	
880-34316-1 MSD	S-5 (0-1')	Total/NA	Solid	8015NM Prep	

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34316-1
SDG: Lea County, New Mexico

GC Semi VOA

Analysis Batch: 64656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34316-1	S-5 (0-1')	Total/NA	Solid	8015 NM	
880-34316-2	S-5 (1.5')	Total/NA	Solid	8015 NM	
880-34316-3	S-5 (2')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34316-1	S-5 (0-1')	Soluble	Solid	DI Leach	
880-34316-2	S-5 (1.5')	Soluble	Solid	DI Leach	
880-34316-3	S-5 (2')	Soluble	Solid	DI Leach	
MB 880-64569/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64569/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64569/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-34313-A-3-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-34313-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 64695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34316-1	S-5 (0-1')	Soluble	Solid	300.0	64569
880-34316-2	S-5 (1.5')	Soluble	Solid	300.0	64569
880-34316-3	S-5 (2')	Soluble	Solid	300.0	64569
MB 880-64569/1-A	Method Blank	Soluble	Solid	300.0	64569
LCS 880-64569/2-A	Lab Control Sample	Soluble	Solid	300.0	64569
LCSD 880-64569/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64569
880-34313-A-3-D MS	Matrix Spike	Soluble	Solid	300.0	64569
880-34313-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	64569

Lab Chronicle

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34316-1
SDG: Lea County, New Mexico

Client Sample ID: S-5 (0-1')

Lab Sample ID: 880-34316-1

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	64502	10/11/23 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64523	10/12/23 17:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64680	10/12/23 17:56	SM	EET MID
Total/NA	Analysis	8015 NM		1			64656	10/12/23 10:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	64532	10/12/23 10:42	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64515	10/12/23 10:56	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	64569	10/12/23 14:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64695	10/15/23 17:56	CH	EET MID

Client Sample ID: S-5 (1.5')

Lab Sample ID: 880-34316-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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	64502	10/11/23 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64523	10/12/23 18:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64680	10/12/23 18:16	SM	EET MID
Total/NA	Analysis	8015 NM		1			64656	10/12/23 12:02	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	64532	10/12/23 10:42	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64515	10/12/23 12:02	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	64569	10/12/23 14:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64695	10/15/23 18:02	CH	EET MID

Client Sample ID: S-5 (2')

Lab Sample ID: 880-34316-3

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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	64502	10/11/23 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64523	10/12/23 18:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64680	10/12/23 18:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			64656	10/12/23 12:24	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	64532	10/12/23 10:42	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64515	10/12/23 12:24	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	64569	10/12/23 14:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64695	10/15/23 18:07	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: Raptor West 3 State #2H

Job ID: 880-34316-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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

Method Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34316-1
SDG: Lea 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: Raptor West 3 State #2H

Job ID: 880-34316-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34316-1	S-5 (0-1')	Solid	10/10/23 00:00	10/11/23 14:19
880-34316-2	S-5 (1.5')	Solid	10/10/23 00:00	10/11/23 14:19
880-34316-3	S-5 (2')	Solid	10/10/23 00:00	10/11/23 14:19

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- 13
- 14

Relinquished by (Signature)	Date/Time	Received by: (Signature)	Date/Time
	10-11-23 1419		

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-34316-1
SDG Number: Lea County, New Mexico

Login Number: 34316

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 10/16/2023 2:53:01 PM

JOB DESCRIPTION

Raptor West 3 State #2H
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34315-1

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



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10/16/2023 2:53:01 PM

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

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Laboratory Job ID: 880-34315-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34315-1
SDG: Lea 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
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
SQL	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: Raptor West 3 State #2H

Job ID: 880-34315-1
SDG: Lea County, New Mexico

Job ID: 880-34315-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-34315-1**

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

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

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

Receipt

The samples were received on 10/11/2023 2:19 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 -7.4°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: S-6 (0-1') (880-34315-1), S-6 (1.5') (880-34315-2) and S-6 (2') (880-34315-3).

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-34311-A-1-C). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-64518 recovered below the lower control limit for Diesel Range Organics (Over C10-C28). An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-64518/47).

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: Raptor West 3 State #2H

Job ID: 880-34315-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34315-1

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 15:04	10/12/23 16:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 16:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 16:54	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/11/23 15:04	10/12/23 16:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 16:54	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/11/23 15:04	10/12/23 16:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130				10/11/23 15:04	10/12/23 16:54	1
1,4-Difluorobenzene (Surr)	71		70 - 130				10/11/23 15:04	10/12/23 16:54	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			10/12/23 16:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			10/12/23 18:16	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	<50.1	U	50.1		mg/Kg		10/11/23 15:46	10/12/23 18:16	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		10/11/23 15:46	10/12/23 18:16	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		10/11/23 15:46	10/12/23 18:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130				10/11/23 15:46	10/12/23 18:16	1
o-Terphenyl	119		70 - 130				10/11/23 15:46	10/12/23 18:16	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	275		5.00		mg/Kg			10/15/23 17:39	1

Client Sample ID: S-6 (1.5')

Lab Sample ID: 880-34315-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 15:04	10/12/23 17:15	1
Toluene	<0.00201	U	0.00201		mg/Kg		10/11/23 15:04	10/12/23 17:15	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/11/23 15:04	10/12/23 17:15	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		10/11/23 15:04	10/12/23 17:15	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/11/23 15:04	10/12/23 17:15	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/11/23 15:04	10/12/23 17:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130				10/11/23 15:04	10/12/23 17:15	1
1,4-Difluorobenzene (Surr)	76		70 - 130				10/11/23 15:04	10/12/23 17:15	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34315-1
SDG: Lea County, New Mexico

Client Sample ID: S-6 (1.5')

Lab Sample ID: 880-34315-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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			10/12/23 17:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			10/12/23 18:38	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	<50.1	U	50.1		mg/Kg		10/11/23 15:46	10/12/23 18:38	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		10/11/23 15:46	10/12/23 18:38	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		10/11/23 15:46	10/12/23 18:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				10/11/23 15:46	10/12/23 18:38	1
o-Terphenyl	100		70 - 130				10/11/23 15:46	10/12/23 18:38	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	124		5.01		mg/Kg			10/15/23 17:45	1

Client Sample ID: S-6 (2')

Lab Sample ID: 880-34315-3

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		10/11/23 15:04	10/12/23 17:35	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/11/23 15:04	10/12/23 17:35	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/11/23 15:04	10/12/23 17:35	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		10/11/23 15:04	10/12/23 17:35	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/11/23 15:04	10/12/23 17:35	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		10/11/23 15:04	10/12/23 17:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				10/11/23 15:04	10/12/23 17:35	1
1,4-Difluorobenzene (Surr)	82		70 - 130				10/11/23 15:04	10/12/23 17:35	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			10/12/23 17:35	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			10/12/23 19:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 19:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 19:01	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34315-1
SDG: Lea County, New Mexico

Client Sample ID: S-6 (2')
Date Collected: 10/10/23 00:00
Date Received: 10/11/23 14:19

Lab Sample ID: 880-34315-3
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 19:01	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	110		70 - 130				10/11/23 15:46	10/12/23 19:01	1	
o-Terphenyl	120		70 - 130				10/11/23 15:46	10/12/23 19:01	1	

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	147		5.02		mg/Kg			10/15/23 17:50	1	

Surrogate Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34315-1
SDG: Lea 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)
880-34311-A-1-A MS	Matrix Spike	122	100
880-34311-A-1-B MSD	Matrix Spike Duplicate	115	104
880-34315-1	S-6 (0-1')	90	71
880-34315-2	S-6 (1.5')	86	76
880-34315-3	S-6 (2')	88	82
LCS 880-64502/1-A	Lab Control Sample	128	109
LCSD 880-64502/2-A	Lab Control Sample Dup	128	101
MB 880-64502/5-A	Method Blank	80	91

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)
880-34290-A-4-E MS	Matrix Spike	97	92
880-34290-A-4-F MSD	Matrix Spike Duplicate	97	91
880-34315-1	S-6 (0-1')	112	119
880-34315-2	S-6 (1.5')	92	100
880-34315-3	S-6 (2')	110	120
LCS 880-64505/2-A	Lab Control Sample	97	103
LCSD 880-64505/3-A	Lab Control Sample Dup	84	90
MB 880-64505/1-A	Method Blank	96	109

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34315-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64502/5-A

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64502

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/11/23 15:04	10/12/23 11:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130	10/11/23 15:04	10/12/23 11:23	1
1,4-Difluorobenzene (Surr)	91		70 - 130	10/11/23 15:04	10/12/23 11:23	1

Lab Sample ID: LCS 880-64502/1-A

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07857		mg/Kg		79	70 - 130
Toluene	0.100	0.07926		mg/Kg		79	70 - 130
Ethylbenzene	0.100	0.09043		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	0.200	0.1946		mg/Kg		97	70 - 130
o-Xylene	0.100	0.09961		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-64502/2-A

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08430		mg/Kg		84	70 - 130	7	35
Toluene	0.100	0.07828		mg/Kg		78	70 - 130	1	35
Ethylbenzene	0.100	0.08874		mg/Kg		89	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1787		mg/Kg		89	70 - 130	9	35
o-Xylene	0.100	0.1040		mg/Kg		104	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-34311-A-1-A MS

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0996	0.09524		mg/Kg		96	70 - 130
Toluene	<0.00200	U	0.0996	0.09387		mg/Kg		94	70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34315-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34311-A-1-A MS

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.0996	0.1043		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.199	0.2282		mg/Kg		115	70 - 130
o-Xylene	<0.00200	U	0.0996	0.1141		mg/Kg		115	70 - 130
Surrogate	%Recovery	MS Qualifier	MS Limits						
4-Bromofluorobenzene (Surr)	122		70 - 130						
1,4-Difluorobenzene (Surr)	100		70 - 130						

