CARMONA RESOURCES

SITE INFORMATION

Closure Report
Tar Heel 19-18-7 Federal Com 5H
Incident ID: nAPP2424334807
Eddy County, New Mexico
Unit N Sec 29 T26S R30E
32.006178°, -103.907038°

Drilling Mud/Fluid Release
Point of Release: Dump trailer seal failed while driving
Release Date: 08.30.2024
Volume Released: 72 Barrels of Drilling Mud/Fluid
Volume Recovered: 72 Barrels of Drilling Mud/Fluid

CARMONA RESOURCES

Prepared for:
Cimarex Energy Co.
6001 Deauville Blvd.
Suite 300N
Midland, Texas 79706

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

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

CARMONA RESOURCES

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

CARMONA RESOURCES

March 20, 2025

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

Re: Closure Report
Tar Heel 19-18-7 Federal Com 5H (8.30.2024)
Incident ID: nAPP2424334807
Cimarex Energy Co.
Site Location: Unit N, S29, T26S, R30E
(Lat 32.006178º, Long -103.907038º)
Eddy County, New Mexico

Mr. Bratcher:

On behalf of Cimarex Energy Co. (Cimarex), Carmona Resources, LLC has prepared this letter to document site assessment and remediation activities for the Tar Heel 19-18-7 Federal Com 5H release. The site is located at 32.006178º, -103.907038º within Unit N, S29, T26S, R30E, in Eddy County, New Mexico (Figures 1 and 2).

1.0 Site Information and Background

Based on the initial C-141 obtained from the New Mexico Oil Conservation Division (NMOCD), the release was discovered on August 30, 2024, due to the seal failing on an end dump trailer filled with oil-based drill cuttings and spilling on a roadway. It resulted in approximately seventy-two (72) barrels of drilling mud/fluid being released with approximately seventy-two (72) barrels of drilling mud/fluid recovered. The spill boundaries are shown in Figure 3. The initial C-141 form is attached in Appendix C.

2.0 Site Characterization and Groundwater

The site is located within a medium karst area. Based on a review of the New Mexico Office of State Engineers and USGS databases, there is one known water source within a 0.50-mile radius of the location. The nearest water source is in Texas, approximately 0.45 miles South of the site at GPS 31.999942°, -103.899683° and was drilled in 2023. The well has a reported depth to groundwater of 117.3 feet below the ground surface (ft bgs). A copy of the 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 and remediating 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.

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4.0 Site Assessment Activities

Initial Assessment

On December 18, 2025, Carmona Resources personnel performed site assessment activities 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 installed to total depths ranging from surface to 1" bgs inside and surrounding the release area. See Figure 3 for the sample locations. For chemical analysis, the soil samples were collected and placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins Labs 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.

Vertical Delineation

Vertical delineation was achieved for all areas except for S-6 and S-8 due to dense geological formations along the roadway. Refer to Table 1.

Horizontal Delineation

Horizontal delineation was achieved in the areas of H-1 through H-8. Refer to Table 1.

Variance

Background samples collected from the East and West ends of the spill area confirmed a naturally high presence of chlorides along the roadway. Based on these findings, it was concluded that the excavation would be solely focused within the areas of S-6 and S-8 until TPH concentrations are below 100 mg/kg. The email correspondence requesting the variance can be found in Appendix C. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix E. Refer to Table 1 for the Background Sample results. See Figure 3 for the sample locations.

5.0 Remediation Activities

On March 13, 2025, Carmona Resources personnel were onsite to guide the remediation activities and collect confirmation samples. Before collecting confirmation samples, the NMOCD division office was notified via NMOCD portal on March 11, 2025, per Subsection D of 19.15.29.12 NMAC. See Appendix C. The areas of S-6 and S-8 were excavated to a depth of 2" - 3" bgs to ensure the removal of all impacted material. Due to the extent of the remediation, the utilization of a grab sample plan was applied per 19.15.29.12.D.1.B NMAC. The email correspondence requesting the variance can be found in Appendix C. A total of eight (8) confirmation grab samples (CS-1 through CS-8) were collected to ensure the proper removal of the contaminated soils. All collected samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B, and Chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix E. The excavation depths and confirmation sample locations are shown in Figure 4.

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

Approximately 1,580 square feet of contamination was remediated, resulting in 20 cubic yards of material excavated and transported offsite for proper disposal.

CARMONA RESOURCES

6.0 Conclusions

Based on the assessment and analytical data from the remediation, no further actions are required at the site. Cimarex formally requests the closure of the spill. If you have any questions regarding this report or need additional information, please contact us at 432-813-8988.

Sincerely,
Carmona Resources, LLC

Ashton Thielke
Environmental Manager

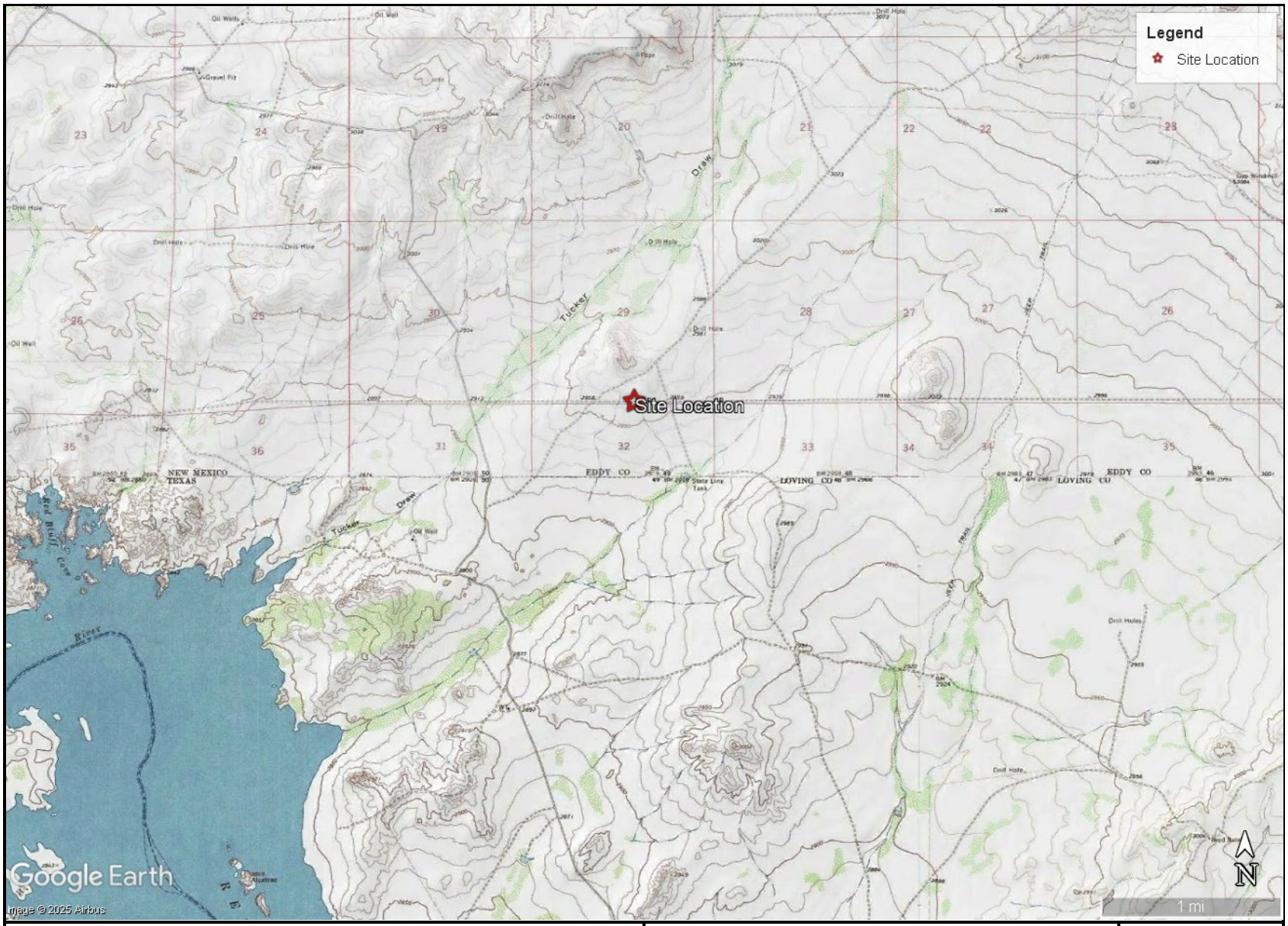
Gilbert Priego
Project Manager

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

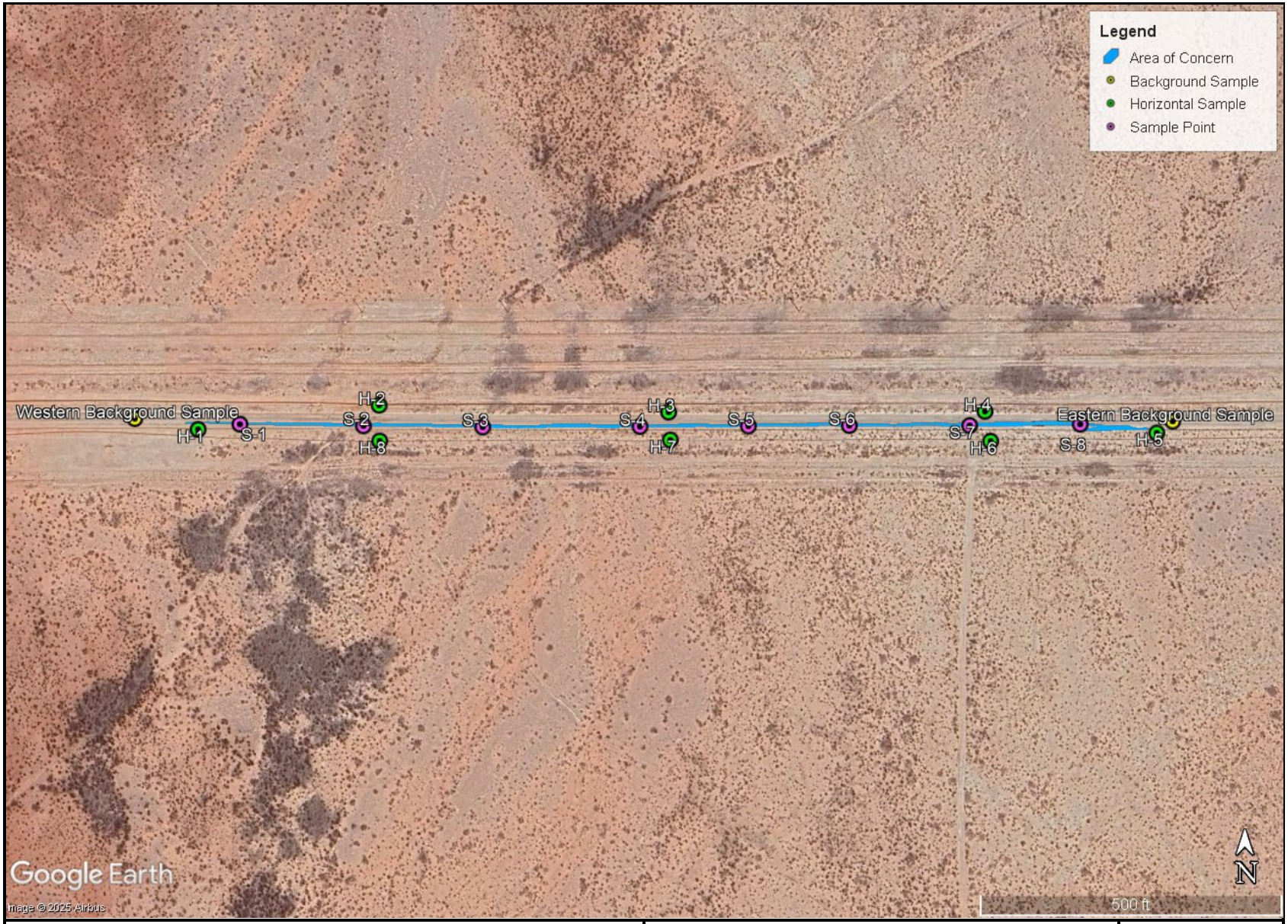
FIGURES

CARMONA RESOURCES

OVERVIEW MAP CIMAREX ENERGY CO. TAR HEEL 19-18-7 FEDERAL COM 5H (8.30.2024) EDDY COUNTY, NEW MEXICO 32.006178°, -103.907038 °	CARMONA RESOURCES	FIGURE 1



TOPOGRAPHIC MAP CIMAREX ENERGY CO. TAR HEEL 19-18-7 FEDERAL COM 5H (8.30.2024) EDDY COUNTY, NEW MEXICO 32.006178°, -103.907038 °	CARMONA RESOURCES	FIGURE 2



SAMPLE LOCATION MAP CIMAREX ENERGY CO. TAR HEEL 19-18-7 FEDERAL COM 5H (8.30.2024) EDDY COUNTY, NEW MEXICO 32.006178°, -103.907038 °	CARMONA RESOURCES	FIGURE 3

EXCAVATION DEPTH MAP CIMAREX ENERGY CO. TAR HEEL 19-18-7 FEDERAL COM 5H (8.30.2024) EDDY COUNTY, NEW MEXICO 32.006178°, -103.907038 °	CARMONA RESOURCES	FIGURE 4

APPENDIX A

CARMONA RESOURCES

Table 1
Cimarex Energy Co. of Colorado
Tar Heel 19-18-7 Federeal Com 5H (8.30.2024)
Eddy County, New Mexico

Sample ID	Date	Depth (in)	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	12/18/2024	0-1"	<50.1	<50.1	<50.1	<50.1	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,080
S-2	12/18/2024	0-1"	<48.3	<48.3	<48.3	<48.3	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	2,180
S-3	12/18/2024	0-1"	<48.4	<48.4	<48.4	<48.4	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	1,140
S-4	12/18/2024	0-1"	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	1,230
S-5	12/18/2024	0-1"	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	530
S-6	12/18/2024	0-1"	<49.8	**365**	<49.8	**365**	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,830
S-7	12/18/2024	0-1"	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	1,870
S-8	12/18/2024	0-1"	<50.0	**1,130**	<50.0	**1,130**	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	1,930
H-1	12/18/2024	0-1"	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	96.8
H-2	12/18/2024	0-1"	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	37.7
H-3	12/18/2024	0-1"	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	28.0
H-4	12/18/2024	0-1"	<49.7	<49.7	<49.7	<49.7	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	32.4
H-5	12/18/2024	0-1"	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	40.7
H-6	12/18/2024	0-1"	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	21.7
H-7	12/18/2024	0-1"	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	110
H-8	12/18/2024	0-1"	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	50.2
Eastern Background	1/15/2025	0-1"	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,760
Western Background	1/15/2025	0-1"	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	1,470
Regulatory Criteria [A]						100 mg/kg	10 mg/kg				50 mg/kg	-

(-) Not Analyzed
[A] – Table 1 - 19.15.29 NMAC
mg/kg - milligram per kilogram
TPH - Total Petroleum Hydrocarbons
in - Inch
(S) Sample Point
(H) Horizontal Sample
Removed

Table 2
Cimarex Energy Co. of Colorado
Tar Heel 19-18-7 Federeal Com 5H (8.30.2024)
Eddy County, New Mexico

Sample ID	Date	Depth (in)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	Total						
CS-1	3/13/2025	2"-3"	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00398	288
CS-2	3/13/2025	2"-3"	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00202	<0.00403	1250
CS-3	3/13/2025	2"-3"	<49.7	<49.7	<49.7	<49.7	<0.00200	<0.00200	<0.00200	<0.00200	<0.00401	2650
CS-4	3/13/2025	2"-3"	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00399	2130
CS-5	3/13/2025	2"-3"	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00201	<0.00402	953
CS-6	3/13/2025	2"-3"	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00400	673
CS-7	3/13/2025	2"-3"	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	0.00310	<0.00398	1880
CS-8	3/13/2025	2"-3"	<49.8	97.8	<49.8	97.8	<0.00201	0.00573	<0.00201	0.00283	0.00856	1940
Regulatory Criteria [A]						100 mg/kg	10 mg/kg				50 mg/kg	-

(-) Not Analyzed
[A] – Table 1 - 19.15.29 NMAC
mg/kg - milligram per kilogram
TPH - Total Petroleum Hydrocarbons
in - Inch
(CS) - Confirmation Sample

APPENDIX B

CARMONA RESOURCES

PHOTOGRAPHIC LOG

Cimarex Energy Co.

Photograph No. 1

Facility: Tar Heel 19-18-7 Federal Com 5H

County: Eddy County, New Mexico

Description:
View East, area of CS-1 through CS-4.

Photograph No. 2

Facility: Tar Heel 19-18-7 Federal Com 5H

County: Eddy County, New Mexico

Description:
View West, area of CS-1 through CS-4.

Photograph No. 3

Facility: Tar Heel 19-18-7 Federal Com 5H

County: Eddy County, New Mexico

Description:
View East, area of CS-5 through CS-8.

CARMONA RESOURCES

PHOTOGRAPHIC LOG

Cimarex Energy Co.

Photograph No. 4

Facility: Tar Heel 19-18-7 Federal Com 5H

County: Eddy County, New Mexico

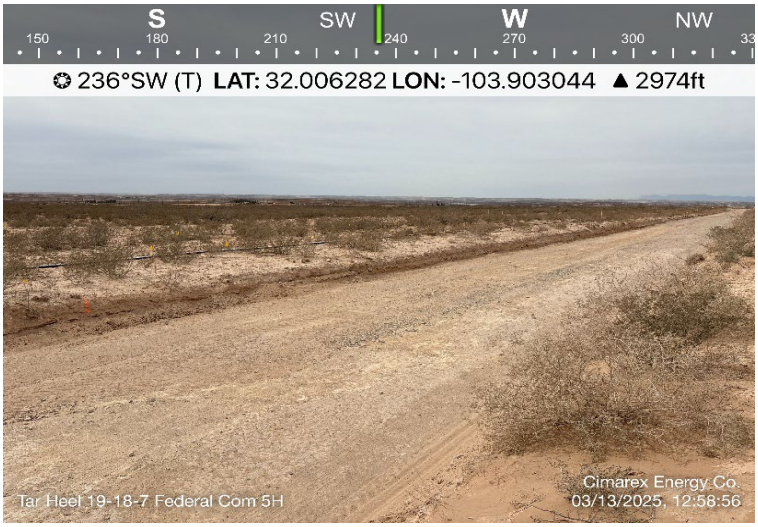
Description:
View West, area of CS-5 through CS-8.

Photograph No. 5

Facility: Tar Heel 19-18-7 Federal Com 5H

County: Eddy County, New Mexico

Description:
View Southwest, area of CS-1 through CS-8.



CARMONA RESOURCES

APPENDIX C

CARMONA RESOURCES

CIMAREX

CIMAREX ENERGY
State Line Road
EDDY, NM

MILESTONE ENVIRONMENTAL SERVICES

SHIPPING CONTROL TICKET
For Shipment of Non-Hazardous Oilfield Waste
www.milestone-es.com

Nº 2467138

Part 1: TO BE COMPLETED BY GENERATOR

Generator Name: Coterra
Generator Phone No:
Generator Rep Email:

ORIGIN OF WASTE:

Lease Name: Jar head 19-18-7 fed Com
Well No: 5H
Rig Name/No: Unit boss 405
API/AFE No: 30-015-54940
County: Eddy
Destination Company: Milestone Environmental Services, LLC

GENERATOR REP CERTIFICATION: I CERTIFY THAT THE FOREGOING IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

Signature of Generator Rep
Ben Rasco
Printed Name of Generator Rep
(601) 507-0779
Phone Number of Generator Rep

Part 2: WASTE TYPE – TO BE COMPLETED BY GENERATOR

Washout: ☐ Yes ☒ No
TOTAL VOLUME: 16 ☒ Yards ☐ Bbls

SOLIDS, CEMENTS, AND GELS (LANDFILL FACILITIES ONLY):
☒ Drill Cuttings ☐ Contaminated Soil ☐ Cement-contaminated Fluid ☐ Frac Gel-contaminated Fluid

LIQUID WASTES:
☐ Tank Bottoms ☐ Flowback – Clean (<1% solids) ☐ Produced Saltwater – Dirty (>1% solids)
☐ Oil-based Mud/Pit Waste ☐ Fines/Solids ☐ Flowback – Dirty (>1% solids) ☐ Fresh Water – Clean (<1% solids)
☒ Water-based Mud/Pit Waste ☐ Oily Dirty Water ☐ Produced Saltwater – Clean (<1% solids) ☐ Fresh Water – Dirty (>1% solids)

Part 3: TO BE COMPLETED BY TRANSPORTER

Transporter Name: JES
Transporter Phone No: 575-396-7430
Mailing Address: Lovington
Location of Load Pick-up: Eddy
WHP Permit No: 7175
Trucking Ticket No: 224109
Truck No: 150
Trailer No: 150

THE FOLLOWING STATEMENT MUST BE SIGNED BY TRUCK DRIVER PRIOR TO UNLOADING AT DISPOSAL SITE:

I CERTIFY THAT NO OTHER MATERIAL HAS BEEN PLACED IN THIS TRUCK SINCE LOADING OF THE MATERIAL DESCRIBED IN PART 2 ABOVE.

08/29/24 3:03 ☐ AM ☒ PM
Date and Time Received
Javier Ochoa M.
Driver Signature

Part 4: TO BE COMPLETED BY DISPOSAL FACILITY

CERTIFICATION: THIS IS TO CERTIFY THAT THE ABOVE DESCRIBED WASTE HAS BEEN DISPOSED OF IN AN AUTHORIZED MANNER AT A PERMITTED MILESTONE SITE.