Lab Sample ID: 880-34311-A-1-B MSD

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 64502

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.08499		mg/Kg		86	70 - 130	11	35
Toluene	<0.00200	U	0.0990	0.08138		mg/Kg		82	70 - 130	14	35
Ethylbenzene	<0.00200	U	0.0990	0.08808		mg/Kg		89	70 - 130	17	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1873		mg/Kg		95	70 - 130	20	35
o-Xylene	<0.00200	U	0.0990	0.09482		mg/Kg		96	70 - 130	18	35
Surrogate	%Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	115		70 - 130								
1,4-Difluorobenzene (Surr)	104		70 - 130								

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

Lab Sample ID: MB 880-64505/1-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64505

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		10/11/23 15:46	10/12/23 08:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 08:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 08:09	1
Surrogate	%Recovery	MB Qualifier	MB Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				10/11/23 15:46	10/12/23 08:09	1
o-Terphenyl	109		70 - 130				10/11/23 15:46	10/12/23 08:09	1

Lab Sample ID: LCS 880-64505/2-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64505

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	952.4		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	1000	912.6		mg/Kg		91	70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34315-1
SDG: Lea County, New Mexico

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

Lab Sample ID: LCS 880-64505/2-A
Matrix: Solid
Analysis Batch: 64518

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 64505

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: LCSD 880-64505/3-A
Matrix: Solid
Analysis Batch: 64518

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 64505

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	856.3		mg/Kg		86	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	786.7		mg/Kg		79	70 - 130	15	20

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

Lab Sample ID: 880-34290-A-4-E MS
Matrix: Solid
Analysis Batch: 64518

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 64505

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	994	1158		mg/Kg		113	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	994	889.8		mg/Kg		87	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: 880-34290-A-4-F MSD
Matrix: Solid
Analysis Batch: 64518

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 64505

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	994	1187		mg/Kg		116	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	994	893.7		mg/Kg		87	70 - 130	0	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	91		70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34315-1
SDG: Lea County, New Mexico

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64569/1-A

Matrix: Solid

Analysis Batch: 64695

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			10/15/23 15:18	1

Lab Sample ID: LCS 880-64569/2-A

Matrix: Solid

Analysis Batch: 64695

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	274.9		mg/Kg		110	90 - 110

Lab Sample ID: LCSD 880-64569/3-A

Matrix: Solid

Analysis Batch: 64695

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	273.8		mg/Kg		110	90 - 110	0	20

Lab Sample ID: 880-34313-A-3-D MS

Matrix: Solid

Analysis Batch: 64695

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	129		249	403.0		mg/Kg		110	90 - 110

Lab Sample ID: 880-34313-A-3-E MSD

Matrix: Solid

Analysis Batch: 64695

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	129		249	402.6		mg/Kg		110	90 - 110	0	20

QC Association Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34315-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34315-1	S-6 (0-1')	Total/NA	Solid	5035	
880-34315-2	S-6 (1.5')	Total/NA	Solid	5035	
880-34315-3	S-6 (2')	Total/NA	Solid	5035	
MB 880-64502/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64502/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64502/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34311-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-34311-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34315-1	S-6 (0-1')	Total/NA	Solid	8021B	64502
880-34315-2	S-6 (1.5')	Total/NA	Solid	8021B	64502
880-34315-3	S-6 (2')	Total/NA	Solid	8021B	64502
MB 880-64502/5-A	Method Blank	Total/NA	Solid	8021B	64502
LCS 880-64502/1-A	Lab Control Sample	Total/NA	Solid	8021B	64502
LCSD 880-64502/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64502
880-34311-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	64502
880-34311-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64502

Analysis Batch: 64679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34315-1	S-6 (0-1')	Total/NA	Solid	Total BTEX	
880-34315-2	S-6 (1.5')	Total/NA	Solid	Total BTEX	
880-34315-3	S-6 (2')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 64505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34315-1	S-6 (0-1')	Total/NA	Solid	8015NM Prep	
880-34315-2	S-6 (1.5')	Total/NA	Solid	8015NM Prep	
880-34315-3	S-6 (2')	Total/NA	Solid	8015NM Prep	
MB 880-64505/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-64505/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-64505/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-34290-A-4-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-34290-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34315-1	S-6 (0-1')	Total/NA	Solid	8015B NM	64505
880-34315-2	S-6 (1.5')	Total/NA	Solid	8015B NM	64505
880-34315-3	S-6 (2')	Total/NA	Solid	8015B NM	64505
MB 880-64505/1-A	Method Blank	Total/NA	Solid	8015B NM	64505
LCS 880-64505/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	64505
LCSD 880-64505/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	64505
880-34290-A-4-E MS	Matrix Spike	Total/NA	Solid	8015B NM	64505
880-34290-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	64505

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QC Association Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34315-1
SDG: Lea County, New Mexico

GC Semi VOA

Analysis Batch: 64718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34315-1	S-6 (0-1')	Total/NA	Solid	8015 NM	
880-34315-2	S-6 (1.5')	Total/NA	Solid	8015 NM	
880-34315-3	S-6 (2')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34315-1	S-6 (0-1')	Soluble	Solid	DI Leach	
880-34315-2	S-6 (1.5')	Soluble	Solid	DI Leach	
880-34315-3	S-6 (2')	Soluble	Solid	DI Leach	
MB 880-64569/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64569/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64569/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-34313-A-3-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-34313-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 64695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34315-1	S-6 (0-1')	Soluble	Solid	300.0	64569
880-34315-2	S-6 (1.5')	Soluble	Solid	300.0	64569
880-34315-3	S-6 (2')	Soluble	Solid	300.0	64569
MB 880-64569/1-A	Method Blank	Soluble	Solid	300.0	64569
LCS 880-64569/2-A	Lab Control Sample	Soluble	Solid	300.0	64569
LCSD 880-64569/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64569
880-34313-A-3-D MS	Matrix Spike	Soluble	Solid	300.0	64569
880-34313-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	64569

Lab Chronicle

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34315-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34315-1

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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	64502	10/11/23 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64523	10/12/23 16:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64679	10/12/23 16:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			64718	10/12/23 18:16	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	64505	10/11/23 15:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64518	10/12/23 18:16	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	64569	10/12/23 14:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64695	10/15/23 17:39	CH	EET MID

Client Sample ID: S-6 (1.5')

Lab Sample ID: 880-34315-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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	64502	10/11/23 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64523	10/12/23 17:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64679	10/12/23 17:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			64718	10/12/23 18:38	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	64505	10/11/23 15:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64518	10/12/23 18:38	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	64569	10/12/23 14:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64695	10/15/23 17:45	CH	EET MID

Client Sample ID: S-6 (2')

Lab Sample ID: 880-34315-3

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	64502	10/11/23 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64523	10/12/23 17:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64679	10/12/23 17:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			64718	10/12/23 19:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	64505	10/11/23 15:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64518	10/12/23 19:01	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	64569	10/12/23 14:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64695	10/15/23 17:50	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: Raptor West 3 State #2H

Job ID: 880-34315-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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

Method Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34315-1
SDG: Lea 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: Raptor West 3 State #2H

Job ID: 880-34315-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34315-1	S-6 (0-1')	Solid	10/10/23 00:00	10/11/23 14:19
880-34315-2	S-6 (1.5')	Solid	10/10/23 00:00	10/11/23 14:19
880-34315-3	S-6 (2')	Solid	10/10/23 00:00	10/11/23 14:19

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[illegible]

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-34315-1

SDG Number: Lea County, New Mexico

Login Number: 34315

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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 10/16/2023 2:48:55 PM

JOB DESCRIPTION

Raptor West 3 State #2H
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34309-1

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
10/16/2023 2:48:55 PM

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

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Laboratory Job ID: 880-34309-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34309-1
SDG: Lea County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34309-1
SDG: Lea County, New Mexico

Job ID: 880-34309-1

Laboratory: Eurofins Midland

Narrative**Job Narrative
880-34309-1**

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

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

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

Receipt

The samples were received on 10/11/2023 2:19 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 -7.4°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: S-7 (0-1') (880-34309-1) and S-7 (1.5') (880-34309-2).

GC VOA

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-64494 and analytical batch 880-64432 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-34290-A-4-B MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-64568 and analytical batch 880-64693 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34309-1
SDG: Lea County, New Mexico

Client Sample ID: S-7 (0-1')

Lab Sample ID: 880-34309-1

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 15:00	10/12/23 06:34	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/11/23 15:00	10/12/23 06:34	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/11/23 15:00	10/12/23 06:34	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		10/11/23 15:00	10/12/23 06:34	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/11/23 15:00	10/12/23 06:34	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		10/11/23 15:00	10/12/23 06:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	10/11/23 15:00	10/12/23 06:34	1
1,4-Difluorobenzene (Surr)	104		70 - 130	10/11/23 15:00	10/12/23 06:34	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			10/12/23 06:34	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			10/12/23 12:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 12:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 12:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 12:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	10/11/23 15:46	10/12/23 12:02	1
o-Terphenyl	117		70 - 130	10/11/23 15:46	10/12/23 12:02	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	158		5.03		mg/Kg			10/15/23 14:39	1

Client Sample ID: S-7 (1.5')

Lab Sample ID: 880-34309-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 15:00	10/12/23 06:55	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/11/23 15:00	10/12/23 06:55	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/11/23 15:00	10/12/23 06:55	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/11/23 15:00	10/12/23 06:55	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/11/23 15:00	10/12/23 06:55	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/11/23 15:00	10/12/23 06:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	10/11/23 15:00	10/12/23 06:55	1
1,4-Difluorobenzene (Surr)	107		70 - 130	10/11/23 15:00	10/12/23 06:55	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34309-1
SDG: Lea County, New Mexico

Client Sample ID: S-7 (1.5')

Lab Sample ID: 880-34309-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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			10/12/23 06:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			10/12/23 12:24	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	<50.3	U	50.3		mg/Kg		10/11/23 15:46	10/12/23 12:24	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		10/11/23 15:46	10/12/23 12:24	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		10/11/23 15:46	10/12/23 12:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130				10/11/23 15:46	10/12/23 12:24	1
o-Terphenyl	127		70 - 130				10/11/23 15:46	10/12/23 12:24	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	102		5.03		mg/Kg			10/15/23 14:44	1