8-30-24 12:27 ☒ AM ☐ PM
Date and Time Received
Washout: ☒ Yes ☐ No _____ hrs _____ BBL Solid

Signature of Receiver
Joseph S
Printed Name of Receiver
14-093828
Disposal Ticket No

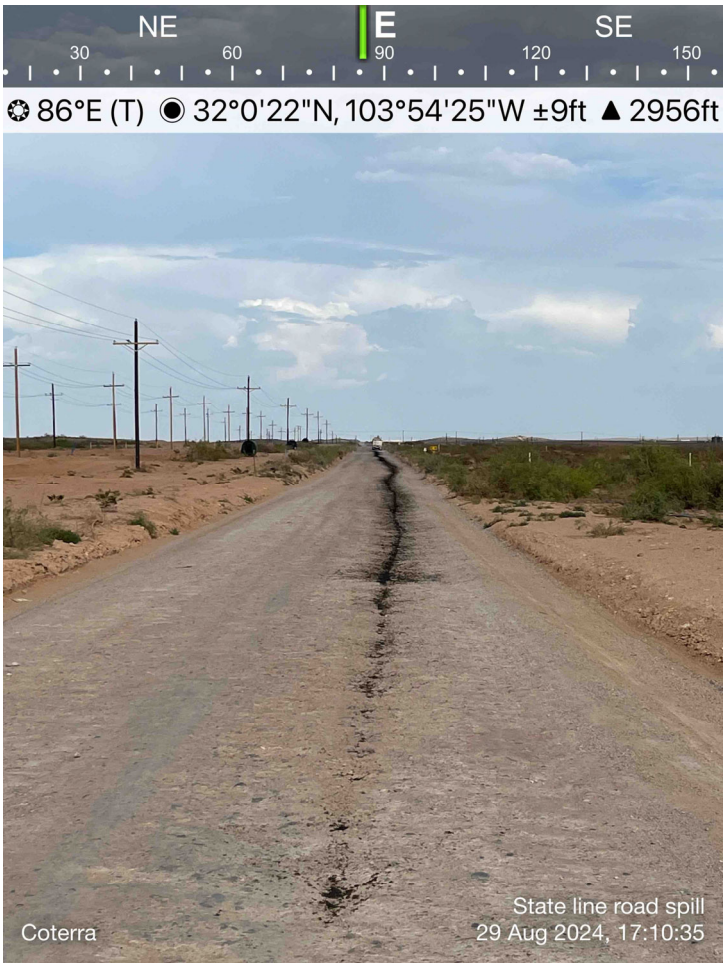
NOTES: W/O approved by Ben via Thore
56880 DCF

CORP-0919 Original - Milestone Environmental Services Yellow - Generator Pink – Transporter

Signatories hereby acknowledge and agree to abide by Milestone Environmental Services payment terms and conditions as listed at www.Milestone-es.Com/payment_terms

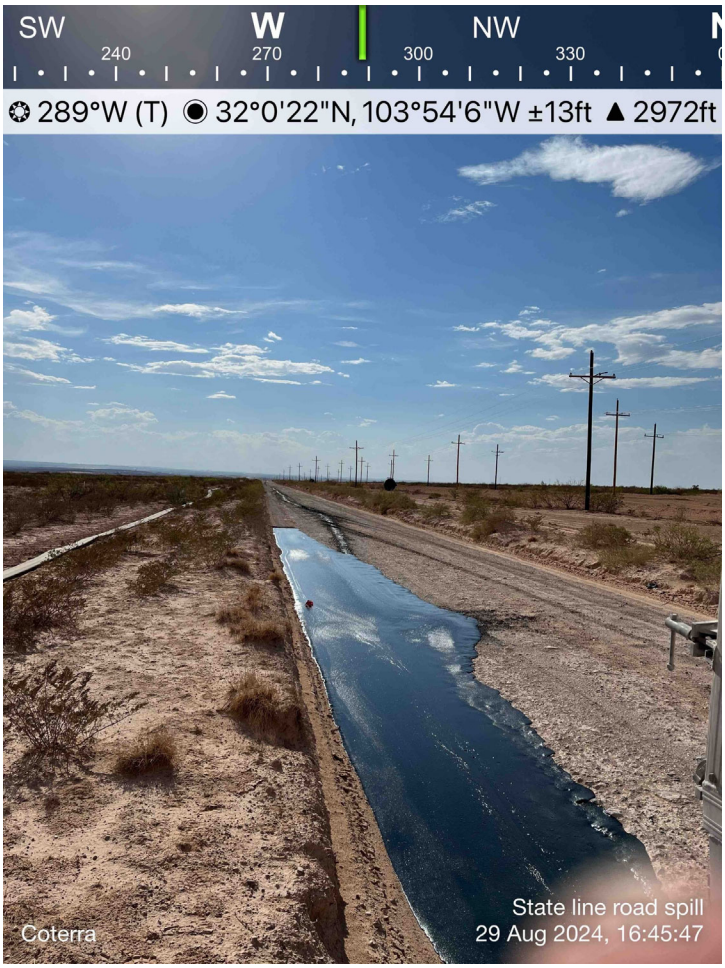
CIMAREX ENERGY
State Line Road
EDDY, NM

INITIAL RELEASE



CIMAREX ENERGY
State Line Road
EDDY, NM

INITIAL RELEASE



CIMAREX ENERGY
State Line Road
EDDY, NM

POST SURFACE SCRAPE

CIMAREX ENERGY
State Line Road
EDDY, NM

POST SURFACE SCRAPE

CIMAREX ENERGY

State Line Road

EDDY, NM

POST SURFACE SCRAPE

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

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

QUESTIONS

Action 379515

QUESTIONS

Operator: CIMAREX ENERGY CO. 6001 Deauville Blvd Midland, TX 79706	OGRID: 215099
	Action Number: 379515
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2424334807**
Incident Name	**NAPP2424334807 TAR HEEL 19-18-7 FEDERAL COM 5H @ 0**
Incident Type	**Other**
Incident Status	**Initial C-141 Received**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	TAR HEEL 19-18-7 FEDERAL COM 5H
Date Release Discovered	08/30/2024
Surface Owner	Federal

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	*Not answered.*
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	Cause: Equipment Failure | Transport | Drilling Mud/Fluid | Released: 72 BBL | Recovered: 72 BBL | Lost: 0 BBL.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	We had a reportable release along State Line Road in Eddy County, NM. A J.E.S. Energy truck was hauling oil based drill cuttings from Cimarex Energy's Tar Heel 19-18-7 Federal Com 5H to Milestone Environmental Landfill in Orla, TX. Approximately 30 minutes after leaving location, the seal on the J.E.S. Energy end dump trailer failed while driving down State Line Road towards C-1. Once the driver saw the trail of cuttings on the lease road, he stopped and reported the incident to his Supervisor. The total length of the release is 0.30 miles. An emergency One-Call was placed for the area and a crew was dispatched to the site to remove the cuttings and surface scrape impacted area of the road. All scraped up cuttings and impacted soils were hauled to Milestone Environmental Landfill for disposal. Released: 72 bbls Oil Based Mud Cuttings Recovered: 72 bbls

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

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

QUESTIONS (continued)

Operator: CIMAREX ENERGY CO. 6001 Deauville Blvd Midland, TX 79706	OGRID: 215099
	Action Number: 379515
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

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

Initial Response *The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.*	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

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

I hereby agree and sign off to the above statement	Name: Laci Luig Title: ES&H Specialist Email: DL_PermianEnvironmental@coterra.com Date: 09/06/2024

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

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

QUESTIONS (continued)

Operator: CIMAREX ENERGY CO. 6001 Deauville Blvd Midland, TX 79706	OGRID: 215099
	Action Number: 379515
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	*Not answered.*
What method was used to determine the depth to ground water	*Not answered.*
Did this release impact groundwater or surface water	*Not answered.*
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	*Not answered.*
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	*Not answered.*
An occupied permanent residence, school, hospital, institution, or church	*Not answered.*
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	*Not answered.*
Any other fresh water well or spring	*Not answered.*
Incorporated municipal boundaries or a defined municipal fresh water well field	*Not answered.*
A wetland	*Not answered.*
A subsurface mine	*Not answered.*
An (non-karst) unstable area	*Not answered.*
Categorize the risk of this well / site being in a karst geology	*Not answered.*
A 100-year floodplain	*Not answered.*
Did the release impact areas not on an exploration, development, production, or storage site	*Not answered.*

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	No
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

District I
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1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Operator:	OGRID:
CIMAREX ENERGY CO. 6001 Deauville Blvd Midland, TX 79706	215099
	Action Number: 379515
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

CONDITIONS

Created By	Condition	Condition Date
scott.rodgers	None	9/9/2024

Ashton Thielke

From: Rodgers, Scott, EMNRD <Scott.Rodgers@emnrd.nm.gov>
Sent: Monday, February 10, 2025 12:46 PM
To: Ashton Thielke; Bratcher, Michael, EMNRD
Cc: Nathaniel Rose; Laci Luig
Subject: RE: [EXTERNAL] Cimarex - nAPP2424334807 - Tar Heel 19-18-7 Federal Com 5H (8.29.2024) - Variance & Extension Request

The sampling variance request for 19.15.29.12.D.1.B of the NMAC is approved.

Your time extension request is approved. Remediation Due date has been updated to May 12, 2025 within the incident page. Ensure that the site characterization/assessment report has been completed and is provided within the final closure report.

Please keep a copy of this communication for inclusion within the appropriate reporting documentation.

The OCD requires a copy of all correspondence related to remedial activities be included in all proposals, weekly/monthly/quarterly/semi-annual/annual, or final closure reports. Correspondence reporting requirements may include, but not limited to, time extension requests, sample event notifications, and variance requests.

If you have any questions, please contact me via email at your convenience.

Thank you.

Regards,
Scott

Scott Rodgers ● Environmental Specialist – Adv.
Environmental Bureau
EMNRD - Oil Conservation Division
5200 Oakland NE, Suite B | Albuquerque, NM 87113
505.469.1830 | scott.rodgers@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd

From: Ashton Thielke <ThielkeA@carmonaresources.com>
Sent: Monday, February 10, 2025 10:14 AM
To: Rodgers, Scott, EMNRD <Scott.Rodgers@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Cc: Nathaniel Rose <Nathaniel.Rose@coterra.com>; Laci Luig <Laci.Luig@coterra.com>
Subject: [EXTERNAL] Cimarex - nAPP2424334807 - Tar Heel 19-18-7 Federal Com 5H (8.29.2024) - Variance & Extension Request

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

Good morning Mr. Bratcher & Mr. Rogers,

Thank you for meeting with myself and Cimarex EHS staff this morning.
Based off of our meeting, we have concluded that we will remediate/excavate the areas of both S-6 & S-8 and that all other areas that exceed NMAC 19.15.29.12 standards for chloride have been proven to be naturally "high" along the roadway. This has been proven by the collection of background samples both east and west of the spill extents on the roadway.
We will remediate/excavate the areas of S-6 & S-8 until TPH concentrations are <100mg/kg.
On behalf of Cimarex, I would like to request a variance to the traditional composite confirmation portion of the 19.15.29.12 NMAC and to utilize 19.15.29.12.D.1.B of the NMAC to request the utilization of grab samples, in which I would recommend the collection of 6-7 grab samples, 1 sample to represent no more than 50ft or horizontal roadway.
I would also like to request a 90-day extension and will have a closure report to the NMOCD no later than May 12, 2025.

Let me know if you have any questions!

Thanks!

Ashton Thielke
Environmental Manager
310 West Wall Street, Suite 500
Midland TX, 79701
M: 432-813-8988 C: 281-753-5659
ThielkeA@carmonaresources.com
Environmental Consulting Firm - Carmona Resources

CARMONA RESOURCES

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS

Action 441111

QUESTIONS

Operator: CIMAREX ENERGY CO. 6001 Deauville Blvd Midland, TX 79706	OGRID: 215099
	Action Number: 441111
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2424334807**
Incident Name	**NAPP2424334807 TAR HEEL 19-18-7 FEDERAL COM 5H @ 0**
Incident Type	**Oil Release**
Incident Status	**Initial C-141 Approved**

Location of Release Source	
Site Name	**TAR HEEL 19-18-7 FEDERAL COM 5H**
Date Release Discovered	**08/30/2024**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	3,200
What is the estimated number of samples that will be gathered	7
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	03/13/2025
Time sampling will commence	11:00 AM
Please provide any information necessary for observers to contact samplers	Due to unforeseen circumstances, this project has been pushed back to Thursday. Grab Sampling has been discussed and approved by NMOCD during preplanning discussions. We will collect grab samples of the roadway area following a surface scrape. The areas of S6 & S8 (from the initial assessment) will be scraped and disposed of properly.
Please provide any information necessary for navigation to sampling site	32.006178,103.907038 Carmona Resources will be onsite 4328138988

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Action 441111

CONDITIONS

Operator: CIMAREX ENERGY CO. 6001 Deauville Blvd Midland, TX 79706	OGRID: 215099
	Action Number: 441111
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
athielke	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	3/11/2025

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☐ Description of remediation activities

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

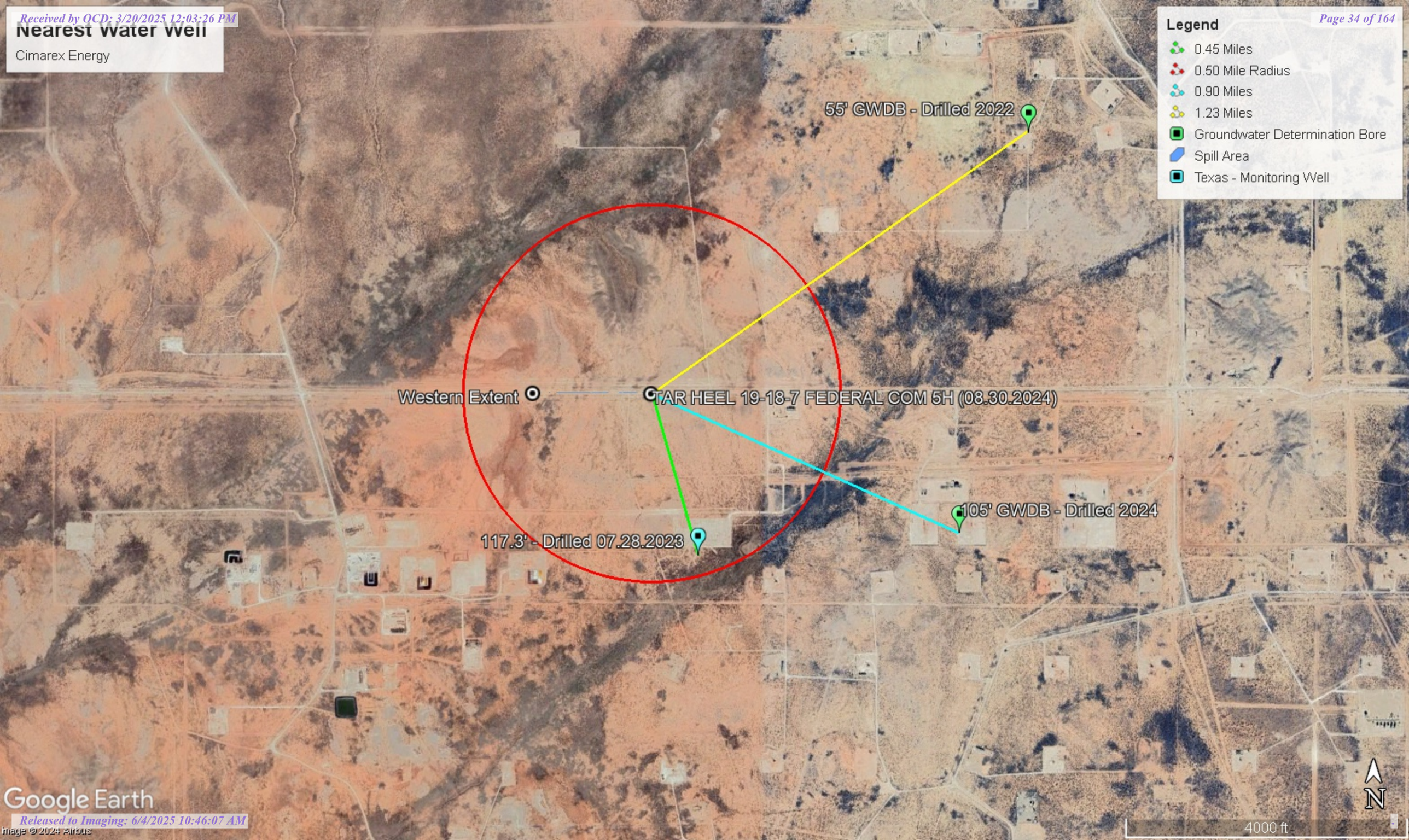
APPENDIX D

CARMONA RESOURCES

Received by OCD: 3/20/2025 12:03:26 PM

Nearest Water Well

Cimarex Energy



Released to Imaging: 6/4/2025 10:46:07 AM
Image © 2024 Airbus

Received by OCD: 3/20/2025 12:03:26 PM

Released to Imaging: 6/4/2025 10:46:07 AM

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 smallest to largest) (meters) (In feet)

POD Number	Code	Sub basin	County	Q64	Q16	Q4	Sec	Tws	Range	X	Y	Map	Distance	Well Depth	Depth Water	Water Column
C 04802 POD1		CUB	ED	SE	SE	SW	33	26S	30E	605057.9	3541059.5		1453	105		
C 04625 POD1		CUB	ED	NW	SW	NE	28	26S	30E	605340.4	3542781.5		1972	55		
C 04629 POD1		CUB	ED	SE	SW	SE	21	26S	30E	605381.1	3543462.2		2456			

Average Depth to Water: **0 feet**

Minimum Depth: **0 feet**

Maximum Depth: **0 feet**

Record Count: 3

UTM Filters (in meters):
Easting: 603727.39
Northing: 3541645.62
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.

STATE OF TEXAS WELL REPORT for Tracking #648729

Owner:	**XTO Energy Inc.**	Owner Well #:	**MW-D-1**
Address:	**200 N. Loraine St. Midland, TX 79701**	Grid #:	**46-01-3**
Well Location:	**XTO Stan 32 Angeles, TX**	Latitude:	**31° 59' 59.79" N**
		Longitude:	**103° 53' 58.86" W**
Well County:	**Loving**	Elevation:	**No Data**
Type of Work:	**New Well**	Proposed Use:	**Monitor**

Drilling Start Date: **7/24/2023** Drilling End Date: **7/28/2023**

Borehole:

Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
17.5	**0**	**100**
9.875	**100**	**240**

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed; Straight Wall**

Filter Pack Intervals:

Top Depth (ft.)	*Bottom Depth (ft.)*	*Filter Material*	*Size*
195	**240**	**Sand**	**8/16**

Annular Seal Data:

Top Depth (ft.)	*Bottom Depth (ft.)*	*Description (number of sacks & material)*
0	**100**	**Grout 77 Bags/Sacks**
0	**5**	**Cement 13 Bags/Sacks**
5	**195**	**Bentonite 79 Bags/Sacks**

Seal Method: **Tremie**

Sealed By: **Driller**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Surface Slab Installed** **Surface Completion by Driller**

Water Level: **117.3 ft.** below land surface on **2023-07-28** Measurement Method: **Water Level Meter**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Released to Imaging: 6/4/2025 10:46:07 AM

Water Quality:

Strata Depth (ft.)	Water Type
117.3 - 240	Sweet

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **White Drilling Company, Inc.**

P.O. Box 906
Clyde, TX 79510

Driller Name: **William B. Atkins** License Number: **54977**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	13	Sand w/clayey sand
13	23	Light brown sand/sandstone
23	31	Brown sandstone
31	63	Yellow, brown and red brown clay
63	98	Red brown mudstone
98	100	Gypsum
100	130	Gypsum mixed w/brown silty sandy clay
130	149	Light tan brown gypsum
149	177	Red brown siltstone/mudstone
177	179	Gypsum
179	217	Red brown mudstone/siltstone
217	227	Red brown siltstone/sandstone
227	230	Red brown mudstone
230	235	Red brown mudstone w/gray nodules
235	240	Brown/red brown siltstone

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
6	Riser	New Plastic (PVC)	40	-2.7	200
10.75	Blank	New Steel		0	100
6	Screen	New Plastic (PVC)	40 0.032	200	240

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

CARMONA RESOURCES

Project Name :	**Devon Clawhammer 33-28-21 412H**	**Date :**	**February 14th, 2024**
Project No. :	**2199**	**Sampler :**	**Ivan Ramos**
Location :	**Eddy County, New Mexico**		
Coordinates :	**32.00073, -103.88776**	**Driller :**	**H&R Enterprises, LLC**
Elevation :	**2950 feet**	**Method :**	**Air Rotary**

Depth (ft.)	WL	Soil Description	Lithology
0		(0') - Tan, poorly cemented small to medium subangular gravel with 65% fine, silty, soft loose sand. Dry, no odor, no organics (SW).	
5		(5') - Light brown, poorly cemented small to medium subangular gravel with 75% fine, silty, soft loose sand. Dry, no odor, no organics (SW)	
10		(10') - Red, poorly cemented small to medium sandstone nodules with 90% fine, silty, soft loose sand. Dry, no odor, no organics (SM)	
15		(15') - Reddish brown, poorly cemented small subrounded sandstone nodules with 90% fine, silty, soft loose sand. Dry, no odor, no organics (SM).	
20		(20') - Pinkish brown, poorly cemented small to medium subrounded gypsum nodules with 80% fine, silty, soft loose sand. Dry, no odor, no organics (SM).	
25		(25') - Pinkish brown, poorly cemented small to medium subrounded gypsum nodules with 80% fine, silty, soft loose sand. Dry, no odor, no organics (SM).	
30		(30') - Brownish-red, poorly cemented small subrounded clayey silt nodules with 90% fine, silty, soft loose silty clay. Dry, no odor, no organics (ML).	
35		(35') - Brownish-red, poorly cemented small subrounded clayey silt nodules with 90% fine, silty, soft loose silty clay. Dry, no odor, no organics (ML).	
40		(40') - Brownish-red, poorly cemented small subrounded clayey silt nodules with 70% fine, silty, soft loose silty clay. Dry, no odor, no organics (ML).	
45		(45') - Brownish-red, poorly cemented small subrounded clayey silt nodules with 80% fine, silty, soft loose silty clay. Dry, no odor, no organics (ML).	
50			

Depth (ft.)	WL	Soil Description	Lithology
50		(50') - Brownish red, poorly cemented clay with 30% fines. Dry, no odor, no organics (ML).	
55		(55') - Brown, poorly cemented clay with 30% fines. Dry, no odor, no organics (ML).	
60		(60') - Reddish-brown, poorly cemented small clayey silt nodules with 95% fine, silty, soft clayey silt. Dry, no odor, no organics (ML).	
65		(65') - Reddish-brown, poorly cemented small clayey silt nodules with 95% fine, silty, soft clayey silt. Dry, no odor, no organics (ML).	
70		(70') - Brown, poorly cemented, medium stiff, well graded clay. Dry, no odor, no organics (CL).	
75		(75') - Brown, poorly cemented small to medim clay nodules with 70% gray, silty soft sandy silt. Dry, no odor, no organics (ML).	
80		(80') - Brown, moderately cemented, brittle to medium stiff clay. Dry, no odor, no organics (CL).	
85		(85') - Brown, moderately cemented, brittle to medium stiff clay. Dry, no odor, no organics (CL).	
90		(90') - Brown, poorly cemented small to medium clay nodules with 75% fine, silty, soft loose clayey silt. Dry, no odor, no organics (ML).	
95		(95') - Brown, poorly cemented small to medium clay nodules with 75% fine, silty, soft loose clayey silt. Dry, no odor, no organics (ML).	
105		(105) - Light brown, poorly cemented clay nodules with 40% clayey silt. Dry, no odor, no organics (ML).	