Surrogate Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34309-1
SDG: Lea 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)
880-34290-A-4-B MS	Matrix Spike	111	98
880-34290-A-4-C MSD	Matrix Spike Duplicate	122	142 S1+
880-34309-1	S-7 (0-1')	104	104
880-34309-2	S-7 (1.5')	103	107
LCS 880-64494/1-A	Lab Control Sample	108	94
LCSD 880-64494/2-A	Lab Control Sample Dup	104	100
MB 880-64332/5-A	Method Blank	108	122
MB 880-64494/5-A	Method Blank	118	129
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)
880-34290-A-4-E MS	Matrix Spike	97	92
880-34290-A-4-F MSD	Matrix Spike Duplicate	97	91
880-34309-1	S-7 (0-1')	110	117
880-34309-2	S-7 (1.5')	119	127
LCS 880-64505/2-A	Lab Control Sample	97	103
LCSD 880-64505/3-A	Lab Control Sample Dup	84	90
MB 880-64505/1-A	Method Blank	96	109
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34309-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64332/5-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64332

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	10/10/23 10:38	10/11/23 12:35	1
1,4-Difluorobenzene (Surr)	122		70 - 130	10/10/23 10:38	10/11/23 12:35	1

Lab Sample ID: MB 880-64494/5-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64494

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/11/23 13:47	10/12/23 00:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/23 13:47	10/12/23 00:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/23 13:47	10/12/23 00:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/11/23 13:47	10/12/23 00:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/23 13:47	10/12/23 00:11	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/11/23 13:47	10/12/23 00:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	10/11/23 13:47	10/12/23 00:11	1
1,4-Difluorobenzene (Surr)	129		70 - 130	10/11/23 13:47	10/12/23 00:11	1

Lab Sample ID: LCS 880-64494/1-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64494

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09030		mg/Kg		90	70 - 130
Toluene	0.100	0.08593		mg/Kg		86	70 - 130
Ethylbenzene	0.100	0.08307		mg/Kg		83	70 - 130
m-Xylene & p-Xylene	0.200	0.1713		mg/Kg		86	70 - 130
o-Xylene	0.100	0.08396		mg/Kg		84	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: LCSD 880-64494/2-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64494

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09034		mg/Kg		90	70 - 130	0	35

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34309-1
SDG: Lea County, New Mexico

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

Lab Sample ID: LCSD 880-64494/2-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64494

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits			
Toluene	0.100	0.08974		mg/Kg		90	70 - 130		4	35
Ethylbenzene	0.100	0.08819		mg/Kg		88	70 - 130		6	35
m-Xylene & p-Xylene	0.200	0.1943		mg/Kg		97	70 - 130		13	35
o-Xylene	0.100	0.09133		mg/Kg		91	70 - 130		8	35

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-34290-A-4-B MS

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64494

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec	
									Limits	
Benzene	<0.00198	U	0.0998	0.08825		mg/Kg		88	70 - 130	
Toluene	<0.00198	U F1	0.0998	0.07919		mg/Kg		79	70 - 130	
Ethylbenzene	<0.00198	U F1	0.0998	0.08069		mg/Kg		81	70 - 130	
m-Xylene & p-Xylene	<0.00396	U	0.200	0.1791		mg/Kg		90	70 - 130	
o-Xylene	<0.00198	U	0.0998	0.08455		mg/Kg		85	70 - 130	

Surrogate	MS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-34290-A-4-C MSD

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 64494

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
									Limits			
Benzene	<0.00198	U	0.100	0.1203		mg/Kg		120	70 - 130		31	35
Toluene	<0.00198	U F1	0.100	0.05846	F1	mg/Kg		58	70 - 130		30	35
Ethylbenzene	<0.00198	U F1	0.100	0.06805	F1	mg/Kg		68	70 - 130		17	35
m-Xylene & p-Xylene	<0.00396	U	0.201	0.2010		mg/Kg		100	70 - 130		12	35
o-Xylene	<0.00198	U	0.100	0.09822		mg/Kg		98	70 - 130		15	35

Surrogate	MSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	122		70 - 130
1,4-Difluorobenzene (Surr)	142	S1+	70 - 130

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

Lab Sample ID: MB 880-64505/1-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64505

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 08:09	1

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34309-1
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-64505/1-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64505

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		10/11/23 15:46	10/12/23 08:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 08:09	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				10/11/23 15:46	10/12/23 08:09	1
o-Terphenyl	109		70 - 130				10/11/23 15:46	10/12/23 08:09	1

Lab Sample ID: LCS 880-64505/2-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64505

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	952.4		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	1000	912.6		mg/Kg		91	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	97		70 - 130				
o-Terphenyl	103		70 - 130				

Lab Sample ID: LCSD 880-64505/3-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64505

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	856.3		mg/Kg		86	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	786.7		mg/Kg		79	70 - 130	15	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	84		70 - 130						
o-Terphenyl	90		70 - 130						

Lab Sample ID: 880-34290-A-4-E MS

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64505

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	994	1158		mg/Kg		113	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	994	889.8		mg/Kg		87	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	97		70 - 130						
o-Terphenyl	92		70 - 130						

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34309-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34290-A-4-F MSD

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 64505

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	994	1187		mg/Kg		116	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	994	893.7		mg/Kg		87	70 - 130	0	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	97		70 - 130								
o-Terphenyl	91		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64568/1-A

Matrix: Solid

Analysis Batch: 64693

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			10/13/23 17:10	1

Lab Sample ID: LCS 880-64568/2-A

Matrix: Solid

Analysis Batch: 64693

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	251.6		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-64568/3-A

Matrix: Solid

Analysis Batch: 64693

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	251.8		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 880-34299-A-11-B MS

Matrix: Solid

Analysis Batch: 64693

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	282	F1	248	583.8	F1	mg/Kg		122	90 - 110

Lab Sample ID: 880-34299-A-11-C MSD

Matrix: Solid

Analysis Batch: 64693

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	282	F1	248	639.2	F1	mg/Kg		144	90 - 110	9	20

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34309-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-64332/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 64432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34309-1	S-7 (0-1')	Total/NA	Solid	8021B	64494
880-34309-2	S-7 (1.5')	Total/NA	Solid	8021B	64494
MB 880-64332/5-A	Method Blank	Total/NA	Solid	8021B	64332
MB 880-64494/5-A	Method Blank	Total/NA	Solid	8021B	64494
LCS 880-64494/1-A	Lab Control Sample	Total/NA	Solid	8021B	64494
LCSD 880-64494/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64494
880-34290-A-4-B MS	Matrix Spike	Total/NA	Solid	8021B	64494
880-34290-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64494

Prep Batch: 64494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34309-1	S-7 (0-1')	Total/NA	Solid	5035	
880-34309-2	S-7 (1.5')	Total/NA	Solid	5035	
MB 880-64494/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64494/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64494/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34290-A-4-B MS	Matrix Spike	Total/NA	Solid	5035	
880-34290-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34309-1	S-7 (0-1')	Total/NA	Solid	Total BTEX	
880-34309-2	S-7 (1.5')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 64505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34309-1	S-7 (0-1')	Total/NA	Solid	8015NM Prep	
880-34309-2	S-7 (1.5')	Total/NA	Solid	8015NM Prep	
MB 880-64505/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-64505/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-64505/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-34290-A-4-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-34290-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34309-1	S-7 (0-1')	Total/NA	Solid	8015B NM	64505
880-34309-2	S-7 (1.5')	Total/NA	Solid	8015B NM	64505
MB 880-64505/1-A	Method Blank	Total/NA	Solid	8015B NM	64505
LCS 880-64505/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	64505
LCSD 880-64505/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	64505
880-34290-A-4-E MS	Matrix Spike	Total/NA	Solid	8015B NM	64505
880-34290-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	64505

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34309-1
SDG: Lea County, New Mexico

GC Semi VOA

Analysis Batch: 64712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34309-1	S-7 (0-1')	Total/NA	Solid	8015 NM	
880-34309-2	S-7 (1.5')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34309-1	S-7 (0-1')	Soluble	Solid	DI Leach	
880-34309-2	S-7 (1.5')	Soluble	Solid	DI Leach	
MB 880-64568/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64568/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64568/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-34299-A-11-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-34299-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 64693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34309-1	S-7 (0-1')	Soluble	Solid	300.0	64568
880-34309-2	S-7 (1.5')	Soluble	Solid	300.0	64568
MB 880-64568/1-A	Method Blank	Soluble	Solid	300.0	64568
LCS 880-64568/2-A	Lab Control Sample	Soluble	Solid	300.0	64568
LCSD 880-64568/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64568
880-34299-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	64568
880-34299-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	64568

Lab Chronicle

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34309-1
SDG: Lea County, New Mexico

Client Sample ID: S-7 (0-1')
Date Collected: 10/10/23 00:00
Date Received: 10/11/23 14:19

Lab Sample ID: 880-34309-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	64494	10/11/23 15:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64432	10/12/23 06:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64600	10/12/23 06:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			64712	10/12/23 12:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	64505	10/11/23 15:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64518	10/12/23 12:02	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	64568	10/12/23 14:13	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64693	10/15/23 14:39	CH	EET MID

Client Sample ID: S-7 (1.5')
Date Collected: 10/10/23 00:00
Date Received: 10/11/23 14:19

Lab Sample ID: 880-34309-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	64494	10/11/23 15:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64432	10/12/23 06:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64600	10/12/23 06:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			64712	10/12/23 12:24	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	64505	10/11/23 15:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64518	10/12/23 12:24	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	64568	10/12/23 14:13	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64693	10/15/23 14:44	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: Raptor West 3 State #2H

Job ID: 880-34309-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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

Method Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34309-1
SDG: Lea 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

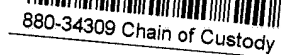
Sample Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34309-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34309-1	S-7 (0-1')	Solid	10/10/23 00:00	10/11/23 14:19
880-34309-2	S-7 (1.5')	Solid	10/10/23 00:00	10/11/23 14:19

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- 11
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- 14

[illegible]

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-34309-1

SDG Number: Lea County, New Mexico

Login Number: 34309

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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

- 1
- 2
- 3
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- 14

ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/16/2023 2:50:18 PM

JOB DESCRIPTION

Raptor West 3 State #2H
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34310-1

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



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

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Laboratory Job ID: 880-34310-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34310-1
SDG: Lea County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34310-1
SDG: Lea County, New Mexico

Job ID: 880-34310-1

Laboratory: Eurofins Midland

Narrative

**Job Narrative
880-34310-1**

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

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

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

Receipt

The samples were received on 10/11/2023 2:19 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 -7.6°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: S-8 (0-1') (880-34310-1) and S-8 (1.5') (880-34310-2).

GC VOA

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-64494 and analytical batch 880-64432 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-34290-A-4-B MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: S-8 (1.5') (880-34310-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: S-8 (1.5') (880-34310-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-64569 and analytical batch 880-64695 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34310-1
SDG: Lea County, New Mexico

Client Sample ID: S-8 (0-1')

Lab Sample ID: 880-34310-1

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 15:00	10/12/23 07:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:00	10/12/23 07:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:00	10/12/23 07:15	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/11/23 15:00	10/12/23 07:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:00	10/12/23 07:15	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/11/23 15:00	10/12/23 07:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	10/11/23 15:00	10/12/23 07:15	1
1,4-Difluorobenzene (Surr)	117		70 - 130	10/11/23 15:00	10/12/23 07:15	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			10/12/23 07:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			10/12/23 12:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		10/11/23 15:46	10/12/23 12:46	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		10/11/23 15:46	10/12/23 12:46	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		10/11/23 15:46	10/12/23 12:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130	10/11/23 15:46	10/12/23 12:46	1
o-Terphenyl	126		70 - 130	10/11/23 15:46	10/12/23 12:46	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	104	F1	4.97		mg/Kg			10/15/23 15:35	1

Client Sample ID: S-8 (1.5')

Lab Sample ID: 880-34310-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 15:00	10/12/23 07:35	1
Toluene	<0.00201	U	0.00201		mg/Kg		10/11/23 15:00	10/12/23 07:35	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/11/23 15:00	10/12/23 07:35	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		10/11/23 15:00	10/12/23 07:35	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/11/23 15:00	10/12/23 07:35	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/11/23 15:00	10/12/23 07:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	304	S1+	70 - 130	10/11/23 15:00	10/12/23 07:35	1
1,4-Difluorobenzene (Surr)	84		70 - 130	10/11/23 15:00	10/12/23 07:35	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34310-1
SDG: Lea County, New Mexico

Client Sample ID: S-8 (1.5')

Lab Sample ID: 880-34310-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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			10/12/23 07:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			10/12/23 13:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		10/11/23 15:46	10/12/23 13:08	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		10/11/23 15:46	10/12/23 13:08	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		10/11/23 15:46	10/12/23 13:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130	10/11/23 15:46	10/12/23 13:08	1
o-Terphenyl	136	S1+	70 - 130	10/11/23 15:46	10/12/23 13:08	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	113		4.98		mg/Kg			10/15/23 15:52	1

Surrogate Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34310-1
SDG: Lea 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)
880-34290-A-4-B MS	Matrix Spike	111	98
880-34290-A-4-C MSD	Matrix Spike Duplicate	122	142 S1+
880-34310-1	S-8 (0-1')	99	117
880-34310-2	S-8 (1.5')	304 S1+	84
LCS 880-64494/1-A	Lab Control Sample	108	94
LCSD 880-64494/2-A	Lab Control Sample Dup	104	100
MB 880-64332/5-A	Method Blank	108	122
MB 880-64494/5-A	Method Blank	118	129
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)
880-34290-A-4-E MS	Matrix Spike	97	92
880-34290-A-4-F MSD	Matrix Spike Duplicate	97	91
880-34310-1	S-8 (0-1')	117	126
880-34310-2	S-8 (1.5')	126	136 S1+
LCS 880-64505/2-A	Lab Control Sample	97	103
LCSD 880-64505/3-A	Lab Control Sample Dup	84	90
MB 880-64505/1-A	Method Blank	96	109
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34310-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64332/5-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64332

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	10/10/23 10:38	10/11/23 12:35	1
1,4-Difluorobenzene (Surr)	122		70 - 130	10/10/23 10:38	10/11/23 12:35	1

Lab Sample ID: MB 880-64494/5-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64494

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/11/23 13:47	10/12/23 00:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/23 13:47	10/12/23 00:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/23 13:47	10/12/23 00:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/11/23 13:47	10/12/23 00:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/23 13:47	10/12/23 00:11	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/11/23 13:47	10/12/23 00:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	10/11/23 13:47	10/12/23 00:11	1
1,4-Difluorobenzene (Surr)	129		70 - 130	10/11/23 13:47	10/12/23 00:11	1

Lab Sample ID: LCS 880-64494/1-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64494

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09030		mg/Kg		90	70 - 130
Toluene	0.100	0.08593		mg/Kg		86	70 - 130
Ethylbenzene	0.100	0.08307		mg/Kg		83	70 - 130
m-Xylene & p-Xylene	0.200	0.1713		mg/Kg		86	70 - 130
o-Xylene	0.100	0.08396		mg/Kg		84	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: LCSD 880-64494/2-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64494

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09034		mg/Kg		90	70 - 130	0	35

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QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34310-1
SDG: Lea County, New Mexico

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

Lab Sample ID: LCSD 880-64494/2-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64494

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits			
Toluene	0.100	0.08974		mg/Kg		90	70 - 130		4	35
Ethylbenzene	0.100	0.08819		mg/Kg		88	70 - 130		6	35
m-Xylene & p-Xylene	0.200	0.1943		mg/Kg		97	70 - 130		13	35
o-Xylene	0.100	0.09133		mg/Kg		91	70 - 130		8	35

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-34290-A-4-B MS

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64494

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec	
									Limits	
Benzene	<0.00198	U	0.0998	0.08825		mg/Kg		88	70 - 130	
Toluene	<0.00198	U F1	0.0998	0.07919		mg/Kg		79	70 - 130	
Ethylbenzene	<0.00198	U F1	0.0998	0.08069		mg/Kg		81	70 - 130	
m-Xylene & p-Xylene	<0.00396	U	0.200	0.1791		mg/Kg		90	70 - 130	
o-Xylene	<0.00198	U	0.0998	0.08455		mg/Kg		85	70 - 130	

Surrogate	MS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-34290-A-4-C MSD

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 64494

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
									Limits			
Benzene	<0.00198	U	0.100	0.1203		mg/Kg		120	70 - 130		31	35
Toluene	<0.00198	U F1	0.100	0.05846	F1	mg/Kg		58	70 - 130		30	35
Ethylbenzene	<0.00198	U F1	0.100	0.06805	F1	mg/Kg		68	70 - 130		17	35
m-Xylene & p-Xylene	<0.00396	U	0.201	0.2010		mg/Kg		100	70 - 130		12	35
o-Xylene	<0.00198	U	0.100	0.09822		mg/Kg		98	70 - 130		15	35

Surrogate	MSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	122		70 - 130
1,4-Difluorobenzene (Surr)	142	S1+	70 - 130

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

Lab Sample ID: MB 880-64505/1-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64505

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 08:09	1

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34310-1
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-64505/1-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64505

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		10/11/23 15:46	10/12/23 08:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 08:09	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				10/11/23 15:46	10/12/23 08:09	1
o-Terphenyl	109		70 - 130				10/11/23 15:46	10/12/23 08:09	1

Lab Sample ID: LCS 880-64505/2-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64505

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	952.4		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	1000	912.6		mg/Kg		91	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	97		70 - 130				
o-Terphenyl	103		70 - 130				

Lab Sample ID: LCSD 880-64505/3-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64505

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	856.3		mg/Kg		86	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	786.7		mg/Kg		79	70 - 130	15	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	84		70 - 130						
o-Terphenyl	90		70 - 130						

Lab Sample ID: 880-34290-A-4-E MS

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64505

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	994	1158		mg/Kg		113	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	994	889.8		mg/Kg		87	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	97		70 - 130						
o-Terphenyl	92		70 - 130						

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34310-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34290-A-4-F MSD

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 64505

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	994	1187		mg/Kg		116	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	994	893.7		mg/Kg		87	70 - 130	0	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	97		70 - 130								
o-Terphenyl	91		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64569/1-A

Matrix: Solid

Analysis Batch: 64695

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			10/15/23 15:18	1

Lab Sample ID: LCS 880-64569/2-A

Matrix: Solid

Analysis Batch: 64695

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	274.9		mg/Kg		110	90 - 110

Lab Sample ID: LCSD 880-64569/3-A

Matrix: Solid

Analysis Batch: 64695

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	273.8		mg/Kg		110	90 - 110	0	20

Lab Sample ID: 880-34310-1 MS

Matrix: Solid

Analysis Batch: 64695

Client Sample ID: S-8 (0-1')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	104	F1	249	391.2	F1	mg/Kg		116	90 - 110

Lab Sample ID: 880-34310-1 MSD

Matrix: Solid

Analysis Batch: 64695

Client Sample ID: S-8 (0-1')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	104	F1	249	390.0	F1	mg/Kg		115	90 - 110	0	20

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34310-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-64332/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 64432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34310-1	S-8 (0-1')	Total/NA	Solid	8021B	64494
880-34310-2	S-8 (1.5')	Total/NA	Solid	8021B	64494
MB 880-64332/5-A	Method Blank	Total/NA	Solid	8021B	64332
MB 880-64494/5-A	Method Blank	Total/NA	Solid	8021B	64494
LCS 880-64494/1-A	Lab Control Sample	Total/NA	Solid	8021B	64494
LCSD 880-64494/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64494
880-34290-A-4-B MS	Matrix Spike	Total/NA	Solid	8021B	64494
880-34290-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64494