Comments : (02/14/24) Boring terminated at 105' at 11:30 A.M. Mountain Time with no presence of groundwater or moisture.

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

OSE DII AUG 8 2022 PM1:01:19

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO.	OSE FILE NO(S).
POD 1 (TW-1)	N/A	C-4625

WELL OWNER NAME(S)	PHONE (OPTIONAL)
Devon Energy	575-748-1838

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
6488 7 Rivers Hwy	Artesia	NM	88210

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	0	58.53	N
	LONGITUDE	103	53	4.54	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHJIP, RANGE) WHERE AVAILABLE

NW SW NE Sec.28 T26S R30S NMPM

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
1249	Jackie D. Atkins	Atkins Engineering Associates, Inc.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
6/15/2022	6/15/2022	Temporary Well	±55	n/a

COMPLETED WELL IS: ☐ ARTESIAN ☑ DRY HOLE ☐ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): n/a

DATE STATIC MEASURED: 6/15/22, 7/12/22

DRILLING FLUID: ☐ AIR ☐ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☐ ROTARY ☐ HAMMER ☐ CABLE TOOL ☑ OTHER – SPECIFY: Hollow Stem Auger

CHECK HERE IF PITLESS ADAPTER IS INSTALLED ☐

DEPTH (feet bgl) FROM	TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	55	±6.5	Boring-HSA	--	--	--	--

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO. C-04625	POD NO. 1	TRN NO. 726170
LOCATION 26S.30E.28.1.3.2	WELL TAG ID NO. —	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES **(attach supplemental sheets to fully describe all units)**	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	20	20	Sand, Fine-grained, poorly graded, 5 YR 5/6, Reddish Yellow	Y ✓ N	
20	40	20	Sand, Fine-grained, poorly graded, with clay, 2.5 YR 5/6, Red	Y ✓ N	
40	55	15	Sand, Fine-grained, poorly graded, with clay, Reddish Yellow	Y ✓ N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
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				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

WELL TEST: TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION: Temporary well material removed and soil boring backfilled using drill cuttings from total depth to ten feet below ground surface(bgs), then hydrated bentonite chips ten feet bgs to surface.

OSE DII AUG 8 2022 PM 1:19

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

Shane Eldridge, Cameron Pruitt

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:

Jack Atkins — Jackie D. Atkins — 8/4/2022

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO. C-04625	POD NO. 1	TRN NO. 726170
LOCATION 26S.30E.28.1.3.2	WELL TAG ID NO. —	PAGE 2 OF 2

Atkins ENGINEERING ASSOCIATES INC.
2904 W 2nd St.
Roswell, NM 88201
voice: 575.624.2420
fax: 575.624.2421
www.atkinseng.com

August 4, 2022

DII-NMOSE
1900 W 2nd Street
Roswell, NM 88201

Hand Delivered to the DII Office of the State Engineer

Re: Well Record C-4625 Pod1

To whom it may concern:

Attached please find a well log & record and a plugging record, in duplicate, for a one (1) soil borings, C-4625 Pod1.

If you have any questions, please contact me at 575.499.9244 or lucas@atkinseng.com.

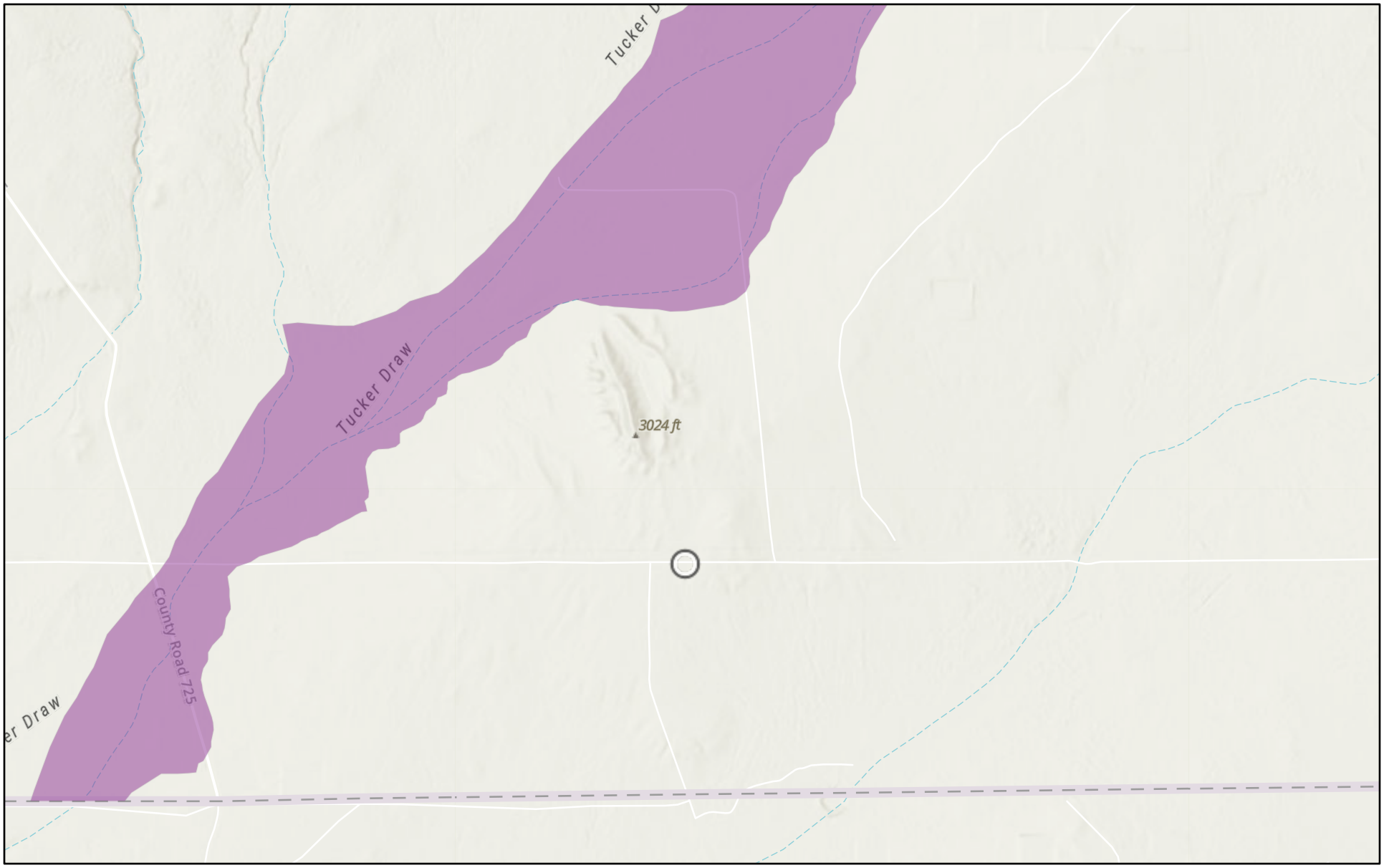
Sincerely,

Lucas Middleton

Enclosures: as noted above

OSE DIT AUG 8 2022 AM 10:19

TAR HEEL 19-18-7 FEDERAL COM 5H (08.30.2024)



12/2/2024

USA Flood Hazard Areas

1% Annual Chance Flood Hazard

World Hillshade

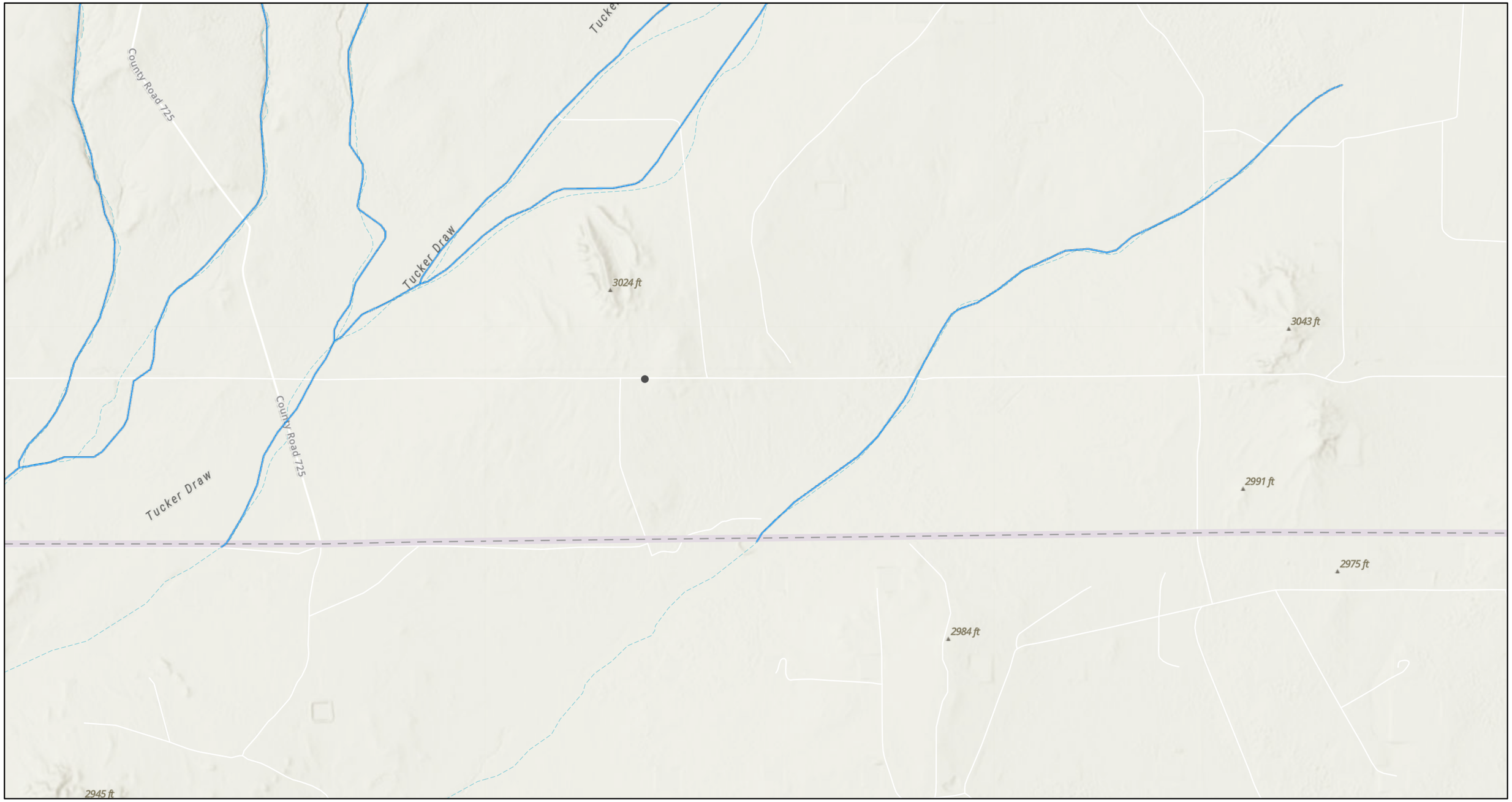
1:18,056

0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

Esri, NASA, NGA, USGS, FEMA, Esri Community Maps Contributors, Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph,

TAR HEEL 19-18-7 FEDERAL COM 5H (08.30.2024)



12/2/2024, 9:16:32 AM

OSE Streams

1:18,056

0 0.17 0.35 0.7 mi

0 0.3 0.6 1.2 km

Esri, NASA, NGA, USGS, FEMA, Esri Community Maps Contributors, Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, NM OSE

New Mexico Oil Conservation Division
NM OCD Oil and Gas Map. http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=4d017f2306164de29fd2fb9f8f35ca75: New Mexico Oil Conservation Division

APPENDIX E

CARMONA RESOURCES

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ashton Thielke
Carmona Resources
310 W Wall St
Ste 500
Midland, Texas 79701

Generated 12/26/2024 10:58:30 AM

JOB DESCRIPTION

Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)
Eddy Co., NM

JOB NUMBER

880-52439-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 6/4/2025 10:46:07 AM

my EOL

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
12/26/2024 10:58:30 AM

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

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Definitions/Glossary

Client: Carmona Resources
Job ID: 880-52439-1
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)
SDG: Eddy Co., NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Carmona Resources
Job ID: 880-52439-1
Project: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
Eurofins Midland

Job Narrative
880-52439-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 12/18/2024 3:16 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 5.6°C.

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

Diesel Range Organics
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-98003 and analytical batch 880-98267 was outside the control limits.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-98003 and analytical batch 880-98267 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD_NM: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: S-1 (0-1") (880-52439-1), S-4 (0-1") (880-52439-4) and S-5 (0-1") (880-52439-5). Percent recoveries are based on the amount spiked.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: S-2 (0-1") (880-52439-2) and S-3 (0-1") (880-52439-3). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: S-6 (0-1") (880-52439-6). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-98235 and analytical batch 880-98269 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: S-7 (0-1") (880-52439-7), S-8 (0-1") (880-52439-8), (LCS 880-98235/2-A) and (LCSD 880-98235/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (880-52440-A-1-G MS). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-98269 recovered above the upper control limit for Gasoline Range Organics (GRO)-C6-C10. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8015MOD_NM: The laboratory control sample duplicate (LCSD) for preparation batch 880-98235 and analytical batch 880-98269 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28). These analytes were biased high in the LCSD and were within limits for the associated laboratory control sample (LCS); therefore, the data have been reported.

Case Narrative

Client: Carmona Resources
Job ID: 880-52439-1
Project: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1 (Continued) Eurofins Midland

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-52440-A-1-F) and (880-52440-A-1-H MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The closing continuing calibration verification (CCVC) associated with batch 880-98269 recovered above the upper control limit for Diesel Range Organics (Over C10-C28). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8015MOD_NM: The method blank for preparation batch 880-98404 and analytical batch 880-98430 contained Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: (LCS 880-98404/2-A) and (LCSD 880-98404/3-A). Percent recoveries are based on the amount spiked.

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-98404 and analytical batch 880-98430 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

HPLC/IC
Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-98272 and analytical batch 880-98286 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Client Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

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

Lab Sample ID: 880-52439-1
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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		12/19/24 09:09	12/19/24 14:24	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/19/24 09:09	12/19/24 14:24	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/19/24 09:09	12/19/24 14:24	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/19/24 09:09	12/19/24 14:24	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/19/24 09:09	12/19/24 14:24	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/19/24 09:09	12/19/24 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*12/19/24 09:09*	*12/19/24 14:24*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*12/19/24 09:09*	*12/19/24 14:24*	*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			12/19/24 14:24	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			12/19/24 16:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		12/17/24 07:50	12/19/24 16:15	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		12/17/24 07:50	12/19/24 16:15	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		12/17/24 07:50	12/19/24 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*69*	*S1-*	*70 - 130*	*12/17/24 07:50*	*12/19/24 16:15*	*1*
o-Terphenyl	*66*	*S1-*	*70 - 130*	*12/17/24 07:50*	*12/19/24 16:15*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1080**		50.2		mg/Kg			12/19/24 15:31	5

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

Lab Sample ID: 880-52439-2
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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		12/19/24 09:09	12/19/24 14:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/19/24 09:09	12/19/24 14:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/19/24 09:09	12/19/24 14:44	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/19/24 09:09	12/19/24 14:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/19/24 09:09	12/19/24 14:44	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/19/24 09:09	12/19/24 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*12/19/24 09:09*	*12/19/24 14:44*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*12/19/24 09:09*	*12/19/24 14:44*	*1*

Client Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

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

Lab Sample ID: 880-52439-2
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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			12/19/24 14:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<48.3	U	48.3		mg/Kg			12/19/24 16:29	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	<48.3	U	48.3		mg/Kg		12/17/24 07:50	12/19/24 16:29	1
Diesel Range Organics (Over C10-C28)	<48.3	U	48.3		mg/Kg		12/17/24 07:50	12/19/24 16:29	1
Oil Range Organics (Over C28-C36)	<48.3	U	48.3		mg/Kg		12/17/24 07:50	12/19/24 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*70*		*70 - 130*	*12/17/24 07:50*	*12/19/24 16:29*	*1*
o-Terphenyl	*66*	*S1-*	*70 - 130*	*12/17/24 07:50*	*12/19/24 16:29*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2180**		50.5		mg/Kg			12/19/24 15:39	5

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

Lab Sample ID: 880-52439-3
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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		12/19/24 09:09	12/19/24 17:46	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/19/24 09:09	12/19/24 17:46	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/19/24 09:09	12/19/24 17:46	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		12/19/24 09:09	12/19/24 17:46	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/19/24 09:09	12/19/24 17:46	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		12/19/24 09:09	12/19/24 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*12/19/24 09:09*	*12/19/24 17:46*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*12/19/24 09:09*	*12/19/24 17:46*	*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			12/19/24 17:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<48.4	U	48.4		mg/Kg			12/19/24 16:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<48.4	U	48.4		mg/Kg		12/17/24 07:50	12/19/24 16:44	1
Diesel Range Organics (Over C10-C28)	<48.4	U	48.4		mg/Kg		12/17/24 07:50	12/19/24 16:44	1

Client Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

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

Lab Sample ID: 880-52439-3
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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)	<48.4	U	48.4		mg/Kg		12/17/24 07:50	12/19/24 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*71*		*70 - 130*	*12/17/24 07:50*	*12/19/24 16:44*	*1*
o-Terphenyl	*67*	*S1-*	*70 - 130*	*12/17/24 07:50*	*12/19/24 16:44*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1140**		49.7		mg/Kg			12/19/24 15:46	5

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

Lab Sample ID: 880-52439-4
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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		12/19/24 09:09	12/19/24 18:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/19/24 09:09	12/19/24 18:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/19/24 09:09	12/19/24 18:07	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		12/19/24 09:09	12/19/24 18:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/19/24 09:09	12/19/24 18:07	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		12/19/24 09:09	12/19/24 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*12/19/24 09:09*	*12/19/24 18:07*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*12/19/24 09:09*	*12/19/24 18:07*	*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			12/19/24 18:07	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			12/19/24 16:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/17/24 07:50	12/19/24 16:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/17/24 07:50	12/19/24 16:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/17/24 07:50	12/19/24 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*63*	*S1-*	*70 - 130*	*12/17/24 07:50*	*12/19/24 16:59*	*1*
o-Terphenyl	*60*	*S1-*	*70 - 130*	*12/17/24 07:50*	*12/19/24 16:59*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1230**		49.9		mg/Kg			12/19/24 16:08	5

Client Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

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

Lab Sample ID: 880-52439-5
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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		12/19/24 09:09	12/19/24 18:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/19/24 09:09	12/19/24 18:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/19/24 09:09	12/19/24 18:27	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/19/24 09:09	12/19/24 18:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/19/24 09:09	12/19/24 18:27	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/19/24 09:09	12/19/24 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*12/19/24 09:09*	*12/19/24 18:27*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/19/24 09:09*	*12/19/24 18:27*	*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			12/19/24 18:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			12/19/24 17:14	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	<49.8	U	49.8		mg/Kg		12/17/24 07:50	12/19/24 17:14	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/17/24 07:50	12/19/24 17:14	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/17/24 07:50	12/19/24 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*69*	*S1-*	*70 - 130*	*12/17/24 07:50*	*12/19/24 17:14*	*1*
o-Terphenyl	*65*	*S1-*	*70 - 130*	*12/17/24 07:50*	*12/19/24 17:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**530**		49.8		mg/Kg			12/19/24 16:15	5

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

Lab Sample ID: 880-52439-6
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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		12/19/24 09:09	12/19/24 18:48	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/19/24 09:09	12/19/24 18:48	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/19/24 09:09	12/19/24 18:48	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/19/24 09:09	12/19/24 18:48	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/19/24 09:09	12/19/24 18:48	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/19/24 09:09	12/19/24 18:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*12/19/24 09:09*	*12/19/24 18:48*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*12/19/24 09:09*	*12/19/24 18:48*	*1*

Client Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

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

Lab Sample ID: 880-52439-6
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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			12/19/24 18:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**365**		49.8		mg/Kg			12/19/24 17:29	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		12/17/24 07:50	12/19/24 17:29	1
Diesel Range Organics (Over C10-C28)	**365**		49.8		mg/Kg		12/17/24 07:50	12/19/24 17:29	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/17/24 07:50	12/19/24 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*67*	*S1-*	*70 - 130*	*12/17/24 07:50*	*12/19/24 17:29*	*1*
o-Terphenyl	*75*		*70 - 130*	*12/17/24 07:50*	*12/19/24 17:29*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1830**		49.5		mg/Kg			12/19/24 16:22	5

Client Sample ID: S-7 (0-1")

Lab Sample ID: 880-52439-7
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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		12/19/24 09:09	12/19/24 19:08	1
Toluene	<0.00201	U	0.00201		mg/Kg		12/19/24 09:09	12/19/24 19:08	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		12/19/24 09:09	12/19/24 19:08	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		12/19/24 09:09	12/19/24 19:08	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		12/19/24 09:09	12/19/24 19:08	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		12/19/24 09:09	12/19/24 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*12/19/24 09:09*	*12/19/24 19:08*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*12/19/24 09:09*	*12/19/24 19:08*	*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			12/19/24 19:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/19/24 21:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *+	49.9		mg/Kg		12/19/24 08:26	12/19/24 21:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U *+	49.9		mg/Kg		12/19/24 08:26	12/19/24 21:59	1

Client Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

Client Sample ID: S-7 (0-1")

Lab Sample ID: 880-52439-7
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/19/24 08:26	12/19/24 21:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*70*		*70 - 130*	*12/19/24 08:26*	*12/19/24 21:59*	*1*
o-Terphenyl	*66*	*S1-*	*70 - 130*	*12/19/24 08:26*	*12/19/24 21:59*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1870**		50.2		mg/Kg			12/19/24 16:29	5

Client Sample ID: S-8 (0-1")

Lab Sample ID: 880-52439-8
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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		12/19/24 09:09	12/19/24 19:29	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/19/24 09:09	12/19/24 19:29	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/19/24 09:09	12/19/24 19:29	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		12/19/24 09:09	12/19/24 19:29	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/19/24 09:09	12/19/24 19:29	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		12/19/24 09:09	12/19/24 19:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*12/19/24 09:09*	*12/19/24 19:29*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*12/19/24 09:09*	*12/19/24 19:29*	*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			12/19/24 19:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**1130**		50.0		mg/Kg			12/20/24 15:45	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		12/19/24 21:32	12/20/24 15:45	1
Diesel Range Organics (Over C10-C28)	**1130**	***+**	50.0		mg/Kg		12/19/24 21:32	12/20/24 15:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/19/24 21:32	12/20/24 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*12/19/24 21:32*	*12/20/24 15:45*	*1*
o-Terphenyl	*106*		*70 - 130*	*12/19/24 21:32*	*12/20/24 15:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1930**		49.7		mg/Kg			12/19/24 16:36	5

Surrogate Summary

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-52381-A-14-D MS	Matrix Spike	99	99
880-52381-A-14-E MSD	Matrix Spike Duplicate	95	103
880-52439-1	S-1 (0-1")	103	106
880-52439-2	S-2 (0-1")	105	108
880-52439-3	S-3 (0-1")	102	105
880-52439-4	S-4 (0-1")	97	106
880-52439-5	S-5 (0-1")	100	107
880-52439-6	S-6 (0-1")	103	102
880-52439-7	S-7 (0-1")	102	102
880-52439-8	S-8 (0-1")	103	108
LCS 880-98240/1-A	Lab Control Sample	99	98
LCSD 880-98240/2-A	Lab Control Sample Dup	94	104
MB 880-98240/5-A	Method Blank	97	97

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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-50704-A-40-A MB	Method Blank	92	97
880-52439-1	S-1 (0-1")	69 S1-	66 S1-
880-52439-2	S-2 (0-1")	70	66 S1-
880-52439-3	S-3 (0-1")	71	67 S1-
880-52439-4	S-4 (0-1")	63 S1-	60 S1-
880-52439-5	S-5 (0-1")	69 S1-	65 S1-
880-52439-6	S-6 (0-1")	67 S1-	75
880-52439-7	S-7 (0-1")	70	66 S1-
880-52439-8	S-8 (0-1")	99	106
880-52440-A-1-G MS	Matrix Spike	70	61 S1-
880-52440-A-1-H MSD	Matrix Spike Duplicate	68 S1-	60 S1-
890-7473-A-19-B MS	Matrix Spike	90	80
890-7473-A-19-C MSD	Matrix Spike Duplicate	90	79
890-7492-A-23-C MS	Matrix Spike	92	99
890-7492-A-23-D MSD	Matrix Spike Duplicate	92	99
LCS 880-98003/2-A	Lab Control Sample	109	87
LCS 880-98235/2-A	Lab Control Sample	131 S1+	111
LCS 880-98404/2-A	Lab Control Sample	158 S1+	172 S1+
LCSD 880-98003/3-A	Lab Control Sample Dup	102	82
LCSD 880-98235/3-A	Lab Control Sample Dup	153 S1+	129
LCSD 880-98404/3-A	Lab Control Sample Dup	166 S1+	175 S1+
MB 880-98003/1-A	Method Blank	77	68 S1-
MB 880-98235/1-A	Method Blank	73	72
MB 880-98404/1-A	Method Blank	93	96

Surrogate Legend

1CO = 1-Chlorooctane

Surrogate Summary

Client: Carmona Resources
Job ID: 880-52439-1
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)
SDG: Eddy Co., NM

OTPH = o-Terphenyl

QC Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-98240/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98132 — **Prep Batch: 98240**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/19/24 09:09	12/19/24 11:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/19/24 09:09	12/19/24 11:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/19/24 09:09	12/19/24 11:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/19/24 09:09	12/19/24 11:19	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/19/24 09:09	12/19/24 11:19	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/19/24 09:09	12/19/24 11:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*12/19/24 09:09*	*12/19/24 11:19*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*12/19/24 09:09*	*12/19/24 11:19*	*1*

Lab Sample ID: LCS 880-98240/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98132 — **Prep Batch: 98240**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1117		mg/Kg		112	70 - 130
Toluene	0.100	0.1051		mg/Kg		105	70 - 130
Ethylbenzene	0.100	0.1059		mg/Kg		106	70 - 130
m-Xylene & p-Xylene	0.200	0.2116		mg/Kg		106	70 - 130
o-Xylene	0.100	0.1057		mg/Kg		106	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-98240/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98132 — **Prep Batch: 98240**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1238		mg/Kg		124	70 - 130	10	35
Toluene	0.100	0.1160		mg/Kg		116	70 - 130	10	35
Ethylbenzene	0.100	0.1166		mg/Kg		117	70 - 130	10	35
m-Xylene & p-Xylene	0.200	0.2323		mg/Kg		116	70 - 130	9	35
o-Xylene	0.100	0.1164		mg/Kg		116	70 - 130	10	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 880-52381-A-14-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98132 — **Prep Batch: 98240**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0996	0.1104		mg/Kg		111	70 - 130
Toluene	<0.00199	U	0.0996	0.1040		mg/Kg		104	70 - 130

QC Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

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

Lab Sample ID: 880-52381-A-14-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98132 — **Prep Batch: 98240**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.0996	0.1052		mg/Kg		106	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.199	0.2092		mg/Kg		103	70 - 130
o-Xylene	<0.00199	U	0.0996	0.1048		mg/Kg		105	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 880-52381-A-14-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98132 — **Prep Batch: 98240**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.101	0.1175		mg/Kg		117	70 - 130	6	35
Toluene	<0.00199	U	0.101	0.1106		mg/Kg		110	70 - 130	6	35
Ethylbenzene	<0.00199	U	0.101	0.1122		mg/Kg		111	70 - 130	7	35
m-Xylene & p-Xylene	<0.00398	U	0.202	0.2234		mg/Kg		109	70 - 130	7	35
o-Xylene	<0.00199	U	0.101	0.1118		mg/Kg		111	70 - 130	6	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

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

Lab Sample ID: MB 880-98003/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98267 — **Prep Batch: 98003**

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		12/17/24 07:50	12/19/24 02:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/17/24 07:50	12/19/24 02:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/17/24 07:50	12/19/24 02:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*12/17/24 07:50*	*12/19/24 02:57*	*1*
o-Terphenyl	*68*	*S1-*	*70 - 130*	*12/17/24 07:50*	*12/19/24 02:57*	*1*

Lab Sample ID: LCS 880-98003/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98267 — **Prep Batch: 98003**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1043		mg/Kg		104	70 - 130
Diesel Range Organics (Over C10-C28)	1000	864.1		mg/Kg		86	70 - 130

QC Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

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

Lab Sample ID: LCS 880-98003/2-A
Matrix: Solid
Analysis Batch: 98267

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98003

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	87		70 - 130

Lab Sample ID: LCSD 880-98003/3-A
Matrix: Solid
Analysis Batch: 98267

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 98003

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	989.9		mg/Kg		99	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	777.1		mg/Kg		78	70 - 130	11	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	82		70 - 130

Lab Sample ID: 890-7473-A-19-B MS
Matrix: Solid
Analysis Batch: 98267

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 98003

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	995	783.9		mg/Kg		79	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U F1	995	665.9	F1	mg/Kg		64	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	80		70 - 130

Lab Sample ID: 890-7473-A-19-C MSD
Matrix: Solid
Analysis Batch: 98267

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 98003

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	995	788.1		mg/Kg		79	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	995	674.8	F1	mg/Kg		65	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	79		70 - 130

QC Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

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

Lab Sample ID: MB 880-98235/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98269 — **Prep Batch: 98235**

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		12/19/24 08:26	12/19/24 18:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/19/24 08:26	12/19/24 18:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/19/24 08:26	12/19/24 18:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*73*		*70 - 130*	*12/19/24 08:26*	*12/19/24 18:45*	*1*
o-Terphenyl	*72*		*70 - 130*	*12/19/24 08:26*	*12/19/24 18:45*	*1*

Lab Sample ID: LCS 880-98235/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98269 — **Prep Batch: 98235**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1248		mg/Kg		125	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1142		mg/Kg		114	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*131*	*S1+*	*70 - 130*
o-Terphenyl	*111*		*70 - 130*

Lab Sample ID: LCSD 880-98235/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98269 — **Prep Batch: 98235**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1395	*+	mg/Kg		140	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	1336	*+	mg/Kg		134	70 - 130	16	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*153*	*S1+*	*70 - 130*
o-Terphenyl	*129*		*70 - 130*

Lab Sample ID: 880-52440-A-1-G MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98269 — **Prep Batch: 98235**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *+ F1	998	580.0	F1	mg/Kg		58	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U *+ F1	998	582.0	F1	mg/Kg		58	70 - 130

QC Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

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

Lab Sample ID: 880-52440-A-1-G MS
Matrix: Solid
Analysis Batch: 98269

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 98235

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	70		70 - 130
o-Terphenyl	61	S1-	70 - 130

Lab Sample ID: 880-52440-A-1-H MSD
Matrix: Solid
Analysis Batch: 98269

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 98235

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	<50.0	U *+ F1	998	553.4	F1	mg/Kg		55	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<50.0	U *+ F1	998	551.6	F1	mg/Kg		55	70 - 130	5	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	68	S1-	70 - 130
o-Terphenyl	60	S1-	70 - 130

Lab Sample ID: 880-50704-A-40-A MB
Matrix: Solid
Analysis Batch: 98430

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 98404

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		12/19/24 21:32	12/20/24 14:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/19/24 21:32	12/20/24 14:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/19/24 21:32	12/20/24 14:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	12/19/24 21:32	12/20/24 14:55	1
o-Terphenyl	97		70 - 130	12/19/24 21:32	12/20/24 14:55	1

Lab Sample ID: MB 880-98404/1-A
Matrix: Solid
Analysis Batch: 98430

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 98404

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		12/19/24 21:32	12/20/24 09:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/19/24 21:32	12/20/24 09:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/19/24 21:32	12/20/24 09:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	12/19/24 21:32	12/20/24 09:12	1
o-Terphenyl	96		70 - 130	12/19/24 21:32	12/20/24 09:12	1

QC Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

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

Lab Sample ID: LCS 880-98404/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98430 — **Prep Batch: 98404**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1398	*+	mg/Kg		140	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1468	*+	mg/Kg		147	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*158*	*S1+*	*70 - 130*
o-Terphenyl	*172*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-98404/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98430 — **Prep Batch: 98404**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1465	*+	mg/Kg		147	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	1590	*+	mg/Kg		159	70 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*166*	*S1+*	*70 - 130*
o-Terphenyl	*175*	*S1+*	*70 - 130*

Lab Sample ID: 890-7492-A-23-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98430 — **Prep Batch: 98404**

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 *+	999	781.1		mg/Kg		78	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U *+	999	867.3		mg/Kg		84	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*92*		*70 - 130*
o-Terphenyl	*99*		*70 - 130*

Lab Sample ID: 890-7492-A-23-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98430 — **Prep Batch: 98404**

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 *+	999	804.1		mg/Kg		80	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U *+	999	863.1		mg/Kg		84	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*92*		*70 - 130*

QC Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

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

Lab Sample ID: 890-7492-A-23-D MSD
Matrix: Solid
Analysis Batch: 98430

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 98404

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl	*99*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-98272/1-A
Matrix: Solid
Analysis Batch: 98286

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			12/19/24 14:41	1

Lab Sample ID: LCS 880-98272/2-A
Matrix: Solid
Analysis Batch: 98286

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	267.3		mg/Kg		107	90 - 110		

Lab Sample ID: LCSD 880-98272/3-A
Matrix: Solid
Analysis Batch: 98286

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	275.0		mg/Kg		110	90 - 110	3	20

Lab Sample ID: 880-52387-A-1-E MS
Matrix: Solid
Analysis Batch: 98286

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	212	F1	250	511.1	F1	mg/Kg		120	90 - 110		

Lab Sample ID: 880-52387-A-1-F MSD
Matrix: Solid
Analysis Batch: 98286

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	212	F1	250	510.1	F1	mg/Kg		119	90 - 110	0	20

QC Association Summary

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

GC VOA

Analysis Batch: 98132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52439-1	S-1 (0-1")	Total/NA	Solid	8021B	98240
880-52439-2	S-2 (0-1")	Total/NA	Solid	8021B	98240
880-52439-3	S-3 (0-1")	Total/NA	Solid	8021B	98240
880-52439-4	S-4 (0-1")	Total/NA	Solid	8021B	98240
880-52439-5	S-5 (0-1")	Total/NA	Solid	8021B	98240
880-52439-6	S-6 (0-1")	Total/NA	Solid	8021B	98240
880-52439-7	S-7 (0-1")	Total/NA	Solid	8021B	98240
880-52439-8	S-8 (0-1")	Total/NA	Solid	8021B	98240
MB 880-98240/5-A	Method Blank	Total/NA	Solid	8021B	98240
LCS 880-98240/1-A	Lab Control Sample	Total/NA	Solid	8021B	98240
LCSD 880-98240/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	98240
880-52381-A-14-D MS	Matrix Spike	Total/NA	Solid	8021B	98240
880-52381-A-14-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	98240

Prep Batch: 98240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52439-1	S-1 (0-1")	Total/NA	Solid	5035	
880-52439-2	S-2 (0-1")	Total/NA	Solid	5035	
880-52439-3	S-3 (0-1")	Total/NA	Solid	5035	
880-52439-4	S-4 (0-1")	Total/NA	Solid	5035	
880-52439-5	S-5 (0-1")	Total/NA	Solid	5035	
880-52439-6	S-6 (0-1")	Total/NA	Solid	5035	
880-52439-7	S-7 (0-1")	Total/NA	Solid	5035	
880-52439-8	S-8 (0-1")	Total/NA	Solid	5035	
MB 880-98240/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-98240/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-98240/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-52381-A-14-D MS	Matrix Spike	Total/NA	Solid	5035	
880-52381-A-14-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 98464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52439-1	S-1 (0-1")	Total/NA	Solid	Total BTEX	
880-52439-2	S-2 (0-1")	Total/NA	Solid	Total BTEX	
880-52439-3	S-3 (0-1")	Total/NA	Solid	Total BTEX	
880-52439-4	S-4 (0-1")	Total/NA	Solid	Total BTEX	
880-52439-5	S-5 (0-1")	Total/NA	Solid	Total BTEX	
880-52439-6	S-6 (0-1")	Total/NA	Solid	Total BTEX	
880-52439-7	S-7 (0-1")	Total/NA	Solid	Total BTEX	
880-52439-8	S-8 (0-1")	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 98003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52439-1	S-1 (0-1")	Total/NA	Solid	8015NM Prep	
880-52439-2	S-2 (0-1")	Total/NA	Solid	8015NM Prep	
880-52439-3	S-3 (0-1")	Total/NA	Solid	8015NM Prep	
880-52439-4	S-4 (0-1")	Total/NA	Solid	8015NM Prep	
880-52439-5	S-5 (0-1")	Total/NA	Solid	8015NM Prep	
880-52439-6	S-6 (0-1")	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

GC Semi VOA (Continued)

Prep Batch: 98003 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-98003/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-98003/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-98003/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-7473-A-19-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-7473-A-19-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 98235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52439-7	S-7 (0-1")	Total/NA	Solid	8015NM Prep	
MB 880-98235/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-98235/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-98235/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-52440-A-1-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-52440-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 98267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52439-1	S-1 (0-1")	Total/NA	Solid	8015B NM	98003
880-52439-2	S-2 (0-1")	Total/NA	Solid	8015B NM	98003
880-52439-3	S-3 (0-1")	Total/NA	Solid	8015B NM	98003
880-52439-4	S-4 (0-1")	Total/NA	Solid	8015B NM	98003
880-52439-5	S-5 (0-1")	Total/NA	Solid	8015B NM	98003
880-52439-6	S-6 (0-1")	Total/NA	Solid	8015B NM	98003
MB 880-98003/1-A	Method Blank	Total/NA	Solid	8015B NM	98003
LCS 880-98003/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	98003
LCSD 880-98003/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	98003
890-7473-A-19-B MS	Matrix Spike	Total/NA	Solid	8015B NM	98003
890-7473-A-19-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	98003

Analysis Batch: 98269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52439-7	S-7 (0-1")	Total/NA	Solid	8015B NM	98235
MB 880-98235/1-A	Method Blank	Total/NA	Solid	8015B NM	98235
LCS 880-98235/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	98235
LCSD 880-98235/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	98235
880-52440-A-1-G MS	Matrix Spike	Total/NA	Solid	8015B NM	98235
880-52440-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	98235

Prep Batch: 98404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52439-8	S-8 (0-1")	Total/NA	Solid	8015NM Prep	
880-50704-A-40-A MB	Method Blank	Total/NA	Solid	8015NM Prep	
MB 880-98404/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-98404/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-98404/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-7492-A-23-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-7492-A-23-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 98430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52439-8	S-8 (0-1")	Total/NA	Solid	8015B NM	98404

QC Association Summary

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

GC Semi VOA (Continued)

Analysis Batch: 98430 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-50704-A-40-A MB	Method Blank	Total/NA	Solid	8015B NM	98404
MB 880-98404/1-A	Method Blank	Total/NA	Solid	8015B NM	98404
LCS 880-98404/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	98404
LCSD 880-98404/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	98404
890-7492-A-23-C MS	Matrix Spike	Total/NA	Solid	8015B NM	98404
890-7492-A-23-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	98404

Analysis Batch: 98472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52439-1	S-1 (0-1")	Total/NA	Solid	8015 NM	
880-52439-2	S-2 (0-1")	Total/NA	Solid	8015 NM	
880-52439-3	S-3 (0-1")	Total/NA	Solid	8015 NM	
880-52439-4	S-4 (0-1")	Total/NA	Solid	8015 NM	
880-52439-5	S-5 (0-1")	Total/NA	Solid	8015 NM	
880-52439-6	S-6 (0-1")	Total/NA	Solid	8015 NM	
880-52439-7	S-7 (0-1")	Total/NA	Solid	8015 NM	
880-52439-8	S-8 (0-1")	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 98272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52439-1	S-1 (0-1")	Soluble	Solid	DI Leach	
880-52439-2	S-2 (0-1")	Soluble	Solid	DI Leach	
880-52439-3	S-3 (0-1")	Soluble	Solid	DI Leach	
880-52439-4	S-4 (0-1")	Soluble	Solid	DI Leach	
880-52439-5	S-5 (0-1")	Soluble	Solid	DI Leach	
880-52439-6	S-6 (0-1")	Soluble	Solid	DI Leach	
880-52439-7	S-7 (0-1")	Soluble	Solid	DI Leach	
880-52439-8	S-8 (0-1")	Soluble	Solid	DI Leach	
MB 880-98272/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-98272/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-98272/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-52387-A-1-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-52387-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 98286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52439-1	S-1 (0-1")	Soluble	Solid	300.0	98272
880-52439-2	S-2 (0-1")	Soluble	Solid	300.0	98272
880-52439-3	S-3 (0-1")	Soluble	Solid	300.0	98272
880-52439-4	S-4 (0-1")	Soluble	Solid	300.0	98272
880-52439-5	S-5 (0-1")	Soluble	Solid	300.0	98272
880-52439-6	S-6 (0-1")	Soluble	Solid	300.0	98272
880-52439-7	S-7 (0-1")	Soluble	Solid	300.0	98272
880-52439-8	S-8 (0-1")	Soluble	Solid	300.0	98272
MB 880-98272/1-A	Method Blank	Soluble	Solid	300.0	98272
LCS 880-98272/2-A	Lab Control Sample	Soluble	Solid	300.0	98272
LCSD 880-98272/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	98272
880-52387-A-1-E MS	Matrix Spike	Soluble	Solid	300.0	98272
880-52387-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	98272

Lab Chronicle

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

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

Lab Sample ID: 880-52439-1
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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	98240	12/19/24 09:09	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	98132	12/19/24 14:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			98464	12/19/24 14:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			98472	12/19/24 16:15	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	98003	12/17/24 07:50	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	98267	12/19/24 16:15	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	98272	12/19/24 10:34	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	98286	12/19/24 15:31	CH	EET MID

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

Lab Sample ID: 880-52439-2
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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	98240	12/19/24 09:09	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	98132	12/19/24 14:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			98464	12/19/24 14:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			98472	12/19/24 16:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.35 g	10 mL	98003	12/17/24 07:50	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	98267	12/19/24 16:29	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	98272	12/19/24 10:34	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	98286	12/19/24 15:39	CH	EET MID