Prep Batch: 64494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34310-1	S-8 (0-1')	Total/NA	Solid	5035	
880-34310-2	S-8 (1.5')	Total/NA	Solid	5035	
MB 880-64494/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64494/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64494/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34290-A-4-B MS	Matrix Spike	Total/NA	Solid	5035	
880-34290-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34310-1	S-8 (0-1')	Total/NA	Solid	Total BTEX	
880-34310-2	S-8 (1.5')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 64505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34310-1	S-8 (0-1')	Total/NA	Solid	8015NM Prep	
880-34310-2	S-8 (1.5')	Total/NA	Solid	8015NM Prep	
MB 880-64505/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-64505/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-64505/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-34290-A-4-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-34290-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34310-1	S-8 (0-1')	Total/NA	Solid	8015B NM	64505
880-34310-2	S-8 (1.5')	Total/NA	Solid	8015B NM	64505
MB 880-64505/1-A	Method Blank	Total/NA	Solid	8015B NM	64505
LCS 880-64505/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	64505
LCSD 880-64505/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	64505
880-34290-A-4-E MS	Matrix Spike	Total/NA	Solid	8015B NM	64505
880-34290-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	64505

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34310-1
SDG: Lea County, New Mexico

GC Semi VOA

Analysis Batch: 64713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34310-1	S-8 (0-1')	Total/NA	Solid	8015 NM	
880-34310-2	S-8 (1.5')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34310-1	S-8 (0-1')	Soluble	Solid	DI Leach	
880-34310-2	S-8 (1.5')	Soluble	Solid	DI Leach	
MB 880-64569/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64569/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64569/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-34310-1 MS	S-8 (0-1')	Soluble	Solid	DI Leach	
880-34310-1 MSD	S-8 (0-1')	Soluble	Solid	DI Leach	

Analysis Batch: 64695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34310-1	S-8 (0-1')	Soluble	Solid	300.0	64569
880-34310-2	S-8 (1.5')	Soluble	Solid	300.0	64569
MB 880-64569/1-A	Method Blank	Soluble	Solid	300.0	64569
LCS 880-64569/2-A	Lab Control Sample	Soluble	Solid	300.0	64569
LCSD 880-64569/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64569
880-34310-1 MS	S-8 (0-1')	Soluble	Solid	300.0	64569
880-34310-1 MSD	S-8 (0-1')	Soluble	Solid	300.0	64569

Lab Chronicle

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34310-1
SDG: Lea County, New Mexico

Client Sample ID: S-8 (0-1')
Date Collected: 10/10/23 00:00
Date Received: 10/11/23 14:19

Lab Sample ID: 880-34310-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	64494	10/11/23 15:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64432	10/12/23 07:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64601	10/12/23 07:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			64713	10/12/23 12:46	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	64505	10/11/23 15:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64518	10/12/23 12:46	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	64569	10/12/23 14:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64695	10/15/23 15:35	CH	EET MID

Client Sample ID: S-8 (1.5')
Date Collected: 10/10/23 00:00
Date Received: 10/11/23 14:19

Lab Sample ID: 880-34310-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	64494	10/11/23 15:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64432	10/12/23 07:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64601	10/12/23 07:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			64713	10/12/23 13:08	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	64505	10/11/23 15:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64518	10/12/23 13:08	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	64569	10/12/23 14:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64695	10/15/23 15:52	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: Raptor West 3 State #2H

Job ID: 880-34310-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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Method Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34310-1
SDG: Lea 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: Raptor West 3 State #2H

Job ID: 880-34310-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34310-1	S-8 (0-1')	Solid	10/10/23 00:00	10/11/23 14:19
880-34310-2	S-8 (1.5')	Solid	10/10/23 00:00	10/11/23 14:19

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Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-34310-1

SDG Number: Lea County, New Mexico

Login Number: 34310

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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 10/16/2023 2:54:22 PM

JOB DESCRIPTION

Raptor West 3 State #2H
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34317-1

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



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10/16/2023 2:54:22 PM

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

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Laboratory Job ID: 880-34317-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea 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
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea County, New Mexico

Job ID: 880-34317-1

Laboratory: Eurofins Midland

Narrative**Job Narrative
880-34317-1**

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

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

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

Receipt

The samples were received on 10/11/2023 2:19 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 -7.4°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: H-1 (0-6") (880-34317-1), H-2 (0-6") (880-34317-2), H-3 (0-6") (880-34317-3), H-4 (0-6") (880-34317-4), H-5 (0-6") (880-34317-5), H-6 (0-6") (880-34317-6), H-7 (0-6") (880-34317-7) and H-8 (0-6") (880-34317-8).

GC VOA

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 880-64532 and analytical batch 880-64515 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-64515/5) and (LCS 880-64532/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-34316-A-1-C MS) and (880-34316-A-1-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: H-2 (0-6") (880-34317-2), H-3 (0-6") (880-34317-3), H-4 (0-6") (880-34317-4), H-5 (0-6") (880-34317-5), H-6 (0-6") (880-34317-6) and H-7 (0-6") (880-34317-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: H-8 (0-6") (880-34317-8). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-64515 recovered above the upper control limit for Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28) due to being inadvertently double spiked. Percent recoveries are based on the amount spiked. The associated samples are impacted: (CCV 880-64515/20) and (CCV 880-64515/31).

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-64568 and analytical batch 880-64693 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because

Case Narrative

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea County, New Mexico

Job ID: 880-34317-1 (Continued)

Laboratory: Eurofins Midland (Continued)

the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

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Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34317-1

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		10/11/23 16:59	10/12/23 12:30	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/11/23 16:59	10/12/23 12:30	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/11/23 16:59	10/12/23 12:30	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		10/11/23 16:59	10/12/23 12:30	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/11/23 16:59	10/12/23 12:30	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		10/11/23 16:59	10/12/23 12:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	10/11/23 16:59	10/12/23 12:30	1
1,4-Difluorobenzene (Surr)	92		70 - 130	10/11/23 16:59	10/12/23 12:30	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			10/12/23 12:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			10/12/23 12:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		10/12/23 10:42	10/12/23 12:46	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		10/12/23 10:42	10/12/23 12:46	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		10/12/23 10:42	10/12/23 12:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	129		70 - 130	10/12/23 10:42	10/12/23 12:46	1
o-Terphenyl	121		70 - 130	10/12/23 10:42	10/12/23 12:46	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	87.5		4.96		mg/Kg			10/13/23 18:06	1

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

Lab Sample ID: 880-34317-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 16:59	10/12/23 12:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/23 16:59	10/12/23 12:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/23 16:59	10/12/23 12:51	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/11/23 16:59	10/12/23 12:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/23 16:59	10/12/23 12:51	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/11/23 16:59	10/12/23 12:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	10/11/23 16:59	10/12/23 12:51	1
1,4-Difluorobenzene (Surr)	98		70 - 130	10/11/23 16:59	10/12/23 12:51	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34317-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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			10/12/23 12:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			10/12/23 13:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		10/12/23 10:42	10/12/23 13:08	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		10/12/23 10:42	10/12/23 13:08	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		10/12/23 10:42	10/12/23 13:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	160	S1+	70 - 130				10/12/23 10:42	10/12/23 13:08	1
o-Terphenyl	148	S1+	70 - 130				10/12/23 10:42	10/12/23 13:08	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	77.8		5.00		mg/Kg			10/13/23 18:22	1

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

Lab Sample ID: 880-34317-3

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 16:59	10/12/23 13:11	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/11/23 16:59	10/12/23 13:11	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/11/23 16:59	10/12/23 13:11	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/11/23 16:59	10/12/23 13:11	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/11/23 16:59	10/12/23 13:11	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/11/23 16:59	10/12/23 13:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				10/11/23 16:59	10/12/23 13:11	1
1,4-Difluorobenzene (Surr)	101		70 - 130				10/11/23 16:59	10/12/23 13:11	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			10/12/23 13:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			10/12/23 13:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		10/12/23 10:42	10/12/23 13:30	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		10/12/23 10:42	10/12/23 13:30	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34317-3

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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)	<49.7	U	49.7		mg/Kg		10/12/23 10:42	10/12/23 13:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	132	S1+	70 - 130				10/12/23 10:42	10/12/23 13:30	1
o-Terphenyl	124		70 - 130				10/12/23 10:42	10/12/23 13:30	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	79.4		4.99		mg/Kg			10/13/23 18:27	1

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

Lab Sample ID: 880-34317-4

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		10/11/23 16:59	10/12/23 13:32	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/11/23 16:59	10/12/23 13:32	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/11/23 16:59	10/12/23 13:32	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		10/11/23 16:59	10/12/23 13:32	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/11/23 16:59	10/12/23 13:32	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		10/11/23 16:59	10/12/23 13:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130				10/11/23 16:59	10/12/23 13:32	1
1,4-Difluorobenzene (Surr)	96		70 - 130				10/11/23 16:59	10/12/23 13:32	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			10/12/23 13:32	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			10/12/23 13:52	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		10/12/23 10:42	10/12/23 13:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/12/23 10:42	10/12/23 13:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/12/23 10:42	10/12/23 13:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	133	S1+	70 - 130				10/12/23 10:42	10/12/23 13:52	1
o-Terphenyl	128		70 - 130				10/12/23 10:42	10/12/23 13:52	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	104		5.01		mg/Kg			10/13/23 18:32	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34317-5

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 16:59	10/12/23 13:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/23 16:59	10/12/23 13:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/23 16:59	10/12/23 13:52	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		10/11/23 16:59	10/12/23 13:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/23 16:59	10/12/23 13:52	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		10/11/23 16:59	10/12/23 13:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	10/11/23 16:59	10/12/23 13:52	1
1,4-Difluorobenzene (Surr)	100		70 - 130	10/11/23 16:59	10/12/23 13:52	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			10/12/23 13:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			10/12/23 14:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		10/12/23 10:42	10/12/23 14:14	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		10/12/23 10:42	10/12/23 14:14	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		10/12/23 10:42	10/12/23 14:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	146	S1+	70 - 130	10/12/23 10:42	10/12/23 14:14	1
o-Terphenyl	138	S1+	70 - 130	10/12/23 10:42	10/12/23 14:14	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	91.5		4.97		mg/Kg			10/13/23 18:37	1