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

Lab Sample ID: 880-52439-3
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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	98240	12/19/24 09:09	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	98132	12/19/24 17:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			98464	12/19/24 17:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			98472	12/19/24 16:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.34 g	10 mL	98003	12/17/24 07:50	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	98267	12/19/24 16:44	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	98272	12/19/24 10:34	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	98286	12/19/24 15:46	CH	EET MID

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

Lab Sample ID: 880-52439-4
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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	98240	12/19/24 09:09	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	98132	12/19/24 18:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			98464	12/19/24 18:07	SM	EET MID

Lab Chronicle

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

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

Lab Sample ID: 880-52439-4
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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			98472	12/19/24 16:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	98003	12/17/24 07:50	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	98267	12/19/24 16:59	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	98272	12/19/24 10:34	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	98286	12/19/24 16:08	CH	EET MID

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

Lab Sample ID: 880-52439-5
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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	98240	12/19/24 09:09	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	98132	12/19/24 18:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			98464	12/19/24 18:27	SM	EET MID
Total/NA	Analysis	8015 NM		1			98472	12/19/24 17:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	98003	12/17/24 07:50	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	98267	12/19/24 17:14	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	98272	12/19/24 10:34	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	98286	12/19/24 16:15	CH	EET MID

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

Lab Sample ID: 880-52439-6
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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	98240	12/19/24 09:09	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	98132	12/19/24 18:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			98464	12/19/24 18:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			98472	12/19/24 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	98003	12/17/24 07:50	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	98267	12/19/24 17:29	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	98272	12/19/24 10:34	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	98286	12/19/24 16:22	CH	EET MID

Client Sample ID: S-7 (0-1")

Lab Sample ID: 880-52439-7
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	98240	12/19/24 09:09	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	98132	12/19/24 19:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			98464	12/19/24 19:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			98472	12/19/24 21:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	98235	12/19/24 08:26	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	98269	12/19/24 21:59	TKC	EET MID

Lab Chronicle

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

Client Sample ID: S-7 (0-1")

Lab Sample ID: 880-52439-7
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	98272	12/19/24 10:34	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	98286	12/19/24 16:29	CH	EET MID

Client Sample ID: S-8 (0-1")

Lab Sample ID: 880-52439-8
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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	98240	12/19/24 09:09	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	98132	12/19/24 19:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			98464	12/19/24 19:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			98472	12/20/24 15:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	98404	12/19/24 21:32	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	98430	12/20/24 15:45	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	98272	12/19/24 10:34	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	98286	12/19/24 16:36	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: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-25

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
300.0		Solid	Chloride
8015 NM		Solid	Total TPH
8015B NM	8015NM Prep	Solid	Diesel Range Organics (Over C10-C28)
8015B NM	8015NM Prep	Solid	Gasoline Range Organics (GRO)-C6-C10
8015B NM	8015NM Prep	Solid	Oil Range Organics (Over C28-C36)
8021B	5035	Solid	Benzene
8021B	5035	Solid	Ethylbenzene
8021B	5035	Solid	m-Xylene & p-Xylene
8021B	5035	Solid	o-Xylene
8021B	5035	Solid	Toluene
8021B	5035	Solid	Xylenes, Total
Total BTEX		Solid	Total BTEX

Method Summary

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

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: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52439-1
SDG: Eddy Co., NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-52439-1	S-1 (0-1")	Solid	12/18/24 00:00	12/18/24 15:16
880-52439-2	S-2 (0-1")	Solid	12/18/24 00:00	12/18/24 15:16
880-52439-3	S-3 (0-1")	Solid	12/18/24 00:00	12/18/24 15:16
880-52439-4	S-4 (0-1")	Solid	12/18/24 00:00	12/18/24 15:16
880-52439-5	S-5 (0-1")	Solid	12/18/24 00:00	12/18/24 15:16
880-52439-6	S-6 (0-1")	Solid	12/18/24 00:00	12/18/24 15:16
880-52439-7	S-7 (0-1")	Solid	12/18/24 00:00	12/18/24 15:16
880-52439-8	S-8 (0-1")	Solid	12/18/24 00:00	12/18/24 15:16

Released to Imaging: 6/4/2025 10:46:07 AM

Received by OCD: 3/20/2025 12:03:26 PM

Chain of Custody

880-52439 Chain of Custody

Page 1 of 1

Project Manager:	Ashton Thielke	Bill to: (if different)	Laci Luig
Company Name:	Carmona Resources	Company Name:	Cimarex Energy
Address:	310 W Wall St Ste 500	Address:	600 N Marienfield St, Suite 600
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	432-813-8988	Email:	laci.luig@coterra.com ashton.thielke@coterra.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐

State of Project:

Reporting: Level II ☐ Level III ☐ TRRP ☐ Level IV ☐

Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Tar Heel 19-18-7 Federal Com 5H (8.29.2024)	Turn Around	
Project Number:	2594	☑ Routine	☐ Rush
Project Location	Eddy Co, NM	Due Date:	Normal
Sampler's Name:	JR		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Received Intact:	Yes No	Thermometer ID:	IR8
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-1
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.7
Total Containers:		Corrected Temperature:	3.6

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2S0_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Date	Time	Soil	Water	Grab/ Comp	# of Cont	BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 300	Hold	Sample Comments
S-1 (0-1")	12/18/2024		X		Grab/	1	X	X	X		
S-2 (0-1")	12/18/2024		X		Grab/	1	X	X	X		
S-3 (0-1")	12/18/2024		X		Grab/	1	X	X	X		
S-4 (0-1")	12/18/2024		X		Grab/	1	X	X	X		
S-5 (0-1")	12/18/2024		X		Grab/	1	X	X	X		
S-6 (0-1")	12/18/2024		X		Grab/	1	X	X	X		
S-7 (0-1")	12/18/2024		X		Grab/	1	X	X	X		
S-8 (0-1")	12/18/2024		X		Grab/	1	X	X	X		

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
	12/17/24 3:46		12/18 15:16

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-52439-1
SDG Number: Eddy Co., NM

Login Number: 52439
List Number: 1
Creator: Vasquez, Julisa

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	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ashton Thielke
Carmona Resources
310 W Wall St
Ste 500
Midland, Texas 79701

Generated 12/23/2024 9:24:39 AM

JOB DESCRIPTION

Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)
Eddy Co., NM

JOB NUMBER

880-52440-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 6/4/2025 10:46:07 AM

my EOL

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
12/23/2024 9:24:39 AM

Authorized for release by
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Definitions/Glossary

Client: Carmona Resources
Job ID: 880-52440-1
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)
SDG: Eddy Co., NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Carmona Resources
Job ID: 880-52440-1
Project: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1
Eurofins Midland

Job Narrative
880-52440-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 12/18/2024 3:16 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 5.6°C.

Receipt Exceptions
The following sample was listed on the Chain of Custody (COC); however, no sample was received: H-1 (0-1') (880-52440-9).

The following samples were received and analyzed from an unpreserved bulk soil jar: H-1 (0-1') (880-52440-1), H-2 (0-1') (880-52440-2), H-3 (0-1') (880-52440-3), H-4 (0-1') (880-52440-4), H-5 (0-1') (880-52440-5), H-6 (0-1') (880-52440-6), H-7 (0-1') (880-52440-7), H-8 (0-1') (880-52440-8) and H-1 (0-1') (880-52440-9).

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

Diesel Range Organics
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-98235 and analytical batch 880-98269 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: H-2 (0-1') (880-52440-2), H-3 (0-1') (880-52440-3), H-4 (0-1') (880-52440-4), H-5 (0-1') (880-52440-5), H-6 (0-1') (880-52440-6), H-7 (0-1') (880-52440-7), H-8 (0-1') (880-52440-8), (LCS 880-98235/2-A) and (LCSD 880-98235/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (880-52440-A-1-G MS). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-98269 recovered above the upper control limit for Gasoline Range Organics (GRO)-C6-C10. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8015MOD_NM: The laboratory control sample duplicate (LCSD) for preparation batch 880-98235 and analytical batch 880-98269 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28). These analytes were biased high in the LCSD and were within limits for the associated laboratory control sample (LCS); therefore, the data have been reported.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: H-1 (0-1') (880-52440-1) and (880-52440-A-1-H MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The closing continuing calibration verification (CCVC) associated with batch 880-98269 recovered above the upper control limit for Diesel Range Organics (Over C10-C28). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

Case Narrative

Client: Carmona Resources
Job ID: 880-52440-1
Project: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1 (Continued)
Eurofins Midland

HPLC/IC
Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-98272 and analytical batch 880-98286 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Client Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1
SDG: Eddy Co., NM

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

Lab Sample ID: 880-52440-1
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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		12/19/24 08:58	12/19/24 14:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/19/24 08:58	12/19/24 14:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/19/24 08:58	12/19/24 14:23	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/19/24 08:58	12/19/24 14:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/19/24 08:58	12/19/24 14:23	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/19/24 08:58	12/19/24 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*12/19/24 08:58*	*12/19/24 14:23*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*12/19/24 08:58*	*12/19/24 14:23*	*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			12/19/24 14:23	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			12/19/24 19:31	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 *+ F1	50.0		mg/Kg		12/19/24 08:26	12/19/24 19:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U *+ F1	50.0		mg/Kg		12/19/24 08:26	12/19/24 19:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/19/24 08:26	12/19/24 19:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*57*	*S1-*	*70 - 130*	*12/19/24 08:26*	*12/19/24 19:31*	*1*
o-Terphenyl	*55*	*S1-*	*70 - 130*	*12/19/24 08:26*	*12/19/24 19:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**96.8**	**F1**	9.98		mg/Kg			12/19/24 16:43	1

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

Lab Sample ID: 880-52440-2
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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		12/19/24 08:58	12/19/24 14:43	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/19/24 08:58	12/19/24 14:43	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/19/24 08:58	12/19/24 14:43	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		12/19/24 08:58	12/19/24 14:43	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/19/24 08:58	12/19/24 14:43	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		12/19/24 08:58	12/19/24 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*12/19/24 08:58*	*12/19/24 14:43*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/19/24 08:58*	*12/19/24 14:43*	*1*

Client Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1
SDG: Eddy Co., NM

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

Lab Sample ID: 880-52440-2
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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			12/19/24 14:43	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			12/19/24 20:16	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	<49.8	U *+	49.8		mg/Kg		12/19/24 08:26	12/19/24 20:16	1
Diesel Range Organics (Over C10-C28)	<49.8	U *+	49.8		mg/Kg		12/19/24 08:26	12/19/24 20:16	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/19/24 08:26	12/19/24 20:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*59*	*S1-*	*70 - 130*	*12/19/24 08:26*	*12/19/24 20:16*	*1*
o-Terphenyl	*57*	*S1-*	*70 - 130*	*12/19/24 08:26*	*12/19/24 20:16*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**37.7**		10.0		mg/Kg			12/19/24 17:05	1

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

Lab Sample ID: 880-52440-3
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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		12/19/24 08:58	12/19/24 16:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/19/24 08:58	12/19/24 16:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/19/24 08:58	12/19/24 16:17	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		12/19/24 08:58	12/19/24 16:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/19/24 08:58	12/19/24 16:17	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		12/19/24 08:58	12/19/24 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*12/19/24 08:58*	*12/19/24 16:17*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*12/19/24 08:58*	*12/19/24 16:17*	*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			12/19/24 16:17	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			12/19/24 20:31	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		12/19/24 08:26	12/19/24 20:31	1
Diesel Range Organics (Over C10-C28)	<49.8	U *+	49.8		mg/Kg		12/19/24 08:26	12/19/24 20:31	1

Client Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1
SDG: Eddy Co., NM

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

Lab Sample ID: 880-52440-3
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/19/24 08:26	12/19/24 20:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*60*	*S1-*	*70 - 130*	*12/19/24 08:26*	*12/19/24 20:31*	*1*
o-Terphenyl	*57*	*S1-*	*70 - 130*	*12/19/24 08:26*	*12/19/24 20:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**28.0**		9.96		mg/Kg			12/19/24 17:12	1

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

Lab Sample ID: 880-52440-4
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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		12/19/24 08:58	12/19/24 16:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/19/24 08:58	12/19/24 16:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/19/24 08:58	12/19/24 16:38	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/19/24 08:58	12/19/24 16:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/19/24 08:58	12/19/24 16:38	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/19/24 08:58	12/19/24 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*12/19/24 08:58*	*12/19/24 16:38*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/19/24 08:58*	*12/19/24 16:38*	*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			12/19/24 16:38	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			12/19/24 20:46	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	<49.7	U *+	49.7		mg/Kg		12/19/24 08:26	12/19/24 20:46	1
Diesel Range Organics (Over C10-C28)	<49.7	U *+	49.7		mg/Kg		12/19/24 08:26	12/19/24 20:46	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		12/19/24 08:26	12/19/24 20:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*64*	*S1-*	*70 - 130*	*12/19/24 08:26*	*12/19/24 20:46*	*1*
o-Terphenyl	*62*	*S1-*	*70 - 130*	*12/19/24 08:26*	*12/19/24 20:46*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**32.4**		10.0		mg/Kg			12/19/24 17:34	1

Client Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1
SDG: Eddy Co., NM

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

Lab Sample ID: 880-52440-5
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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		12/19/24 08:58	12/19/24 16:58	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/19/24 08:58	12/19/24 16:58	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/19/24 08:58	12/19/24 16:58	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/19/24 08:58	12/19/24 16:58	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/19/24 08:58	12/19/24 16:58	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/19/24 08:58	12/19/24 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*12/19/24 08:58*	*12/19/24 16:58*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/19/24 08:58*	*12/19/24 16:58*	*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			12/19/24 16:58	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			12/19/24 21:01	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		12/19/24 08:26	12/19/24 21:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U *+	50.0		mg/Kg		12/19/24 08:26	12/19/24 21:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/19/24 08:26	12/19/24 21:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*61*	*S1-*	*70 - 130*	*12/19/24 08:26*	*12/19/24 21:01*	*1*
o-Terphenyl	*59*	*S1-*	*70 - 130*	*12/19/24 08:26*	*12/19/24 21:01*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**40.7**		9.94		mg/Kg			12/19/24 17:41	1

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

Lab Sample ID: 880-52440-6
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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		12/19/24 08:58	12/19/24 17:19	1
Toluene	<0.00201	U	0.00201		mg/Kg		12/19/24 08:58	12/19/24 17:19	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		12/19/24 08:58	12/19/24 17:19	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		12/19/24 08:58	12/19/24 17:19	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		12/19/24 08:58	12/19/24 17:19	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		12/19/24 08:58	12/19/24 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*12/19/24 08:58*	*12/19/24 17:19*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*12/19/24 08:58*	*12/19/24 17:19*	*1*

Client Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1
SDG: Eddy Co., NM

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

Lab Sample ID: 880-52440-6
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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			12/19/24 17:19	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			12/19/24 21:16	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	<49.9	U *+	49.9		mg/Kg		12/19/24 08:26	12/19/24 21:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U *+	49.9		mg/Kg		12/19/24 08:26	12/19/24 21:16	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/19/24 08:26	12/19/24 21:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*68*	*S1-*	*70 - 130*	*12/19/24 08:26*	*12/19/24 21:16*	*1*
o-Terphenyl	*65*	*S1-*	*70 - 130*	*12/19/24 08:26*	*12/19/24 21:16*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**21.7**		9.92		mg/Kg			12/19/24 17:48	1

Client Sample ID: H-7 (0-1')

Lab Sample ID: 880-52440-7
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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		12/19/24 08:58	12/19/24 17:39	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/19/24 08:58	12/19/24 17:39	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/19/24 08:58	12/19/24 17:39	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		12/19/24 08:58	12/19/24 17:39	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/19/24 08:58	12/19/24 17:39	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		12/19/24 08:58	12/19/24 17:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*12/19/24 08:58*	*12/19/24 17:39*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*12/19/24 08:58*	*12/19/24 17:39*	*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			12/19/24 17:39	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			12/19/24 21:30	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	<50.0	U *+	50.0		mg/Kg		12/19/24 08:26	12/19/24 21:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U *+	50.0		mg/Kg		12/19/24 08:26	12/19/24 21:30	1

Client Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1
SDG: Eddy Co., NM

Client Sample ID: H-7 (0-1')

Lab Sample ID: 880-52440-7
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/19/24 08:26	12/19/24 21:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*62*	*S1-*	*70 - 130*	*12/19/24 08:26*	*12/19/24 21:30*	*1*
o-Terphenyl	*59*	*S1-*	*70 - 130*	*12/19/24 08:26*	*12/19/24 21:30*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**110**		9.96		mg/Kg			12/19/24 17:55	1

Client Sample ID: H-8 (0-1')

Lab Sample ID: 880-52440-8
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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		12/19/24 08:58	12/19/24 18:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/19/24 08:58	12/19/24 18:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/19/24 08:58	12/19/24 18:00	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/19/24 08:58	12/19/24 18:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/19/24 08:58	12/19/24 18:00	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/19/24 08:58	12/19/24 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*12/19/24 08:58*	*12/19/24 18:00*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*12/19/24 08:58*	*12/19/24 18:00*	*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			12/19/24 18:00	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			12/19/24 21:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *+	49.8		mg/Kg		12/19/24 08:26	12/19/24 21:44	1
Diesel Range Organics (Over C10-C28)	<49.8	U *+	49.8		mg/Kg		12/19/24 08:26	12/19/24 21:44	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/19/24 08:26	12/19/24 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*63*	*S1-*	*70 - 130*	*12/19/24 08:26*	*12/19/24 21:44*	*1*
o-Terphenyl	*60*	*S1-*	*70 - 130*	*12/19/24 08:26*	*12/19/24 21:44*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**50.2**		10.0		mg/Kg			12/19/24 18:02	1

Surrogate Summary

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1
SDG: Eddy Co., NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-52381-A-11-D MS	Matrix Spike	107	104
880-52381-A-11-E MSD	Matrix Spike Duplicate	108	103
880-52440-1	H-1 (0-1')	109	105
880-52440-2	H-2 (0-1')	115	107
880-52440-3	H-3 (0-1')	118	106
880-52440-4	H-4 (0-1')	113	107
880-52440-5	H-5 (0-1')	112	107
880-52440-6	H-6 (0-1')	112	106
880-52440-7	H-7 (0-1')	115	106
880-52440-8	H-8 (0-1')	110	106
LCS 880-98239/1-A	Lab Control Sample	106	104
LCSD 880-98239/2-A	Lab Control Sample Dup	105	103
MB 880-98239/5-A	Method Blank	113	104

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-52440-1	H-1 (0-1')	57 S1-	55 S1-
880-52440-1 MS	H-1 (0-1')	70	61 S1-
880-52440-1 MSD	H-1 (0-1')	68 S1-	60 S1-
880-52440-2	H-2 (0-1')	59 S1-	57 S1-
880-52440-3	H-3 (0-1')	60 S1-	57 S1-
880-52440-4	H-4 (0-1')	64 S1-	62 S1-
880-52440-5	H-5 (0-1')	61 S1-	59 S1-
880-52440-6	H-6 (0-1')	68 S1-	65 S1-
880-52440-7	H-7 (0-1')	62 S1-	59 S1-
880-52440-8	H-8 (0-1')	63 S1-	60 S1-
LCS 880-98235/2-A	Lab Control Sample	131 S1+	111
LCSD 880-98235/3-A	Lab Control Sample Dup	153 S1+	129
MB 880-98235/1-A	Method Blank	73	72

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1
SDG: Eddy Co., NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-98239/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98233 — **Prep Batch: 98239**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/19/24 08:58	12/19/24 11:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/19/24 08:58	12/19/24 11:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/19/24 08:58	12/19/24 11:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/19/24 08:58	12/19/24 11:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/19/24 08:58	12/19/24 11:17	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/19/24 08:58	12/19/24 11:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*12/19/24 08:58*	*12/19/24 11:17*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*12/19/24 08:58*	*12/19/24 11:17*	*1*

Lab Sample ID: LCS 880-98239/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98233 — **Prep Batch: 98239**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1094		mg/Kg		109	70 - 130
Toluene	0.100	0.1057		mg/Kg		106	70 - 130
Ethylbenzene	0.100	0.1039		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	0.200	0.2123		mg/Kg		106	70 - 130
o-Xylene	0.100	0.1084		mg/Kg		108	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: LCSD 880-98239/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98233 — **Prep Batch: 98239**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1143		mg/Kg		114	70 - 130	4	35
Toluene	0.100	0.1106		mg/Kg		111	70 - 130	4	35
Ethylbenzene	0.100	0.1087		mg/Kg		109	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2219		mg/Kg		111	70 - 130	4	35
o-Xylene	0.100	0.1132		mg/Kg		113	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 880-52381-A-11-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98233 — **Prep Batch: 98239**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0996	0.1155		mg/Kg		116	70 - 130
Toluene	0.00671		0.0996	0.1119		mg/Kg		106	70 - 130

QC Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1
SDG: Eddy Co., NM

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

Lab Sample ID: 880-52381-A-11-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98233 — **Prep Batch: 98239**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	0.00451		0.0996	0.1113		mg/Kg		107	70 - 130
m-Xylene & p-Xylene	0.0598		0.199	0.2265		mg/Kg		84	70 - 130
o-Xylene	0.0196		0.0996	0.1151		mg/Kg		96	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 880-52381-A-11-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98233 — **Prep Batch: 98239**

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

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

Lab Sample ID: MB 880-98235/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98269 — **Prep Batch: 98235**

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		12/19/24 08:26	12/19/24 18:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/19/24 08:26	12/19/24 18:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/19/24 08:26	12/19/24 18:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*73*		*70 - 130*	*12/19/24 08:26*	*12/19/24 18:45*	*1*
o-Terphenyl	*72*		*70 - 130*	*12/19/24 08:26*	*12/19/24 18:45*	*1*

Lab Sample ID: LCS 880-98235/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98269 — **Prep Batch: 98235**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1248		mg/Kg		125	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1142		mg/Kg		114	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*131*	*S1+*	*70 - 130*
o-Terphenyl	*111*		*70 - 130*