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

Lab Sample ID: 880-34317-6

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		10/11/23 16:59	10/12/23 14:13	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/11/23 16:59	10/12/23 14:13	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/11/23 16:59	10/12/23 14:13	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		10/11/23 16:59	10/12/23 14:13	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/11/23 16:59	10/12/23 14:13	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		10/11/23 16:59	10/12/23 14:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	10/11/23 16:59	10/12/23 14:13	1
1,4-Difluorobenzene (Surr)	102		70 - 130	10/11/23 16:59	10/12/23 14:13	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34317-6

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			10/12/23 14:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			10/12/23 14:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		10/12/23 10:42	10/12/23 14:36	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		10/12/23 10:42	10/12/23 14:36	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		10/12/23 10:42	10/12/23 14:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	131	S1+	70 - 130				10/12/23 10:42	10/12/23 14:36	1
o-Terphenyl	123		70 - 130				10/12/23 10:42	10/12/23 14:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	95.9		4.95		mg/Kg			10/13/23 18:52	1

Client Sample ID: H-7 (0-6")

Lab Sample ID: 880-34317-7

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 16:59	10/12/23 14:33	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/11/23 16:59	10/12/23 14:33	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/11/23 16:59	10/12/23 14:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/11/23 16:59	10/12/23 14:33	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/11/23 16:59	10/12/23 14:33	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/11/23 16:59	10/12/23 14:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				10/11/23 16:59	10/12/23 14:33	1
1,4-Difluorobenzene (Surr)	99		70 - 130				10/11/23 16:59	10/12/23 14:33	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			10/12/23 14:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			10/12/23 14:58	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	<50.5	U	50.5		mg/Kg		10/12/23 10:42	10/12/23 14:58	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		10/12/23 10:42	10/12/23 14:58	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea County, New Mexico

Client Sample ID: H-7 (0-6")

Lab Sample ID: 880-34317-7

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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)	<50.5	U	50.5		mg/Kg		10/12/23 10:42	10/12/23 14:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	134	S1+	70 - 130				10/12/23 10:42	10/12/23 14:58	1
o-Terphenyl	127		70 - 130				10/12/23 10:42	10/12/23 14:58	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		4.98		mg/Kg			10/13/23 18:57	1

Client Sample ID: H-8 (0-6")

Lab Sample ID: 880-34317-8

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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		10/11/23 16:59	10/12/23 14:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/23 16:59	10/12/23 14:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/23 16:59	10/12/23 14:54	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/11/23 16:59	10/12/23 14:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/23 16:59	10/12/23 14:54	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/11/23 16:59	10/12/23 14:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				10/11/23 16:59	10/12/23 14:54	1
1,4-Difluorobenzene (Surr)	100		70 - 130				10/11/23 16:59	10/12/23 14:54	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			10/12/23 14:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			10/12/23 15:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		10/12/23 10:42	10/12/23 15:42	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		10/12/23 10:42	10/12/23 15:42	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		10/12/23 10:42	10/12/23 15:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	131	S1+	70 - 130				10/12/23 10:42	10/12/23 15:42	1
o-Terphenyl	124		70 - 130				10/12/23 10:42	10/12/23 15:42	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	113		4.96		mg/Kg			10/15/23 14:50	1

Eurofins Midland

Surrogate Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea 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)
880-34317-1	H-1 (0-6")	97	92
880-34317-1 MS	H-1 (0-6")	121	97
880-34317-1 MSD	H-1 (0-6")	111	91
880-34317-2	H-2 (0-6")	106	98
880-34317-3	H-3 (0-6")	107	101
880-34317-4	H-4 (0-6")	98	96
880-34317-5	H-5 (0-6")	99	100
880-34317-6	H-6 (0-6")	103	102
880-34317-7	H-7 (0-6")	106	99
880-34317-8	H-8 (0-6")	108	100
LCS 880-64507/1-A	Lab Control Sample	103	96
LCSD 880-64507/2-A	Lab Control Sample Dup	116	94
MB 880-64507/5-A	Method Blank	111	123

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)
880-34316-A-1-C MS	Matrix Spike	137 S1+	115
880-34316-A-1-D MSD	Matrix Spike Duplicate	132 S1+	111
880-34317-1	H-1 (0-6")	129	121
880-34317-2	H-2 (0-6")	160 S1+	148 S1+
880-34317-3	H-3 (0-6")	132 S1+	124
880-34317-4	H-4 (0-6")	133 S1+	128
880-34317-5	H-5 (0-6")	146 S1+	138 S1+
880-34317-6	H-6 (0-6")	131 S1+	123
880-34317-7	H-7 (0-6")	134 S1+	127
880-34317-8	H-8 (0-6")	131 S1+	124
LCS 880-64532/2-A	Lab Control Sample	117	136 S1+
LCSD 880-64532/3-A	Lab Control Sample Dup	82	88
MB 880-64532/1-A	Method Blank	196 S1+	182 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64507/5-A

Matrix: Solid

Analysis Batch: 64524

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64507

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/11/23 16:59	10/12/23 12:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/23 16:59	10/12/23 12:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/23 16:59	10/12/23 12:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/11/23 16:59	10/12/23 12:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/23 16:59	10/12/23 12:01	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/11/23 16:59	10/12/23 12:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	10/11/23 16:59	10/12/23 12:01	1
1,4-Difluorobenzene (Surr)	123		70 - 130	10/11/23 16:59	10/12/23 12:01	1

Lab Sample ID: LCS 880-64507/1-A

Matrix: Solid

Analysis Batch: 64524

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64507

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1141		mg/Kg		114	70 - 130
Toluene	0.100	0.09752		mg/Kg		98	70 - 130
Ethylbenzene	0.100	0.1096		mg/Kg		110	70 - 130
m-Xylene & p-Xylene	0.200	0.2067		mg/Kg		103	70 - 130
o-Xylene	0.100	0.09835		mg/Kg		98	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: LCSD 880-64507/2-A

Matrix: Solid

Analysis Batch: 64524

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64507

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1044		mg/Kg		104	70 - 130	9	35
Toluene	0.100	0.09198		mg/Kg		92	70 - 130	6	35
Ethylbenzene	0.100	0.09293		mg/Kg		93	70 - 130	16	35
m-Xylene & p-Xylene	0.200	0.1806		mg/Kg		90	70 - 130	13	35
o-Xylene	0.100	0.08517		mg/Kg		85	70 - 130	14	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 880-34317-1 MS

Matrix: Solid

Analysis Batch: 64524

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

Prep Type: Total/NA

Prep Batch: 64507

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.100	0.1080		mg/Kg		108	70 - 130
Toluene	<0.00202	U	0.100	0.09138		mg/Kg		91	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34317-1 MS

Matrix: Solid

Analysis Batch: 64524

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

Prep Type: Total/NA

Prep Batch: 64507

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.100	0.09338		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1900		mg/Kg		95	70 - 130
o-Xylene	<0.00202	U	0.100	0.09359		mg/Kg		93	70 - 130
Surrogate	MS %Recovery	MS Qualifier	MS Limits						
4-Bromofluorobenzene (Surr)	121		70 - 130						
1,4-Difluorobenzene (Surr)	97		70 - 130						

Lab Sample ID: 880-34317-1 MSD

Matrix: Solid

Analysis Batch: 64524

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

Prep Type: Total/NA

Prep Batch: 64507

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0998	0.09229		mg/Kg		92	70 - 130	16	35
Toluene	<0.00202	U	0.0998	0.08541		mg/Kg		86	70 - 130	7	35
Ethylbenzene	<0.00202	U	0.0998	0.08788		mg/Kg		88	70 - 130	6	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.2014		mg/Kg		101	70 - 130	6	35
o-Xylene	<0.00202	U	0.0998	0.09323		mg/Kg		93	70 - 130	0	35
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	111		70 - 130								
1,4-Difluorobenzene (Surr)	91		70 - 130								

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

Lab Sample ID: MB 880-64532/1-A

Matrix: Solid

Analysis Batch: 64515

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64532

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		10/12/23 08:00	10/12/23 08:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/12/23 08:00	10/12/23 08:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/12/23 08:00	10/12/23 08:09	1
Surrogate	MB %Recovery	MB Qualifier	MB Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	196	S1+	70 - 130				10/12/23 08:00	10/12/23 08:09	1
o-Terphenyl	182	S1+	70 - 130				10/12/23 08:00	10/12/23 08:09	1

Lab Sample ID: LCS 880-64532/2-A

Matrix: Solid

Analysis Batch: 64515

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64532

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	843.0		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	1000	878.5		mg/Kg		88	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea County, New Mexico

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

Lab Sample ID: LCS 880-64532/2-A
Matrix: Solid
Analysis Batch: 64515

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 64532

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	117		70 - 130
o-Terphenyl	136	S1+	70 - 130

Lab Sample ID: LCSD 880-64532/3-A
Matrix: Solid
Analysis Batch: 64515

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 64532

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	798.2		mg/Kg		80	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	1000	772.7		mg/Kg		77	70 - 130	13	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	82		70 - 130
o-Terphenyl	88		70 - 130

Lab Sample ID: 880-34316-A-1-C MS
Matrix: Solid
Analysis Batch: 64515

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 64532

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	991	946.5		mg/Kg		94	70 - 130		
Diesel Range Organics (Over C10-C28)	60.5		991	1320		mg/Kg		127	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	137	S1+	70 - 130
o-Terphenyl	115		70 - 130

Lab Sample ID: 880-34316-A-1-D MSD
Matrix: Solid
Analysis Batch: 64515

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 64532

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	991	919.0		mg/Kg		91	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	60.5		991	1278		mg/Kg		123	70 - 130	3	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	132	S1+	70 - 130
o-Terphenyl	111		70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea County, New Mexico

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64568/1-A

Matrix: Solid

Analysis Batch: 64693

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			10/13/23 17:10	1

Lab Sample ID: LCS 880-64568/2-A

Matrix: Solid

Analysis Batch: 64693

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	251.6		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-64568/3-A

Matrix: Solid

Analysis Batch: 64693

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	251.8		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 880-34299-A-11-B MS

Matrix: Solid

Analysis Batch: 64693

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	282	F1	248	583.8	F1	mg/Kg		122	90 - 110

Lab Sample ID: 880-34299-A-11-C MSD

Matrix: Solid

Analysis Batch: 64693

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	282	F1	248	639.2	F1	mg/Kg		144	90 - 110	9	20

Lab Sample ID: MB 880-64571/1-A

Matrix: Solid

Analysis Batch: 64698

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			10/13/23 17:23	1

Lab Sample ID: LCS 880-64571/2-A

Matrix: Solid

Analysis Batch: 64698

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	233.3		mg/Kg		93	90 - 110

Lab Sample ID: LCSD 880-64571/3-A

Matrix: Solid

Analysis Batch: 64698

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	233.6		mg/Kg		93	90 - 110	0	20

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QC Sample Results

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea County, New Mexico

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-34317-1 MS

Matrix: Solid

Analysis Batch: 64698

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

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	87.5		248	336.9		mg/Kg		101	90 - 110

Lab Sample ID: 880-34317-1 MSD

Matrix: Solid

Analysis Batch: 64698

Client Sample ID: H-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	87.5		248	342.7		mg/Kg		103	90 - 110	2	20

QC Association Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34317-1	H-1 (0-6")	Total/NA	Solid	5035	
880-34317-2	H-2 (0-6")	Total/NA	Solid	5035	
880-34317-3	H-3 (0-6")	Total/NA	Solid	5035	
880-34317-4	H-4 (0-6")	Total/NA	Solid	5035	
880-34317-5	H-5 (0-6")	Total/NA	Solid	5035	
880-34317-6	H-6 (0-6")	Total/NA	Solid	5035	
880-34317-7	H-7 (0-6")	Total/NA	Solid	5035	
880-34317-8	H-8 (0-6")	Total/NA	Solid	5035	
MB 880-64507/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64507/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64507/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34317-1 MS	H-1 (0-6")	Total/NA	Solid	5035	
880-34317-1 MSD	H-1 (0-6")	Total/NA	Solid	5035	

Analysis Batch: 64524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34317-1	H-1 (0-6")	Total/NA	Solid	8021B	64507
880-34317-2	H-2 (0-6")	Total/NA	Solid	8021B	64507
880-34317-3	H-3 (0-6")	Total/NA	Solid	8021B	64507
880-34317-4	H-4 (0-6")	Total/NA	Solid	8021B	64507
880-34317-5	H-5 (0-6")	Total/NA	Solid	8021B	64507
880-34317-6	H-6 (0-6")	Total/NA	Solid	8021B	64507
880-34317-7	H-7 (0-6")	Total/NA	Solid	8021B	64507
880-34317-8	H-8 (0-6")	Total/NA	Solid	8021B	64507
MB 880-64507/5-A	Method Blank	Total/NA	Solid	8021B	64507
LCS 880-64507/1-A	Lab Control Sample	Total/NA	Solid	8021B	64507
LCSD 880-64507/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64507
880-34317-1 MS	H-1 (0-6")	Total/NA	Solid	8021B	64507
880-34317-1 MSD	H-1 (0-6")	Total/NA	Solid	8021B	64507

Analysis Batch: 64669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34317-1	H-1 (0-6")	Total/NA	Solid	Total BTEX	
880-34317-2	H-2 (0-6")	Total/NA	Solid	Total BTEX	
880-34317-3	H-3 (0-6")	Total/NA	Solid	Total BTEX	
880-34317-4	H-4 (0-6")	Total/NA	Solid	Total BTEX	
880-34317-5	H-5 (0-6")	Total/NA	Solid	Total BTEX	
880-34317-6	H-6 (0-6")	Total/NA	Solid	Total BTEX	
880-34317-7	H-7 (0-6")	Total/NA	Solid	Total BTEX	
880-34317-8	H-8 (0-6")	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 64515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34317-1	H-1 (0-6")	Total/NA	Solid	8015B NM	64532
880-34317-2	H-2 (0-6")	Total/NA	Solid	8015B NM	64532
880-34317-3	H-3 (0-6")	Total/NA	Solid	8015B NM	64532
880-34317-4	H-4 (0-6")	Total/NA	Solid	8015B NM	64532
880-34317-5	H-5 (0-6")	Total/NA	Solid	8015B NM	64532
880-34317-6	H-6 (0-6")	Total/NA	Solid	8015B NM	64532

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea County, New Mexico

GC Semi VOA (Continued)

Analysis Batch: 64515 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34317-7	H-7 (0-6")	Total/NA	Solid	8015B NM	64532
880-34317-8	H-8 (0-6")	Total/NA	Solid	8015B NM	64532
MB 880-64532/1-A	Method Blank	Total/NA	Solid	8015B NM	64532
LCS 880-64532/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	64532
LCSD 880-64532/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	64532
880-34316-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	64532
880-34316-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	64532

Prep Batch: 64532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34317-1	H-1 (0-6")	Total/NA	Solid	8015NM Prep	
880-34317-2	H-2 (0-6")	Total/NA	Solid	8015NM Prep	
880-34317-3	H-3 (0-6")	Total/NA	Solid	8015NM Prep	
880-34317-4	H-4 (0-6")	Total/NA	Solid	8015NM Prep	
880-34317-5	H-5 (0-6")	Total/NA	Solid	8015NM Prep	
880-34317-6	H-6 (0-6")	Total/NA	Solid	8015NM Prep	
880-34317-7	H-7 (0-6")	Total/NA	Solid	8015NM Prep	
880-34317-8	H-8 (0-6")	Total/NA	Solid	8015NM Prep	
MB 880-64532/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-64532/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-64532/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-34316-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-34316-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34317-1	H-1 (0-6")	Total/NA	Solid	8015 NM	
880-34317-2	H-2 (0-6")	Total/NA	Solid	8015 NM	
880-34317-3	H-3 (0-6")	Total/NA	Solid	8015 NM	
880-34317-4	H-4 (0-6")	Total/NA	Solid	8015 NM	
880-34317-5	H-5 (0-6")	Total/NA	Solid	8015 NM	
880-34317-6	H-6 (0-6")	Total/NA	Solid	8015 NM	
880-34317-7	H-7 (0-6")	Total/NA	Solid	8015 NM	
880-34317-8	H-8 (0-6")	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34317-8	H-8 (0-6")	Soluble	Solid	DI Leach	
MB 880-64568/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64568/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64568/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-34299-A-11-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-34299-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 64571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34317-1	H-1 (0-6")	Soluble	Solid	DI Leach	
880-34317-2	H-2 (0-6")	Soluble	Solid	DI Leach	
880-34317-3	H-3 (0-6")	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea County, New Mexico

HPLC/IC (Continued)

Leach Batch: 64571 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34317-4	H-4 (0-6")	Soluble	Solid	DI Leach	
880-34317-5	H-5 (0-6")	Soluble	Solid	DI Leach	
880-34317-6	H-6 (0-6")	Soluble	Solid	DI Leach	
880-34317-7	H-7 (0-6")	Soluble	Solid	DI Leach	
MB 880-64571/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64571/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64571/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-34317-1 MS	H-1 (0-6")	Soluble	Solid	DI Leach	
880-34317-1 MSD	H-1 (0-6")	Soluble	Solid	DI Leach	

Analysis Batch: 64693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34317-8	H-8 (0-6")	Soluble	Solid	300.0	64568
MB 880-64568/1-A	Method Blank	Soluble	Solid	300.0	64568
LCS 880-64568/2-A	Lab Control Sample	Soluble	Solid	300.0	64568
LCSD 880-64568/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64568
880-34299-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	64568
880-34299-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	64568

Analysis Batch: 64698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34317-1	H-1 (0-6")	Soluble	Solid	300.0	64571
880-34317-2	H-2 (0-6")	Soluble	Solid	300.0	64571
880-34317-3	H-3 (0-6")	Soluble	Solid	300.0	64571
880-34317-4	H-4 (0-6")	Soluble	Solid	300.0	64571
880-34317-5	H-5 (0-6")	Soluble	Solid	300.0	64571
880-34317-6	H-6 (0-6")	Soluble	Solid	300.0	64571
880-34317-7	H-7 (0-6")	Soluble	Solid	300.0	64571
MB 880-64571/1-A	Method Blank	Soluble	Solid	300.0	64571
LCS 880-64571/2-A	Lab Control Sample	Soluble	Solid	300.0	64571
LCSD 880-64571/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64571
880-34317-1 MS	H-1 (0-6")	Soluble	Solid	300.0	64571
880-34317-1 MSD	H-1 (0-6")	Soluble	Solid	300.0	64571

Lab Chronicle

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34317-1

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	64507	10/11/23 16:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64524	10/12/23 12:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64669	10/12/23 12:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			64657	10/12/23 12:46	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	64532	10/12/23 10:42	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64515	10/12/23 12:46	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	64571	10/12/23 14:18	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64698	10/13/23 18:06	CH	EET MID

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

Lab Sample ID: 880-34317-2

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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	64507	10/11/23 16:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64524	10/12/23 12:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64669	10/12/23 12:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			64657	10/12/23 13:08	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	64532	10/12/23 10:42	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64515	10/12/23 13:08	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	64571	10/12/23 14:18	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64698	10/13/23 18:22	CH	EET MID

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

Lab Sample ID: 880-34317-3

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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	64507	10/11/23 16:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64524	10/12/23 13:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64669	10/12/23 13:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			64657	10/12/23 13:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	64532	10/12/23 10:42	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64515	10/12/23 13:30	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	64571	10/12/23 14:18	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64698	10/13/23 18:27	CH	EET MID

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

Lab Sample ID: 880-34317-4

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	64507	10/11/23 16:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64524	10/12/23 13:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64669	10/12/23 13:32	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34317-4

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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			64657	10/12/23 13:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	64532	10/12/23 10:42	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64515	10/12/23 13:52	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	64571	10/12/23 14:18	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64698	10/13/23 18:32	CH	EET MID

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

Lab Sample ID: 880-34317-5

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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	64507	10/11/23 16:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64524	10/12/23 13:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64669	10/12/23 13:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			64657	10/12/23 14:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	64532	10/12/23 10:42	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64515	10/12/23 14:14	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	64571	10/12/23 14:18	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64698	10/13/23 18:37	CH	EET MID