QC Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1
SDG: Eddy Co., NM

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

Lab Sample ID: LCSD 880-98235/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98269 — **Prep Batch: 98235**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1395	*+	mg/Kg		140	70 - 130	11	20
Diesel Range Organics (Over C10-C28)			1000	1336	*+	mg/Kg		134	70 - 130	16	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*153*	*S1+*	*70 - 130*
o-Terphenyl	*129*		*70 - 130*

Lab Sample ID: 880-52440-1 MS — **Client Sample ID: H-1 (0-1')**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98269 — **Prep Batch: 98235**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *+ F1	998	580.0	F1	mg/Kg		58	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U *+ F1	998	582.0	F1	mg/Kg		58	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*70*		*70 - 130*
o-Terphenyl	*61*	*S1-*	*70 - 130*

Lab Sample ID: 880-52440-1 MSD — **Client Sample ID: H-1 (0-1')**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98269 — **Prep Batch: 98235**

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	<50.0	U *+ F1	998	553.4	F1	mg/Kg		55	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<50.0	U *+ F1	998	551.6	F1	mg/Kg		55	70 - 130	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*68*	*S1-*	*70 - 130*
o-Terphenyl	*60*	*S1-*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-98272/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 98286

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			12/19/24 14:41	1

QC Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1
SDG: Eddy Co., NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-98272/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 98286

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	267.3		mg/Kg		107	90 - 110		

Lab Sample ID: LCSD 880-98272/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 98286

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	275.0		mg/Kg		110	90 - 110	3	20

Lab Sample ID: 880-52440-1 MS — **Client Sample ID: H-1 (0-1')**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 98286

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	96.8	F1	250	316.2	F1	mg/Kg		88	90 - 110		

Lab Sample ID: 880-52440-1 MSD — **Client Sample ID: H-1 (0-1')**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 98286

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	96.8	F1	250	314.3	F1	mg/Kg		87	90 - 110	1	20

QC Association Summary

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1
SDG: Eddy Co., NM

GC VOA

Analysis Batch: 98233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52440-1	H-1 (0-1')	Total/NA	Solid	8021B	98239
880-52440-2	H-2 (0-1')	Total/NA	Solid	8021B	98239
880-52440-3	H-3 (0-1')	Total/NA	Solid	8021B	98239
880-52440-4	H-4 (0-1')	Total/NA	Solid	8021B	98239
880-52440-5	H-5 (0-1')	Total/NA	Solid	8021B	98239
880-52440-6	H-6 (0-1')	Total/NA	Solid	8021B	98239
880-52440-7	H-7 (0-1')	Total/NA	Solid	8021B	98239
880-52440-8	H-8 (0-1')	Total/NA	Solid	8021B	98239
MB 880-98239/5-A	Method Blank	Total/NA	Solid	8021B	98239
LCS 880-98239/1-A	Lab Control Sample	Total/NA	Solid	8021B	98239
LCSD 880-98239/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	98239
880-52381-A-11-D MS	Matrix Spike	Total/NA	Solid	8021B	98239
880-52381-A-11-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	98239

Prep Batch: 98239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52440-1	H-1 (0-1')	Total/NA	Solid	5035	
880-52440-2	H-2 (0-1')	Total/NA	Solid	5035	
880-52440-3	H-3 (0-1')	Total/NA	Solid	5035	
880-52440-4	H-4 (0-1')	Total/NA	Solid	5035	
880-52440-5	H-5 (0-1')	Total/NA	Solid	5035	
880-52440-6	H-6 (0-1')	Total/NA	Solid	5035	
880-52440-7	H-7 (0-1')	Total/NA	Solid	5035	
880-52440-8	H-8 (0-1')	Total/NA	Solid	5035	
MB 880-98239/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-98239/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-98239/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-52381-A-11-D MS	Matrix Spike	Total/NA	Solid	5035	
880-52381-A-11-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 98460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52440-1	H-1 (0-1')	Total/NA	Solid	Total BTEX	
880-52440-2	H-2 (0-1')	Total/NA	Solid	Total BTEX	
880-52440-3	H-3 (0-1')	Total/NA	Solid	Total BTEX	
880-52440-4	H-4 (0-1')	Total/NA	Solid	Total BTEX	
880-52440-5	H-5 (0-1')	Total/NA	Solid	Total BTEX	
880-52440-6	H-6 (0-1')	Total/NA	Solid	Total BTEX	
880-52440-7	H-7 (0-1')	Total/NA	Solid	Total BTEX	
880-52440-8	H-8 (0-1')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 98235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52440-1	H-1 (0-1')	Total/NA	Solid	8015NM Prep	
880-52440-2	H-2 (0-1')	Total/NA	Solid	8015NM Prep	
880-52440-3	H-3 (0-1')	Total/NA	Solid	8015NM Prep	
880-52440-4	H-4 (0-1')	Total/NA	Solid	8015NM Prep	
880-52440-5	H-5 (0-1')	Total/NA	Solid	8015NM Prep	
880-52440-6	H-6 (0-1')	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1
SDG: Eddy Co., NM

GC Semi VOA (Continued)

Prep Batch: 98235 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52440-7	H-7 (0-1')	Total/NA	Solid	8015NM Prep	
880-52440-8	H-8 (0-1')	Total/NA	Solid	8015NM Prep	
MB 880-98235/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-98235/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-98235/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-52440-1 MS	H-1 (0-1')	Total/NA	Solid	8015NM Prep	
880-52440-1 MSD	H-1 (0-1')	Total/NA	Solid	8015NM Prep	

Analysis Batch: 98269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52440-1	H-1 (0-1')	Total/NA	Solid	8015B NM	98235
880-52440-2	H-2 (0-1')	Total/NA	Solid	8015B NM	98235
880-52440-3	H-3 (0-1')	Total/NA	Solid	8015B NM	98235
880-52440-4	H-4 (0-1')	Total/NA	Solid	8015B NM	98235
880-52440-5	H-5 (0-1')	Total/NA	Solid	8015B NM	98235
880-52440-6	H-6 (0-1')	Total/NA	Solid	8015B NM	98235
880-52440-7	H-7 (0-1')	Total/NA	Solid	8015B NM	98235
880-52440-8	H-8 (0-1')	Total/NA	Solid	8015B NM	98235
MB 880-98235/1-A	Method Blank	Total/NA	Solid	8015B NM	98235
LCS 880-98235/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	98235
LCSD 880-98235/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	98235
880-52440-1 MS	H-1 (0-1')	Total/NA	Solid	8015B NM	98235
880-52440-1 MSD	H-1 (0-1')	Total/NA	Solid	8015B NM	98235

Analysis Batch: 98471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52440-1	H-1 (0-1')	Total/NA	Solid	8015 NM	
880-52440-2	H-2 (0-1')	Total/NA	Solid	8015 NM	
880-52440-3	H-3 (0-1')	Total/NA	Solid	8015 NM	
880-52440-4	H-4 (0-1')	Total/NA	Solid	8015 NM	
880-52440-5	H-5 (0-1')	Total/NA	Solid	8015 NM	
880-52440-6	H-6 (0-1')	Total/NA	Solid	8015 NM	
880-52440-7	H-7 (0-1')	Total/NA	Solid	8015 NM	
880-52440-8	H-8 (0-1')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 98272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52440-1	H-1 (0-1')	Soluble	Solid	DI Leach	
880-52440-2	H-2 (0-1')	Soluble	Solid	DI Leach	
880-52440-3	H-3 (0-1')	Soluble	Solid	DI Leach	
880-52440-4	H-4 (0-1')	Soluble	Solid	DI Leach	
880-52440-5	H-5 (0-1')	Soluble	Solid	DI Leach	
880-52440-6	H-6 (0-1')	Soluble	Solid	DI Leach	
880-52440-7	H-7 (0-1')	Soluble	Solid	DI Leach	
880-52440-8	H-8 (0-1')	Soluble	Solid	DI Leach	
MB 880-98272/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-98272/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-98272/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-52440-1 MS	H-1 (0-1')	Soluble	Solid	DI Leach	

QC Association Summary

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1
SDG: Eddy Co., NM

HPLC/IC (Continued)

Leach Batch: 98272 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52440-1 MSD	H-1 (0-1')	Soluble	Solid	DI Leach	

Analysis Batch: 98286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52440-1	H-1 (0-1')	Soluble	Solid	300.0	98272
880-52440-2	H-2 (0-1')	Soluble	Solid	300.0	98272
880-52440-3	H-3 (0-1')	Soluble	Solid	300.0	98272
880-52440-4	H-4 (0-1')	Soluble	Solid	300.0	98272
880-52440-5	H-5 (0-1')	Soluble	Solid	300.0	98272
880-52440-6	H-6 (0-1')	Soluble	Solid	300.0	98272
880-52440-7	H-7 (0-1')	Soluble	Solid	300.0	98272
880-52440-8	H-8 (0-1')	Soluble	Solid	300.0	98272
MB 880-98272/1-A	Method Blank	Soluble	Solid	300.0	98272
LCS 880-98272/2-A	Lab Control Sample	Soluble	Solid	300.0	98272
LCSD 880-98272/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	98272
880-52440-1 MS	H-1 (0-1')	Soluble	Solid	300.0	98272
880-52440-1 MSD	H-1 (0-1')	Soluble	Solid	300.0	98272

Lab Chronicle

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1
SDG: Eddy Co., NM

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

Lab Sample ID: 880-52440-1
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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	98239	12/19/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	98233	12/19/24 14:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			98460	12/19/24 14:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			98471	12/19/24 19:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	98235	12/19/24 08:26	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	98269	12/19/24 19:31	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	98272	12/19/24 10:34	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	98286	12/19/24 16:43	CH	EET MID

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

Lab Sample ID: 880-52440-2
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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	98239	12/19/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	98233	12/19/24 14:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			98460	12/19/24 14:43	SM	EET MID
Total/NA	Analysis	8015 NM		1			98471	12/19/24 20:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	98235	12/19/24 08:26	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	98269	12/19/24 20:16	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	98272	12/19/24 10:34	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	98286	12/19/24 17:05	CH	EET MID

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

Lab Sample ID: 880-52440-3
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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	98239	12/19/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	98233	12/19/24 16:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			98460	12/19/24 16:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			98471	12/19/24 20:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	98235	12/19/24 08:26	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	98269	12/19/24 20:31	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	98272	12/19/24 10:34	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	98286	12/19/24 17:12	CH	EET MID

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

Lab Sample ID: 880-52440-4
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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	98239	12/19/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	98233	12/19/24 16:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			98460	12/19/24 16:38	SM	EET MID

Lab Chronicle

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1
SDG: Eddy Co., NM

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

Lab Sample ID: 880-52440-4
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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			98471	12/19/24 20:46	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	98235	12/19/24 08:26	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	98269	12/19/24 20:46	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	98272	12/19/24 10:34	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	98286	12/19/24 17:34	CH	EET MID

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

Lab Sample ID: 880-52440-5
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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	98239	12/19/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	98233	12/19/24 16:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			98460	12/19/24 16:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			98471	12/19/24 21:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	98235	12/19/24 08:26	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	98269	12/19/24 21:01	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	98272	12/19/24 10:34	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	98286	12/19/24 17:41	CH	EET MID

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

Lab Sample ID: 880-52440-6
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	98239	12/19/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	98233	12/19/24 17:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			98460	12/19/24 17:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			98471	12/19/24 21:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	98235	12/19/24 08:26	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	98269	12/19/24 21:16	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	98272	12/19/24 10:34	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	98286	12/19/24 17:48	CH	EET MID

Client Sample ID: H-7 (0-1')

Lab Sample ID: 880-52440-7
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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	98239	12/19/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	98233	12/19/24 17:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			98460	12/19/24 17:39	SM	EET MID
Total/NA	Analysis	8015 NM		1			98471	12/19/24 21:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	98235	12/19/24 08:26	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	98269	12/19/24 21:30	TKC	EET MID

Lab Chronicle

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1
SDG: Eddy Co., NM

Client Sample ID: H-7 (0-1')

Lab Sample ID: 880-52440-7
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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	98272	12/19/24 10:34	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	98286	12/19/24 17:55	CH	EET MID

Client Sample ID: H-8 (0-1')

Lab Sample ID: 880-52440-8
Date Collected: 12/18/24 00:00
Matrix: Solid
Date Received: 12/18/24 15:16

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	98239	12/19/24 08:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	98233	12/19/24 18:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			98460	12/19/24 18:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			98471	12/19/24 21:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	98235	12/19/24 08:26	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	98269	12/19/24 21:44	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	98272	12/19/24 10:34	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	98286	12/19/24 18:02	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: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1
SDG: Eddy Co., NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-25

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
300.0		Solid	Chloride
8015 NM		Solid	Total TPH
8015B NM	8015NM Prep	Solid	Diesel Range Organics (Over C10-C28)
8015B NM	8015NM Prep	Solid	Gasoline Range Organics (GRO)-C6-C10
8015B NM	8015NM Prep	Solid	Oil Range Organics (Over C28-C36)
8021B	5035	Solid	Benzene
8021B	5035	Solid	Ethylbenzene
8021B	5035	Solid	m-Xylene & p-Xylene
8021B	5035	Solid	o-Xylene
8021B	5035	Solid	Toluene
8021B	5035	Solid	Xylenes, Total
Total BTEX		Solid	Total BTEX

Method Summary

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1
SDG: Eddy Co., NM

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: Tar Heel 19-18-7 Federeal Com 5H (8.29.2024)

Job ID: 880-52440-1
SDG: Eddy Co., NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-52440-1	H-1 (0-1')	Solid	12/18/24 00:00	12/18/24 15:16
880-52440-2	H-2 (0-1')	Solid	12/18/24 00:00	12/18/24 15:16
880-52440-3	H-3 (0-1')	Solid	12/18/24 00:00	12/18/24 15:16
880-52440-4	H-4 (0-1')	Solid	12/18/24 00:00	12/18/24 15:16
880-52440-5	H-5 (0-1')	Solid	12/18/24 00:00	12/18/24 15:16
880-52440-6	H-6 (0-1')	Solid	12/18/24 00:00	12/18/24 15:16
880-52440-7	H-7 (0-1')	Solid	12/18/24 00:00	12/18/24 15:16
880-52440-8	H-8 (0-1')	Solid	12/18/24 00:00	12/18/24 15:16

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Received by OCD: 3/20/2025 12:03:26 PM

Chain of Custody

880-52440 Chain of Custody

Page ___ ___ ___1___

Project Manager:	Ashton Thielke	Bill to: (if different)	Laci Luig
Company Name:	Carmona Resources	Company Name:	Cimarex Energy
Address:	310 W Wall St Ste 500	Address:	600 N Marienfield St, Suite 600
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	432-813-8988	Email:	laci.luig@coterra.com ashton.thielke@coterra.com

Work Order Comments

Program: UST/PST ☐PRP ☐Brownfields ☐RRC ☐Superfund ☐

State of Project:

Reporting: Level II ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐

Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Tar Heel 19-18-7 Federal Com 5H (8.29.2024)	Turn Around	
Project Number:	2594	☑Routine	☐Rush
Project Location	Eddy Co, NM	Due Date:	Normal
Sampler's Name:	JR		
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Received Intact:	Yes No	Thermometer ID:	IR6	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-.1	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.7	
Total Containers:		Corrected Temperature:	5.6	

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO3: HN; H_2S0_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Date	Time	Soil	Water	Grab/ Comp	# of Cont	BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 300	Hold	Sample Comments
H-1 (0-1')	12/18/2024		X		Grab/	1	X	X	X		
H-2 (0-1')	12/18/2024		X		Grab/	1	X	X	X		
H-3 (0-1')	12/18/2024		X		Grab/	1	X	X	X		
H-4 (0-1')	12/18/2024		X		Grab/	1	X	X	X		
H-5 (0-1')	12/18/2024		X		Grab/	1	X	X	X		
H-6 (0-1')	12/18/2024		X		Grab/	1	X	X	X		
H-7 (0-1')	12/18/2024		X		Grab/	1	X	X	X		
H-8 (0-1')	12/18/2024		X		Grab/	1	X	X	X		
H-1 (0-1')	12/18/2024		X		Grab/	1	X	X	X		

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
	12/18/24 3:16		12/18 1516

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-52440-1
SDG Number: Eddy Co., NM

Login Number: 52440
List Number: 1
Creator: Vasquez, Julisa

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	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Conner Moehring
Carmona Resources
310 W Wall St
Ste 500
Midland, Texas 79701

Generated 1/21/2025 12:38:47 PM

JOB DESCRIPTION

Tar Heel 19-18-7 Federal Com 5H (8.29.2024)
Eddy Co, NM

JOB NUMBER

880-53343-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

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my EOL

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

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Definitions/Glossary

Client: Carmona Resources
Job ID: 880-53343-1
Project/Site: Tar Heel 19-18-7 Federal Com 5H (8.29.2024)
SDG: Eddy Co, NM

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
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
Job ID: 880-53343-1
Project: Tar Heel 19-18-7 Federal Com 5H (8.29.2024)

Job ID: 880-53343-1
Eurofins Midland

Job Narrative
880-53343-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 1/17/2025 8:15 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -1.8°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: Eastern Background (0-1") (880-53343-1) and Western Background (0-1") (880-53343-2).

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

Diesel Range Organics
Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-100652 recovered above the upper 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 880-100652/21).

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

HPLC/IC
Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-100544 and analytical batch 880-100583 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Client Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H (8.29.2024)

Job ID: 880-53343-1
SDG: Eddy Co, NM

Client Sample ID: Eastern Background (0-1")

Lab Sample ID: 880-53343-1
Matrix: Solid

Date Collected: 01/15/25 00:00
Date Received: 01/17/25 08:15

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		01/17/25 09:23	01/17/25 13:37	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/17/25 09:23	01/17/25 13:37	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/17/25 09:23	01/17/25 13:37	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/17/25 09:23	01/17/25 13:37	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/17/25 09:23	01/17/25 13:37	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/17/25 09:23	01/17/25 13:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*01/17/25 09:23*	*01/17/25 13:37*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*01/17/25 09:23*	*01/17/25 13:37*	*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			01/17/25 13:37	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			01/20/25 12:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/17/25 09:29	01/20/25 12:08	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/17/25 09:29	01/20/25 12:08	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/17/25 09:29	01/20/25 12:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*01/17/25 09:29*	*01/20/25 12:08*	*1*
o-Terphenyl	*119*		*70 - 130*	*01/17/25 09:29*	*01/20/25 12:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1760**		50.1		mg/Kg			01/17/25 15:32	5

Client Sample ID: Western Background (0-1")

Lab Sample ID: 880-53343-2
Matrix: Solid

Date Collected: 01/15/25 00:00
Date Received: 01/17/25 08:15

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		01/17/25 09:23	01/17/25 14:04	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/17/25 09:23	01/17/25 14:04	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/17/25 09:23	01/17/25 14:04	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		01/17/25 09:23	01/17/25 14:04	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/17/25 09:23	01/17/25 14:04	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/17/25 09:23	01/17/25 14:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*01/17/25 09:23*	*01/17/25 14:04*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*01/17/25 09:23*	*01/17/25 14:04*	*1*

Client Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H (8.29.2024)

Job ID: 880-53343-1
SDG: Eddy Co, NM

Client Sample ID: Western Background (0-1")

Lab Sample ID: 880-53343-2

Date Collected: 01/15/25 00:00
Matrix: Solid
Date Received: 01/17/25 08:15

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			01/17/25 14:04	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			01/20/25 12:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/17/25 09:29	01/20/25 12:55	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/17/25 09:29	01/20/25 12:55	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/17/25 09:29	01/20/25 12:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*01/17/25 09:29*	*01/20/25 12:55*	*1*
o-Terphenyl	*115*		*70 - 130*	*01/17/25 09:29*	*01/20/25 12:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1470**		49.8		mg/Kg			01/17/25 15:39	5

Surrogate Summary

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H (8.29.2024)

Job ID: 880-53343-1
SDG: Eddy Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-53343-1	Eastern Background (0-1")	91	97
880-53343-1 MS	Eastern Background (0-1")	97	98
880-53343-1 MSD	Eastern Background (0-1")	94	104
880-53343-2	Western Background (0-1")	98	99
LCS 880-100498/1-A	Lab Control Sample	93	98
LCSD 880-100498/2-A	Lab Control Sample Dup	87	95
MB 880-100498/5-A	Method Blank	90	89

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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-53343-1	Eastern Background (0-1")	117	119
880-53343-1 MS	Eastern Background (0-1")	112	122
880-53343-1 MSD	Eastern Background (0-1")	115	123
880-53343-2	Western Background (0-1")	113	115
LCS 880-100504/2-A	Lab Control Sample	117	130
LCSD 880-100504/3-A	Lab Control Sample Dup	119	130
MB 880-100504/1-A	Method Blank	111	111

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H (8.29.2024)

Job ID: 880-53343-1
SDG: Eddy Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-100498/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 100506 — **Prep Batch: 100498**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/17/25 09:23	01/17/25 13:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/17/25 09:23	01/17/25 13:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/17/25 09:23	01/17/25 13:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/17/25 09:23	01/17/25 13:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/17/25 09:23	01/17/25 13:11	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/17/25 09:23	01/17/25 13:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*01/17/25 09:23*	*01/17/25 13:11*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*01/17/25 09:23*	*01/17/25 13:11*	*1*

Lab Sample ID: LCS 880-100498/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 100506 — **Prep Batch: 100498**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08975		mg/Kg		90	70 - 130
Toluene	0.100	0.08665		mg/Kg		87	70 - 130
Ethylbenzene	0.100	0.08538		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	0.200	0.1789		mg/Kg		89	70 - 130
o-Xylene	0.100	0.09108		mg/Kg		91	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-100498/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 100506 — **Prep Batch: 100498**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08299		mg/Kg		83	70 - 130	8	35
Toluene	0.100	0.08070		mg/Kg		81	70 - 130	7	35
Ethylbenzene	0.100	0.07780		mg/Kg		78	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.1611		mg/Kg		81	70 - 130	10	35
o-Xylene	0.100	0.08226		mg/Kg		82	70 - 130	10	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 880-53343-1 MS — **Client Sample ID: Eastern Background (0-1")**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 100506 — **Prep Batch: 100498**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0996	0.07700		mg/Kg		77	70 - 130
Toluene	<0.00199	U	0.0996	0.07282		mg/Kg		73	70 - 130