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

Lab Sample ID: 880-34317-6

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	64507	10/11/23 16:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64524	10/12/23 14:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64669	10/12/23 14:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			64657	10/12/23 14:36	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	64532	10/12/23 10:42	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64515	10/12/23 14:36	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	64571	10/12/23 14:18	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64698	10/13/23 18:52	CH	EET MID

Client Sample ID: H-7 (0-6")

Lab Sample ID: 880-34317-7

Date Collected: 10/10/23 00:00

Matrix: Solid

Date Received: 10/11/23 14:19

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	64507	10/11/23 16:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64524	10/12/23 14:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64669	10/12/23 14:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			64657	10/12/23 14:58	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	64532	10/12/23 10:42	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64515	10/12/23 14:58	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea County, New Mexico

Client Sample ID: H-7 (0-6")
Date Collected: 10/10/23 00:00
Date Received: 10/11/23 14:19

Lab Sample ID: 880-34317-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	64571	10/12/23 14:18	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64698	10/13/23 18:57	CH	EET MID

Client Sample ID: H-8 (0-6")
Date Collected: 10/10/23 00:00
Date Received: 10/11/23 14:19

Lab Sample ID: 880-34317-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	64507	10/11/23 16:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64524	10/12/23 14:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64669	10/12/23 14:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			64657	10/12/23 15:42	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	64532	10/12/23 10:42	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64515	10/12/23 15:42	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	64568	10/12/23 14:13	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64693	10/15/23 14:50	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: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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

Method Summary

Client: Carmona Resources
Project/Site: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea 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: Raptor West 3 State #2H

Job ID: 880-34317-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34317-1	H-1 (0-6")	Solid	10/10/23 00:00	10/11/23 14:19
880-34317-2	H-2 (0-6")	Solid	10/10/23 00:00	10/11/23 14:19
880-34317-3	H-3 (0-6")	Solid	10/10/23 00:00	10/11/23 14:19
880-34317-4	H-4 (0-6")	Solid	10/10/23 00:00	10/11/23 14:19
880-34317-5	H-5 (0-6")	Solid	10/10/23 00:00	10/11/23 14:19
880-34317-6	H-6 (0-6")	Solid	10/10/23 00:00	10/11/23 14:19
880-34317-7	H-7 (0-6")	Solid	10/10/23 00:00	10/11/23 14:19
880-34317-8	H-8 (0-6")	Solid	10/10/23 00:00	10/11/23 14:19

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



7 4 0 0 C 1 S 1

W



10/16/2023

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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/PST	☐ PRP ☐ Brownfields ☐ RC ☐ perfund ☐
State of Project:	
Reporting Level II	☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐
Deliverables EDD	☐ ADaPT ☐ Other

Project Name		Raptor West 3 State #2H		Turn Around		ANALYSIS REQUEST														Preservative Codes									
Project Number		2154		☒ Routine ☐ Rush		Pres. Code																None NO DI Water H ₂ O							
Project Location		Lea County New Mexico		Due Date		5 day																		Cool Cool MeOH Me					
Sampler's Name		CCM																						HCL HC HNO ₃ HN					
PO #:																								H ₂ SO ₄ H ₂ NaOH Na					
SAMPLE RECEIPT		Temp Blank		Yes ☒ No ☐		Wet Ice		Yes ☒ No ☐																		H ₃ PO ₄ HP			
Received Intact:		Yes ☒ No ☐		Thermometer ID																						NaHSO ₄ NABIS			
Cooler Custody Seals		Yes ☐ No ☒ N/A		Correction Factor																						Na ₂ S ₂ O ₃ NaSO ₃			
Sample Custody Seals		Yes ☐ No ☒ N/A		Temperature Reading																						Zn Acetate+NaOH Zn			
Total Containers				Corrected Temperature																						NaOH+Ascorbic Acid SAPC			
Sample Identification		Date		Time		Soil		Water		Grab/Comp		# of Cont																Sample Comments	
H-1 (0-6")		10/10/2023				X				G		1		X X X															
H-2 (0-6")		10/10/2023				X				G		1		X X X															
H-3 (0-6")		10/10/2023				X				G		1		X X X															
H-4 (0-6")		10/10/2023				X				G		1		X X X															
H-5 (0-6")		10/10/2023				X				G		1		X X X															
H-6 (0-6")		10/10/2023				X				G		1		X X X															
H-7 (0-6")		10/10/2023				X				G		1		X X X															
H-8 (0-6")		10/10/2023				X				G		1		X X X															

Comments Email results to Mike Carmona mcarmona@carmonaresources.com, Conner Moehring cmoehring@carmonaresources.com, Clint Merritt MerrittC@carmonaresources.com			
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Relinquished by (Signature)		Date/Time		Received by (Signature)		Date/Time	
		10/11/23					
		10/19					

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Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-34317-1

SDG Number: Lea County, New Mexico

Login Number: 34317

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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	

APPENDIX F

CARMONA RESOURCES



Soil Map—Lea County, New Mexico



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

11/2/2023
Page 1 of 3

Soil Map—Lea County, New Mexico

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lea County, New Mexico

Survey Area Data: Version 20, Sep 6, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
TE	Tonuco fine sand, hummocky	1.5	25.1%
TF	Tonuco loamy fine sand, 0 to 3 percent slopes	4.6	74.9%
Totals for Area of Interest		6.1	100.0%

Map Unit Description: Tonuco fine sand, hummocky---Lea County, New Mexico

Lea County, New Mexico

TE—Tonuco fine sand, hummocky

Map Unit Setting

National map unit symbol: dmrq

Elevation: 3,000 to 4,400 feet

Mean annual precipitation: 10 to 13 inches

Mean annual air temperature: 59 to 62 degrees F

Frost-free period: 190 to 205 days

Farmland classification: Not prime farmland

Map Unit Composition

Tonuco and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tonuco

Setting

Landform: Plains, ridges

Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Rise

Down-slope shape: Linear, convex

Across-slope shape: Linear

Parent material: Eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 12 inches: fine sand

AC - 12 to 17 inches: loamy fine sand

Bkm - 17 to 27 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: 6 to 20 inches to petrocalcic

Drainage class: Excessively drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 2 percent

Gypsum, maximum content: 1 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 2.0

Available water supply, 0 to 60 inches: Very low (about 1.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Map Unit Description: Tonuco fine sand, hummocky---Lea County, New Mexico

Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: R077DY046TX - Sandy 12-17" PZ
Hydric soil rating: No

Minor Components

Simona

Percent of map unit: 5 percent
Ecological site: R070BD002NM - Shallow Sandy
Hydric soil rating: No

Cacique

Percent of map unit: 3 percent
Ecological site: R070BD004NM - Sandy
Hydric soil rating: No

Maljamar

Percent of map unit: 3 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Dune land

Percent of map unit: 2 percent
Hydric soil rating: No

Palomas

Percent of map unit: 2 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Data Source Information

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 20, Sep 6, 2023

Map Unit Description: Tonuco loamy fine sand, 0 to 3 percent slopes---Lea County, New Mexico

Lea County, New Mexico

TF—Tonuco loamy fine sand, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2tw3c

Elevation: 3,280 to 4,460 feet

Mean annual precipitation: 10 to 16 inches

Mean annual air temperature: 59 to 64 degrees F

Frost-free period: 180 to 220 days

Farmland classification: Not prime farmland

Map Unit Composition

Tonuco and similar soils: 70 percent

Minor components: 30 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tonuco

Setting

Landform: Ridges, plains

Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Rise

Down-slope shape: Convex, linear

Across-slope shape: Linear

Parent material: Sandy eolian deposits

Typical profile

A - 0 to 12 inches: loamy fine sand

Bw - 12 to 17 inches: loamy sand

Bkkm - 17 to 39 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: 12 to 20 inches to petrocalcic

Drainage class: Excessively drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 2 percent

Gypsum, maximum content: 1 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 2.0

Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Map Unit Description: Tonuco loamy fine sand, 0 to 3 percent slopes---Lea County, New Mexico

Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: R077DY048TX - Shallow 12-17" PZ
Hydric soil rating: No

Minor Components

Simona

Percent of map unit: 15 percent
Landform: Ridges, plains
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Ecological site: R070BD002NM - Shallow Sandy
Hydric soil rating: No

Berino

Percent of map unit: 10 percent
Landform: Ridges, plains
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Cacique

Percent of map unit: 5 percent
Landform: Ridges, plains
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Ecological site: R070BD004NM - Sandy
Hydric soil rating: No

Data Source Information

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 20, Sep 6, 2023

NMSLO Seed Mix**Loamy (L)****LOAMY (L) SITES SEED MIXTURE:**

COMMON NAME	VARIETY	APPLICATION RATE (PLS/Acre)	DRILL BOX
Grasses:			
Black grama	VNS, Southern	1.0	D
Blue grama	Lovington	1.0	D
Sideoats grama	Vaughn, El Reno	4.0	F
Sand dropseed	VNS, Southern	2.0	S
Alkali sacaton	VNS, Southern	1.0	
Little bluestem	Cimarron, Pastura	1.5	F
Forbs:			
Firewheel (<i>Gaillardia</i>)	VNS, Southern	1.0	D
Shrubs:			
Fourwing saltbush	Marana, Santa Rita	1.0	D
Common winterfat	VNS, Southern	0.5	F
Total PLS/acre		18.0	

S = Small seed drill box, D = Standard seed drill box, F = Fluffy seed drill box

VNS = Variety Not Stated, PLS = Pure Live Seed

- Seed mixes should be provided in bags separating seed types into the three categories: small (S), standard (D) and fluffy (F).
- VNS, Southern – Seed should be from a southern latitude collection of this species.
- Double seed application rate for broadcast or hydroseeding.
- If one species is not available, contact the SLO for an approved substitute; alternatively the SLO may require other species proportionately increased.
- Additional information on these seed species can be found on the USDA Plants Database website at <http://plants.usda.gov>.



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 282593

CONDITIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 282593
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Remediation plan is approved as written. Marathon has until May 21, 2024 to submit to OCD its appropriate or final remediation closure report.	2/21/2024