QC Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H (8.29.2024)

Job ID: 880-53343-1
SDG: Eddy Co, NM

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

Lab Sample ID: 880-53343-1 MS — **Client Sample ID: Eastern Background (0-1")**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 100506 — **Prep Batch: 100498**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.0996	0.07264		mg/Kg		73	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1515		mg/Kg		76	70 - 130
o-Xylene	<0.00199	U	0.0996	0.07911		mg/Kg		79	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 880-53343-1 MSD — **Client Sample ID: Eastern Background (0-1")**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 100506 — **Prep Batch: 100498**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.101	0.08399		mg/Kg		83	70 - 130	9	35
Toluene	<0.00199	U	0.101	0.07690		mg/Kg		76	70 - 130	5	35
Ethylbenzene	<0.00199	U	0.101	0.07674		mg/Kg		76	70 - 130	5	35
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1590		mg/Kg		79	70 - 130	5	35
o-Xylene	<0.00199	U	0.101	0.08275		mg/Kg		82	70 - 130	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

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

Lab Sample ID: MB 880-100504/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 100652 — **Prep Batch: 100504**

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		01/17/25 09:29	01/20/25 09:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/17/25 09:29	01/20/25 09:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/17/25 09:29	01/20/25 09:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*01/17/25 09:29*	*01/20/25 09:44*	*1*
o-Terphenyl	*111*		*70 - 130*	*01/17/25 09:29*	*01/20/25 09:44*	*1*

Lab Sample ID: LCS 880-100504/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 100652 — **Prep Batch: 100504**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1036		mg/Kg		104	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1135		mg/Kg		113	70 - 130

QC Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H (8.29.2024)

Job ID: 880-53343-1
SDG: Eddy Co, NM

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

Lab Sample ID: LCS 880-100504/2-A
Matrix: Solid
Analysis Batch: 100652

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 100504

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

Lab Sample ID: LCSD 880-100504/3-A
Matrix: Solid
Analysis Batch: 100652

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 100504

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1065		mg/Kg		107	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	1120		mg/Kg		112	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	119		70 - 130
o-Terphenyl	130		70 - 130

Lab Sample ID: 880-53343-1 MS
Matrix: Solid
Analysis Batch: 100652

Client Sample ID: Eastern Background (0-1")
Prep Type: Total/NA
Prep Batch: 100504

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	999	924.6		mg/Kg		93	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1102		mg/Kg		110	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	122		70 - 130

Lab Sample ID: 880-53343-1 MSD
Matrix: Solid
Analysis Batch: 100652

Client Sample ID: Eastern Background (0-1")
Prep Type: Total/NA
Prep Batch: 100504

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	999	951.3		mg/Kg		95	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1098		mg/Kg		110	70 - 130	0	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	115		70 - 130
o-Terphenyl	123		70 - 130

QC Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H (8.29.2024)

Job ID: 880-53343-1
SDG: Eddy Co, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-100544/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 100583

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			01/17/25 14:06	1

Lab Sample ID: LCS 880-100544/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 100583

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	251.8		mg/Kg		101	90 - 110		

Lab Sample ID: LCSD 880-100544/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 100583

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	254.3		mg/Kg		102	90 - 110	1	20

Lab Sample ID: 880-53334-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 100583

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	4220	F1	1260	5612	F1	mg/Kg		111	90 - 110		

Lab Sample ID: 880-53334-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 100583

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	4220	F1	1260	5534		mg/Kg		105	90 - 110	1	20

QC Association Summary

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H (8.29.2024)

Job ID: 880-53343-1
SDG: Eddy Co, NM

GC VOA

Prep Batch: 100498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-53343-1	Eastern Background (0-1")	Total/NA	Solid	5035	
880-53343-2	Western Background (0-1")	Total/NA	Solid	5035	
MB 880-100498/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-100498/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-100498/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-53343-1 MS	Eastern Background (0-1")	Total/NA	Solid	5035	
880-53343-1 MSD	Eastern Background (0-1")	Total/NA	Solid	5035	

Analysis Batch: 100506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-53343-1	Eastern Background (0-1")	Total/NA	Solid	8021B	100498
880-53343-2	Western Background (0-1")	Total/NA	Solid	8021B	100498
MB 880-100498/5-A	Method Blank	Total/NA	Solid	8021B	100498
LCS 880-100498/1-A	Lab Control Sample	Total/NA	Solid	8021B	100498
LCSD 880-100498/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	100498
880-53343-1 MS	Eastern Background (0-1")	Total/NA	Solid	8021B	100498
880-53343-1 MSD	Eastern Background (0-1")	Total/NA	Solid	8021B	100498

Analysis Batch: 100679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-53343-1	Eastern Background (0-1")	Total/NA	Solid	Total BTEX	
880-53343-2	Western Background (0-1")	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 100504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-53343-1	Eastern Background (0-1")	Total/NA	Solid	8015NM Prep	
880-53343-2	Western Background (0-1")	Total/NA	Solid	8015NM Prep	
MB 880-100504/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-100504/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-100504/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-53343-1 MS	Eastern Background (0-1")	Total/NA	Solid	8015NM Prep	
880-53343-1 MSD	Eastern Background (0-1")	Total/NA	Solid	8015NM Prep	

Analysis Batch: 100652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-53343-1	Eastern Background (0-1")	Total/NA	Solid	8015B NM	100504
880-53343-2	Western Background (0-1")	Total/NA	Solid	8015B NM	100504
MB 880-100504/1-A	Method Blank	Total/NA	Solid	8015B NM	100504
LCS 880-100504/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	100504
LCSD 880-100504/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	100504
880-53343-1 MS	Eastern Background (0-1")	Total/NA	Solid	8015B NM	100504
880-53343-1 MSD	Eastern Background (0-1")	Total/NA	Solid	8015B NM	100504

Analysis Batch: 100765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-53343-1	Eastern Background (0-1")	Total/NA	Solid	8015 NM	
880-53343-2	Western Background (0-1")	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H (8.29.2024)

Job ID: 880-53343-1
SDG: Eddy Co, NM

HPLC/IC

Leach Batch: 100544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-53343-1	Eastern Background (0-1")	Soluble	Solid	DI Leach	
880-53343-2	Western Background (0-1")	Soluble	Solid	DI Leach	
MB 880-100544/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-100544/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-100544/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-53334-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-53334-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 100583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-53343-1	Eastern Background (0-1")	Soluble	Solid	300.0	100544
880-53343-2	Western Background (0-1")	Soluble	Solid	300.0	100544
MB 880-100544/1-A	Method Blank	Soluble	Solid	300.0	100544
LCS 880-100544/2-A	Lab Control Sample	Soluble	Solid	300.0	100544
LCSD 880-100544/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	100544
880-53334-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	100544
880-53334-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	100544

Lab Chronicle

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H (8.29.2024)

Job ID: 880-53343-1
SDG: Eddy Co, NM

Client Sample ID: Eastern Background (0-1")

Lab Sample ID: 880-53343-1
Date Collected: 01/15/25 00:00
Matrix: Solid
Date Received: 01/17/25 08:15

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	100498	01/17/25 09:23	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	100506	01/17/25 13:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			100679	01/17/25 13:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			100765	01/20/25 12:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	100504	01/17/25 09:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	100652	01/20/25 12:08	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	100544	01/17/25 10:47	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	100583	01/17/25 15:32	CH	EET MID

Client Sample ID: Western Background (0-1")

Lab Sample ID: 880-53343-2
Date Collected: 01/15/25 00:00
Matrix: Solid
Date Received: 01/17/25 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	100498	01/17/25 09:23	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	100506	01/17/25 14:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			100679	01/17/25 14:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			100765	01/20/25 12:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	100504	01/17/25 09:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	100652	01/20/25 12:55	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	100544	01/17/25 10:47	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	100583	01/17/25 15:39	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: Tar Heel 19-18-7 Federal Com 5H (8.29.2024)

Job ID: 880-53343-1
SDG: Eddy Co, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-25

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
300.0		Solid	Chloride
8015 NM		Solid	Total TPH
8015B NM	8015NM Prep	Solid	Diesel Range Organics (Over C10-C28)
8015B NM	8015NM Prep	Solid	Gasoline Range Organics (GRO)-C6-C10
8015B NM	8015NM Prep	Solid	Oil Range Organics (Over C28-C36)
8021B	5035	Solid	Benzene
8021B	5035	Solid	Ethylbenzene
8021B	5035	Solid	m-Xylene & p-Xylene
8021B	5035	Solid	o-Xylene
8021B	5035	Solid	Toluene
8021B	5035	Solid	Xylenes, Total
Total BTEX		Solid	Total BTEX

Method Summary

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H (8.29.2024)

Job ID: 880-53343-1
SDG: Eddy Co, NM

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: Tar Heel 19-18-7 Federal Com 5H (8.29.2024)

Job ID: 880-53343-1
SDG: Eddy Co, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-53343-1	Eastern Background (0-1")	Solid	01/15/25 00:00	01/17/25 08:15
880-53343-2	Western Background (0-1")	Solid	01/15/25 00:00	01/17/25 08:15

Released to Imaging: 6/4/2025 10:46:07 AM

Received by OCD: 3/20/2025 12:03:26 PM

Chain of Custody

880-53343 Chain of Custody

Page 1 of 1

Project Manager:	Ashton Thielke	Bill to: (if different)	Laci Luig
Company Name:	Carmona Resources	Company Name:	Cimarex Energy
Address:	310 W Wall St Ste 500	Address:	600 N Marienfield St, Suite 600
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	432-813-8988	Email:	laci.luig@coterra.com ashton.thielke@coterra.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐

State of Project:

Reporting: Level II ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐

Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Tar Heel 19-18-7 Federal Com 5H (8.29.2024)	Turn Around	
Project Number:	2594	☐ Routine	☑ Rush
Project Location	Eddy Co, NM	Due Date:	72hrs
Sampler's Name:	JR		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Received Intact:	(Yes) No	Thermometer ID:	IR8
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-1.8
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	-1.7
Total Containers:		Corrected Temperature:	-1.8

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2S0_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Date	Time	Soil	Water	Grab/ Comp	# of Cont	BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 300	Hold	Sample Comments
Eastern Background (0-1")	1/15/2025		X		Grab/	1	X	X	X		
Western Background (0-1")	1/15/2025		X		Grab/	1	X	X	X		

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	1/17/25 0815	[signature]	1/17/25 815

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-53343-1
SDG Number: Eddy Co, NM

Login Number: 53343
List Number: 1
Creator: Vasquez, Julisa

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	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ashton Thielke
Carmona Resources
310 W Wall St
Ste 500
Midland, Texas 79701

Generated 3/17/2025 2:18:39 PM

JOB DESCRIPTION

Tar Heel 19-18-7 Federal Com 5H
Eddy Co, NM

JOB NUMBER

880-55645-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 6/4/2025 10:46:07 AM

my EOL

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

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Definitions/Glossary

Client: Carmona Resources
Job ID: 880-55645-1
Project/Site: Tar Heel 19-18-7 Federal Com 5H
SDG: Eddy Co, NM

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1

Job ID: 880-55645-1 Eurofins Midland

Job Narrative
880-55645-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 3/14/2025 9:48 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -1.2°C.

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: CS-3 (2"-3") (880-55645-3), CS-4 (2"-3") (880-55645-4), CS-5 (2"-3") (880-55645-5), CS-6 (2"-3") (880-55645-6), CS-7 (2"-3") (880-55645-7), CS-8 (2"-3") (880-55645-8), (CCV 880-105279/2), (CCV 880-105279/20), (CCV 880-105279/33), (LCS 880-105302/1-A), (LCSD 880-105302/2-A), (890-7809-A-1-G), (890-7809-A-1-E MS) and (890-7809-A-1-F MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-105302 and analytical batch 880-105279 was outside the upper control limits.

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

Diesel Range Organics
Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-105297 recovered above the upper control limit for Diesel Range Organics (Over C10-C28). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-105297/32).

Passing CCV within 20 samples from the last passing CCV and within 12 hours; All data is valid

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-105305/2-A) and (LCSD 880-105305/3-A). Evidence of matrix interferences is not obvious.

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: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

Client Sample ID: CS-1 (2"-3")

Lab Sample ID: 880-55645-1
Date Collected: 03/13/25 00:00
Matrix: Solid
Date Received: 03/14/25 09:48

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		03/14/25 11:04	03/14/25 12:51	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/14/25 11:04	03/14/25 12:51	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/14/25 11:04	03/14/25 12:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/14/25 11:04	03/14/25 12:51	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/14/25 11:04	03/14/25 12:51	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/14/25 11:04	03/14/25 12:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*03/14/25 11:04*	*03/14/25 12:51*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*03/14/25 11:04*	*03/14/25 12:51*	*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			03/14/25 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	<50.0	U	50.0		mg/Kg			03/14/25 19:52	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		03/14/25 10:29	03/14/25 19:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/25 10:29	03/14/25 19:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/25 10:29	03/14/25 19:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*03/14/25 10:29*	*03/14/25 19:52*	*1*
o-Terphenyl	*92*		*70 - 130*	*03/14/25 10:29*	*03/14/25 19:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**288**		10.1		mg/Kg			03/14/25 23:44	1

Client Sample ID: CS-2 (2"-3")

Lab Sample ID: 880-55645-2
Date Collected: 03/13/25 00:00
Matrix: Solid
Date Received: 03/14/25 09:48

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		03/14/25 11:04	03/14/25 13:11	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/14/25 11:04	03/14/25 13:11	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/14/25 11:04	03/14/25 13:11	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/14/25 11:04	03/14/25 13:11	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/14/25 11:04	03/14/25 13:11	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/14/25 11:04	03/14/25 13:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/14/25 11:04*	*03/14/25 13:11*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/14/25 11:04*	*03/14/25 13:11*	*1*

Client Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

Client Sample ID: CS-2 (2"-3")

Lab Sample ID: 880-55645-2
Matrix: Solid

Date Collected: 03/13/25 00:00
Date Received: 03/14/25 09:48

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			03/14/25 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	<49.8	U	49.8		mg/Kg			03/14/25 20:38	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	<49.8	U	49.8		mg/Kg		03/14/25 10:29	03/14/25 20:38	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/14/25 10:29	03/14/25 20:38	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/14/25 10:29	03/14/25 20:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*03/14/25 10:29*	*03/14/25 20:38*	*1*
o-Terphenyl	*84*		*70 - 130*	*03/14/25 10:29*	*03/14/25 20:38*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1250**		50.3		mg/Kg			03/15/25 00:01	5

Client Sample ID: CS-3 (2"-3")

Lab Sample ID: 880-55645-3
Matrix: Solid

Date Collected: 03/13/25 00:00
Date Received: 03/14/25 09:48

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		03/14/25 11:51	03/14/25 16:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/14/25 11:51	03/14/25 16:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/14/25 11:51	03/14/25 16:48	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/14/25 11:51	03/14/25 16:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/14/25 11:51	03/14/25 16:48	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/14/25 11:51	03/14/25 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*180*	*S1+*	*70 - 130*	*03/14/25 11:51*	*03/14/25 16:48*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*03/14/25 11:51*	*03/14/25 16:48*	*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			03/14/25 16:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			03/14/25 20:54	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	<49.7	U	49.7		mg/Kg		03/14/25 10:29	03/14/25 20:54	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/14/25 10:29	03/14/25 20:54	1

Client Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

Client Sample ID: CS-3 (2"-3")

Lab Sample ID: 880-55645-3
Date Collected: 03/13/25 00:00
Matrix: Solid
Date Received: 03/14/25 09:48

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		03/14/25 10:29	03/14/25 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*03/14/25 10:29*	*03/14/25 20:54*	*1*
o-Terphenyl	*88*		*70 - 130*	*03/14/25 10:29*	*03/14/25 20:54*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2650**		99.8		mg/Kg			03/15/25 00:07	10

Client Sample ID: CS-4 (2"-3")

Lab Sample ID: 880-55645-4
Date Collected: 03/13/25 00:00
Matrix: Solid
Date Received: 03/14/25 09:48

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		03/14/25 11:51	03/14/25 17:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/14/25 11:51	03/14/25 17:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/14/25 11:51	03/14/25 17:08	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/14/25 11:51	03/14/25 17:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/14/25 11:51	03/14/25 17:08	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/14/25 11:51	03/14/25 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*171*	*S1+*	*70 - 130*	*03/14/25 11:51*	*03/14/25 17:08*	*1*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*03/14/25 11:51*	*03/14/25 17:08*	*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			03/14/25 17:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/14/25 21:10	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	<50.0	U	50.0		mg/Kg		03/14/25 10:29	03/14/25 21:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/25 10:29	03/14/25 21:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/25 10:29	03/14/25 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*03/14/25 10:29*	*03/14/25 21:10*	*1*
o-Terphenyl	*94*		*70 - 130*	*03/14/25 10:29*	*03/14/25 21:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2130**		49.8		mg/Kg			03/15/25 00:12	5

Client Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

Client Sample ID: CS-5 (2"-3")

Lab Sample ID: 880-55645-5
Date Collected: 03/13/25 00:00
Matrix: Solid
Date Received: 03/14/25 09:48

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		03/14/25 11:51	03/14/25 17:29	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/14/25 11:51	03/14/25 17:29	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/14/25 11:51	03/14/25 17:29	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/14/25 11:51	03/14/25 17:29	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/14/25 11:51	03/14/25 17:29	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/14/25 11:51	03/14/25 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*178*	*S1+*	*70 - 130*	*03/14/25 11:51*	*03/14/25 17:29*	*1*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*03/14/25 11:51*	*03/14/25 17:29*	*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			03/14/25 17:29	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			03/14/25 21:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/14/25 10:29	03/14/25 21:25	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/14/25 10:29	03/14/25 21:25	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/14/25 10:29	03/14/25 21:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*03/14/25 10:29*	*03/14/25 21:25*	*1*
o-Terphenyl	*97*		*70 - 130*	*03/14/25 10:29*	*03/14/25 21:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**953**		50.4		mg/Kg			03/15/25 00:18	5

Client Sample ID: CS-6 (2"-3")

Lab Sample ID: 880-55645-6
Date Collected: 03/13/25 00:00
Matrix: Solid
Date Received: 03/14/25 09:48

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		03/14/25 11:51	03/14/25 17:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/14/25 11:51	03/14/25 17:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/14/25 11:51	03/14/25 17:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/14/25 11:51	03/14/25 17:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/14/25 11:51	03/14/25 17:49	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/14/25 11:51	03/14/25 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*170*	*S1+*	*70 - 130*	*03/14/25 11:51*	*03/14/25 17:49*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*03/14/25 11:51*	*03/14/25 17:49*	*1*

Client Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

Client Sample ID: CS-6 (2"-3")

Lab Sample ID: 880-55645-6
Matrix: Solid

Date Collected: 03/13/25 00:00
Date Received: 03/14/25 09:48

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			03/14/25 17:49	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			03/14/25 21:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/14/25 10:29	03/14/25 21:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/14/25 10:29	03/14/25 21:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/14/25 10:29	03/14/25 21:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*03/14/25 10:29*	*03/14/25 21:41*	*1*
o-Terphenyl	*90*		*70 - 130*	*03/14/25 10:29*	*03/14/25 21:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**673**		10.1		mg/Kg			03/15/25 00:36	1

Client Sample ID: CS-7 (2"-3")

Lab Sample ID: 880-55645-7
Matrix: Solid

Date Collected: 03/13/25 00:00
Date Received: 03/14/25 09:48

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		03/14/25 11:51	03/14/25 18:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/14/25 11:51	03/14/25 18:10	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/14/25 11:51	03/14/25 18:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/14/25 11:51	03/14/25 18:10	1
o-Xylene	**0.00310**		0.00199		mg/Kg		03/14/25 11:51	03/14/25 18:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/14/25 11:51	03/14/25 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*177*	*S1+*	*70 - 130*	*03/14/25 11:51*	*03/14/25 18:10*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*03/14/25 11:51*	*03/14/25 18:10*	*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			03/14/25 18:10	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			03/14/25 21:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/14/25 10:29	03/14/25 21:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/25 10:29	03/14/25 21:57	1

Client Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

Client Sample ID: CS-7 (2"-3")

Lab Sample ID: 880-55645-7
Date Collected: 03/13/25 00:00
Matrix: Solid
Date Received: 03/14/25 09:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/25 10:29	03/14/25 21:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*03/14/25 10:29*	*03/14/25 21:57*	*1*
o-Terphenyl	*91*		*70 - 130*	*03/14/25 10:29*	*03/14/25 21:57*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1880**		99.0		mg/Kg			03/15/25 00:41	10

Client Sample ID: CS-8 (2"-3")

Lab Sample ID: 880-55645-8
Date Collected: 03/13/25 00:00
Matrix: Solid
Date Received: 03/14/25 09:48

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		03/14/25 11:51	03/14/25 18:30	1
Toluene	**0.00573**		0.00201		mg/Kg		03/14/25 11:51	03/14/25 18:30	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/14/25 11:51	03/14/25 18:30	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/14/25 11:51	03/14/25 18:30	1
o-Xylene	**0.00283**		0.00201		mg/Kg		03/14/25 11:51	03/14/25 18:30	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/14/25 11:51	03/14/25 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*182*	*S1+*	*70 - 130*	*03/14/25 11:51*	*03/14/25 18:30*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*03/14/25 11:51*	*03/14/25 18:30*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00856**		0.00402		mg/Kg			03/14/25 18:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**97.8**		49.8		mg/Kg			03/14/25 22:12	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		03/14/25 10:29	03/14/25 22:12	1
Diesel Range Organics (Over C10-C28)	**97.8**		49.8		mg/Kg		03/14/25 10:29	03/14/25 22:12	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/14/25 10:29	03/14/25 22:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*03/14/25 10:29*	*03/14/25 22:12*	*1*
o-Terphenyl	*86*		*70 - 130*	*03/14/25 10:29*	*03/14/25 22:12*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1940**		101		mg/Kg			03/15/25 00:47	10

Surrogate Summary

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-55645-1	CS-1 (2"-3")	99	89
880-55645-1 MS	CS-1 (2"-3")	95	92
880-55645-1 MSD	CS-1 (2"-3")	99	94
880-55645-2	CS-2 (2"-3")	104	90
880-55645-3	CS-3 (2"-3")	180 S1+	77
880-55645-4	CS-4 (2"-3")	171 S1+	81
880-55645-5	CS-5 (2"-3")	178 S1+	76
880-55645-6	CS-6 (2"-3")	170 S1+	79
880-55645-7	CS-7 (2"-3")	177 S1+	82
880-55645-8	CS-8 (2"-3")	182 S1+	77
890-7809-A-1-E MS	Matrix Spike	158 S1+	82
890-7809-A-1-F MSD	Matrix Spike Duplicate	163 S1+	81
LCS 880-105302/1-A	Lab Control Sample	157 S1+	86
LCS 880-105315/1-A	Lab Control Sample	96	94
LCSD 880-105302/2-A	Lab Control Sample Dup	157 S1+	87
LCSD 880-105315/2-A	Lab Control Sample Dup	97	94
MB 880-105302/5-A	Method Blank	146 S1+	76
MB 880-105315/5-A	Method Blank	97	84

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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-55645-1	CS-1 (2"-3")	117	92
880-55645-1 MS	CS-1 (2"-3")	105	96
880-55645-1 MSD	CS-1 (2"-3")	112	102
880-55645-2	CS-2 (2"-3")	104	84
880-55645-3	CS-3 (2"-3")	109	88
880-55645-4	CS-4 (2"-3")	113	94
880-55645-5	CS-5 (2"-3")	115	97
880-55645-6	CS-6 (2"-3")	106	90
880-55645-7	CS-7 (2"-3")	112	91
880-55645-8	CS-8 (2"-3")	105	86
LCS 880-105305/2-A	Lab Control Sample	138 S1+	138 S1+
LCSD 880-105305/3-A	Lab Control Sample Dup	133 S1+	134 S1+
MB 880-105305/1-A	Method Blank	122	111

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-105302/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 105279 — **Prep Batch: 105302**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/14/25 09:51	03/14/25 11:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/14/25 09:51	03/14/25 11:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/14/25 09:51	03/14/25 11:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/14/25 09:51	03/14/25 11:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/14/25 09:51	03/14/25 11:49	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/14/25 09:51	03/14/25 11:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*146*	*S1+*	*70 - 130*	*03/14/25 09:51*	*03/14/25 11:49*	*1*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*03/14/25 09:51*	*03/14/25 11:49*	*1*

Lab Sample ID: LCS 880-105302/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 105279 — **Prep Batch: 105302**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1107		mg/Kg		111	70 - 130
Toluene	0.100	0.1085		mg/Kg		109	70 - 130
Ethylbenzene	0.100	0.1076		mg/Kg		108	70 - 130
m-Xylene & p-Xylene	0.200	0.2335		mg/Kg		117	70 - 130
o-Xylene	0.100	0.1152		mg/Kg		115	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*157*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*

Lab Sample ID: LCSD 880-105302/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 105279 — **Prep Batch: 105302**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1055		mg/Kg		105	70 - 130	5	35
Toluene	0.100	0.1096		mg/Kg		110	70 - 130	1	35
Ethylbenzene	0.100	0.1086		mg/Kg		109	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.2352		mg/Kg		118	70 - 130	1	35
o-Xylene	0.100	0.1165		mg/Kg		116	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*157*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*

Lab Sample ID: 890-7809-A-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 105279 — **Prep Batch: 105302**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.09704		mg/Kg		97	70 - 130
Toluene	<0.00200	U	0.100	0.1005		mg/Kg		100	70 - 130

QC Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

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

Lab Sample ID: 890-7809-A-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 105279 — **Prep Batch: 105302**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.100	0.09836		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2131		mg/Kg		107	70 - 130
o-Xylene	<0.00200	U	0.100	0.1056		mg/Kg		106	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*158*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*

Lab Sample ID: 890-7809-A-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 105279 — **Prep Batch: 105302**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.1034		mg/Kg		103	70 - 130	6	35
Toluene	<0.00200	U	0.100	0.1025		mg/Kg		103	70 - 130	2	35
Ethylbenzene	<0.00200	U	0.100	0.1018		mg/Kg		102	70 - 130	3	35
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2220		mg/Kg		111	70 - 130	4	35
o-Xylene	<0.00200	U	0.100	0.1101		mg/Kg		110	70 - 130	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*163*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*

Lab Sample ID: MB 880-105315/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 105281 — **Prep Batch: 105315**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/14/25 11:04	03/14/25 12:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/14/25 11:04	03/14/25 12:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/14/25 11:04	03/14/25 12:29	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/14/25 11:04	03/14/25 12:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/14/25 11:04	03/14/25 12:29	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/14/25 11:04	03/14/25 12:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*03/14/25 11:04*	*03/14/25 12:29*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*03/14/25 11:04*	*03/14/25 12:29*	*1*

Lab Sample ID: LCS 880-105315/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 105281 — **Prep Batch: 105315**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09014		mg/Kg		90	70 - 130
Toluene	0.100	0.08492		mg/Kg		85	70 - 130
Ethylbenzene	0.100	0.09333		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	0.200	0.1898		mg/Kg		95	70 - 130

QC Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

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

Lab Sample ID: LCS 880-105315/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 105281 — **Prep Batch: 105315**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.09674		mg/Kg		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 880-105315/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 105281 — **Prep Batch: 105315**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09134		mg/Kg		91	70 - 130	1	35
Toluene			0.100	0.08593		mg/Kg		86	70 - 130	1	35
Ethylbenzene			0.100	0.09432		mg/Kg		94	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.1912		mg/Kg		96	70 - 130	1	35
o-Xylene			0.100	0.09770		mg/Kg		98	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: 880-55645-1 MS — **Client Sample ID: CS-1 (2"-3")**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 105281 — **Prep Batch: 105315**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.0992	0.08836		mg/Kg		89	70 - 130		
Toluene	<0.00199	U	0.0992	0.08279		mg/Kg		83	70 - 130		
Ethylbenzene	<0.00199	U	0.0992	0.08783		mg/Kg		89	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1814		mg/Kg		91	70 - 130		
o-Xylene	<0.00199	U	0.0992	0.09332		mg/Kg		94	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: 880-55645-1 MSD — **Client Sample ID: CS-1 (2"-3")**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 105281 — **Prep Batch: 105315**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.08980		mg/Kg		90	70 - 130	2	35
Toluene	<0.00199	U	0.100	0.08325		mg/Kg		83	70 - 130	1	35
Ethylbenzene	<0.00199	U	0.100	0.09047		mg/Kg		90	70 - 130	3	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1847		mg/Kg		92	70 - 130	2	35
o-Xylene	<0.00199	U	0.100	0.09467		mg/Kg		94	70 - 130	1	35

QC Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

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

Lab Sample ID: 880-55645-1 MSD
Matrix: Solid
Analysis Batch: 105281

Client Sample ID: CS-1 (2"-3")
Prep Type: Total/NA
Prep Batch: 105315

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

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

Lab Sample ID: MB 880-105305/1-A
Matrix: Solid
Analysis Batch: 105297

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 105305

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		03/14/25 10:28	03/14/25 19:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/25 10:28	03/14/25 19:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/25 10:28	03/14/25 19:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130	03/14/25 10:28	03/14/25 19:03	1
o-Terphenyl	111		70 - 130	03/14/25 10:28	03/14/25 19:03	1

Lab Sample ID: LCS 880-105305/2-A
Matrix: Solid
Analysis Batch: 105297

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 105305

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1017		mg/Kg		102	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1103		mg/Kg		110	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	138	S1+	70 - 130
o-Terphenyl	138	S1+	70 - 130

Lab Sample ID: LCSD 880-105305/3-A
Matrix: Solid
Analysis Batch: 105297

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 105305

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	989.5		mg/Kg		99	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	1087		mg/Kg		109	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	133	S1+	70 - 130
o-Terphenyl	134	S1+	70 - 130

QC Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

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

Lab Sample ID: 880-55645-1 MS — **Client Sample ID: CS-1 (2"-3")**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 105297 — **Prep Batch: 105305**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	819.4		mg/Kg		82	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	999	830.1		mg/Kg		83	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*105*		*70 - 130*
o-Terphenyl	*96*		*70 - 130*

Lab Sample ID: 880-55645-1 MSD — **Client Sample ID: CS-1 (2"-3")**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 105297 — **Prep Batch: 105305**

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	<50.0	U	999	931.4		mg/Kg		93	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	907.5		mg/Kg		91	70 - 130	9	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*112*		*70 - 130*
o-Terphenyl	*102*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-105321/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 105325

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			03/14/25 23:26	1

Lab Sample ID: LCS 880-105321/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 105325

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	258.8		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-105321/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 105325

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	259.7		mg/Kg		104	90 - 110	0	20

QC Sample Results

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-55645-1 MS
Matrix: Solid
Analysis Batch: 105325

Client Sample ID: CS-1 (2"-3")
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	288		253	557.6		mg/Kg		107	90 - 110		

Lab Sample ID: 880-55645-1 MSD
Matrix: Solid
Analysis Batch: 105325

Client Sample ID: CS-1 (2"-3")
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	288		253	534.4		mg/Kg		98	90 - 110	4	20

QC Association Summary

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

GC VOA

Analysis Batch: 105279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-55645-3	CS-3 (2"-3")	Total/NA	Solid	8021B	105302
880-55645-4	CS-4 (2"-3")	Total/NA	Solid	8021B	105302
880-55645-5	CS-5 (2"-3")	Total/NA	Solid	8021B	105302
880-55645-6	CS-6 (2"-3")	Total/NA	Solid	8021B	105302
880-55645-7	CS-7 (2"-3")	Total/NA	Solid	8021B	105302
880-55645-8	CS-8 (2"-3")	Total/NA	Solid	8021B	105302
MB 880-105302/5-A	Method Blank	Total/NA	Solid	8021B	105302
LCS 880-105302/1-A	Lab Control Sample	Total/NA	Solid	8021B	105302
LCSD 880-105302/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	105302
890-7809-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	105302
890-7809-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	105302

Analysis Batch: 105281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-55645-1	CS-1 (2"-3")	Total/NA	Solid	8021B	105315
880-55645-2	CS-2 (2"-3")	Total/NA	Solid	8021B	105315
MB 880-105315/5-A	Method Blank	Total/NA	Solid	8021B	105315
LCS 880-105315/1-A	Lab Control Sample	Total/NA	Solid	8021B	105315
LCSD 880-105315/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	105315
880-55645-1 MS	CS-1 (2"-3")	Total/NA	Solid	8021B	105315
880-55645-1 MSD	CS-1 (2"-3")	Total/NA	Solid	8021B	105315

Prep Batch: 105302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-55645-3	CS-3 (2"-3")	Total/NA	Solid	5035	
880-55645-4	CS-4 (2"-3")	Total/NA	Solid	5035	
880-55645-5	CS-5 (2"-3")	Total/NA	Solid	5035	
880-55645-6	CS-6 (2"-3")	Total/NA	Solid	5035	
880-55645-7	CS-7 (2"-3")	Total/NA	Solid	5035	
880-55645-8	CS-8 (2"-3")	Total/NA	Solid	5035	
MB 880-105302/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-105302/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-105302/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-7809-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-7809-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 105315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-55645-1	CS-1 (2"-3")	Total/NA	Solid	5035	
880-55645-2	CS-2 (2"-3")	Total/NA	Solid	5035	
MB 880-105315/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-105315/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-105315/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-55645-1 MS	CS-1 (2"-3")	Total/NA	Solid	5035	
880-55645-1 MSD	CS-1 (2"-3")	Total/NA	Solid	5035	

Analysis Batch: 105406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-55645-1	CS-1 (2"-3")	Total/NA	Solid	Total BTEX	
880-55645-2	CS-2 (2"-3")	Total/NA	Solid	Total BTEX	
880-55645-3	CS-3 (2"-3")	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

GC VOA (Continued)

Analysis Batch: 105406 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-55645-4	CS-4 (2"-3")	Total/NA	Solid	Total BTEX	
880-55645-5	CS-5 (2"-3")	Total/NA	Solid	Total BTEX	
880-55645-6	CS-6 (2"-3")	Total/NA	Solid	Total BTEX	
880-55645-7	CS-7 (2"-3")	Total/NA	Solid	Total BTEX	
880-55645-8	CS-8 (2"-3")	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 105297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-55645-1	CS-1 (2"-3")	Total/NA	Solid	8015B NM	105305
880-55645-2	CS-2 (2"-3")	Total/NA	Solid	8015B NM	105305
880-55645-3	CS-3 (2"-3")	Total/NA	Solid	8015B NM	105305
880-55645-4	CS-4 (2"-3")	Total/NA	Solid	8015B NM	105305
880-55645-5	CS-5 (2"-3")	Total/NA	Solid	8015B NM	105305
880-55645-6	CS-6 (2"-3")	Total/NA	Solid	8015B NM	105305
880-55645-7	CS-7 (2"-3")	Total/NA	Solid	8015B NM	105305
880-55645-8	CS-8 (2"-3")	Total/NA	Solid	8015B NM	105305
MB 880-105305/1-A	Method Blank	Total/NA	Solid	8015B NM	105305
LCS 880-105305/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	105305
LCSD 880-105305/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	105305
880-55645-1 MS	CS-1 (2"-3")	Total/NA	Solid	8015B NM	105305
880-55645-1 MSD	CS-1 (2"-3")	Total/NA	Solid	8015B NM	105305

Prep Batch: 105305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-55645-1	CS-1 (2"-3")	Total/NA	Solid	8015NM Prep	
880-55645-2	CS-2 (2"-3")	Total/NA	Solid	8015NM Prep	
880-55645-3	CS-3 (2"-3")	Total/NA	Solid	8015NM Prep	
880-55645-4	CS-4 (2"-3")	Total/NA	Solid	8015NM Prep	
880-55645-5	CS-5 (2"-3")	Total/NA	Solid	8015NM Prep	
880-55645-6	CS-6 (2"-3")	Total/NA	Solid	8015NM Prep	
880-55645-7	CS-7 (2"-3")	Total/NA	Solid	8015NM Prep	
880-55645-8	CS-8 (2"-3")	Total/NA	Solid	8015NM Prep	
MB 880-105305/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-105305/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-105305/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-55645-1 MS	CS-1 (2"-3")	Total/NA	Solid	8015NM Prep	
880-55645-1 MSD	CS-1 (2"-3")	Total/NA	Solid	8015NM Prep	

Analysis Batch: 105373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-55645-1	CS-1 (2"-3")	Total/NA	Solid	8015 NM	
880-55645-2	CS-2 (2"-3")	Total/NA	Solid	8015 NM	
880-55645-3	CS-3 (2"-3")	Total/NA	Solid	8015 NM	
880-55645-4	CS-4 (2"-3")	Total/NA	Solid	8015 NM	
880-55645-5	CS-5 (2"-3")	Total/NA	Solid	8015 NM	
880-55645-6	CS-6 (2"-3")	Total/NA	Solid	8015 NM	
880-55645-7	CS-7 (2"-3")	Total/NA	Solid	8015 NM	
880-55645-8	CS-8 (2"-3")	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

HPLC/IC

Leach Batch: 105321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-55645-1	CS-1 (2"-3")	Soluble	Solid	DI Leach	
880-55645-2	CS-2 (2"-3")	Soluble	Solid	DI Leach	
880-55645-3	CS-3 (2"-3")	Soluble	Solid	DI Leach	
880-55645-4	CS-4 (2"-3")	Soluble	Solid	DI Leach	
880-55645-5	CS-5 (2"-3")	Soluble	Solid	DI Leach	
880-55645-6	CS-6 (2"-3")	Soluble	Solid	DI Leach	
880-55645-7	CS-7 (2"-3")	Soluble	Solid	DI Leach	
880-55645-8	CS-8 (2"-3")	Soluble	Solid	DI Leach	
MB 880-105321/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-105321/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-105321/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-55645-1 MS	CS-1 (2"-3")	Soluble	Solid	DI Leach	
880-55645-1 MSD	CS-1 (2"-3")	Soluble	Solid	DI Leach	

Analysis Batch: 105325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-55645-1	CS-1 (2"-3")	Soluble	Solid	300.0	105321
880-55645-2	CS-2 (2"-3")	Soluble	Solid	300.0	105321
880-55645-3	CS-3 (2"-3")	Soluble	Solid	300.0	105321
880-55645-4	CS-4 (2"-3")	Soluble	Solid	300.0	105321
880-55645-5	CS-5 (2"-3")	Soluble	Solid	300.0	105321
880-55645-6	CS-6 (2"-3")	Soluble	Solid	300.0	105321
880-55645-7	CS-7 (2"-3")	Soluble	Solid	300.0	105321
880-55645-8	CS-8 (2"-3")	Soluble	Solid	300.0	105321
MB 880-105321/1-A	Method Blank	Soluble	Solid	300.0	105321
LCS 880-105321/2-A	Lab Control Sample	Soluble	Solid	300.0	105321
LCSD 880-105321/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	105321
880-55645-1 MS	CS-1 (2"-3")	Soluble	Solid	300.0	105321
880-55645-1 MSD	CS-1 (2"-3")	Soluble	Solid	300.0	105321

Lab Chronicle

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

Client Sample ID: CS-1 (2"-3")

Lab Sample ID: 880-55645-1
Date Collected: 03/13/25 00:00
Matrix: Solid
Date Received: 03/14/25 09:48

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	105315	03/14/25 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105281	03/14/25 12:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			105406	03/14/25 12:51	AJ	EET MID
Total/NA	Analysis	8015 NM		1			105373	03/14/25 19:52	TKC	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	105305	03/14/25 10:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105297	03/14/25 19:52	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	105321	03/14/25 13:40	SI	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	105325	03/14/25 23:44	CH	EET MID

Client Sample ID: CS-2 (2"-3")

Lab Sample ID: 880-55645-2
Date Collected: 03/13/25 00:00
Matrix: Solid
Date Received: 03/14/25 09:48

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	105315	03/14/25 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105281	03/14/25 13:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			105406	03/14/25 13:11	AJ	EET MID
Total/NA	Analysis	8015 NM		1			105373	03/14/25 20:38	TKC	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	105305	03/14/25 10:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105297	03/14/25 20:38	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	105321	03/14/25 13:40	SI	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	105325	03/15/25 00:01	CH	EET MID

Client Sample ID: CS-3 (2"-3")

Lab Sample ID: 880-55645-3
Date Collected: 03/13/25 00:00
Matrix: Solid
Date Received: 03/14/25 09:48

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	105302	03/14/25 11:51	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105279	03/14/25 16:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			105406	03/14/25 16:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			105373	03/14/25 20:54	TKC	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	105305	03/14/25 10:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105297	03/14/25 20:54	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	105321	03/14/25 13:40	SI	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	105325	03/15/25 00:07	CH	EET MID

Client Sample ID: CS-4 (2"-3")

Lab Sample ID: 880-55645-4
Date Collected: 03/13/25 00:00
Matrix: Solid
Date Received: 03/14/25 09:48

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	105302	03/14/25 11:51	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105279	03/14/25 17:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			105406	03/14/25 17:08	AJ	EET MID

Lab Chronicle

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

Client Sample ID: CS-4 (2"-3")

Lab Sample ID: 880-55645-4
Date Collected: 03/13/25 00:00
Matrix: Solid
Date Received: 03/14/25 09:48

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			105373	03/14/25 21:10	TKC	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	105305	03/14/25 10:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105297	03/14/25 21:10	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	105321	03/14/25 13:40	SI	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	105325	03/15/25 00:12	CH	EET MID

Client Sample ID: CS-5 (2"-3")

Lab Sample ID: 880-55645-5
Date Collected: 03/13/25 00:00
Matrix: Solid
Date Received: 03/14/25 09:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	105302	03/14/25 11:51	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105279	03/14/25 17:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			105406	03/14/25 17:29	AJ	EET MID
Total/NA	Analysis	8015 NM		1			105373	03/14/25 21:25	TKC	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	105305	03/14/25 10:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105297	03/14/25 21:25	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	105321	03/14/25 13:40	SI	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	105325	03/15/25 00:18	CH	EET MID

Client Sample ID: CS-6 (2"-3")

Lab Sample ID: 880-55645-6
Date Collected: 03/13/25 00:00
Matrix: Solid
Date Received: 03/14/25 09:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	105302	03/14/25 11:51	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105279	03/14/25 17:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			105406	03/14/25 17:49	AJ	EET MID
Total/NA	Analysis	8015 NM		1			105373	03/14/25 21:41	TKC	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	105305	03/14/25 10:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105297	03/14/25 21:41	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	105321	03/14/25 13:40	SI	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	105325	03/15/25 00:36	CH	EET MID

Client Sample ID: CS-7 (2"-3")

Lab Sample ID: 880-55645-7
Date Collected: 03/13/25 00:00
Matrix: Solid
Date Received: 03/14/25 09:48

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	105302	03/14/25 11:51	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105279	03/14/25 18:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			105406	03/14/25 18:10	AJ	EET MID
Total/NA	Analysis	8015 NM		1			105373	03/14/25 21:57	TKC	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	105305	03/14/25 10:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105297	03/14/25 21:57	TKC	EET MID

Lab Chronicle

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

Client Sample ID: CS-7 (2"-3")

Lab Sample ID: 880-55645-7
Date Collected: 03/13/25 00:00
Matrix: Solid
Date Received: 03/14/25 09:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	105321	03/14/25 13:40	SI	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	105325	03/15/25 00:41	CH	EET MID

Client Sample ID: CS-8 (2"-3")

Lab Sample ID: 880-55645-8
Date Collected: 03/13/25 00:00
Matrix: Solid
Date Received: 03/14/25 09:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	105302	03/14/25 11:51	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105279	03/14/25 18:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			105406	03/14/25 18:30	AJ	EET MID
Total/NA	Analysis	8015 NM		1			105373	03/14/25 22:12	TKC	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	105305	03/14/25 10:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105297	03/14/25 22:12	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	105321	03/14/25 13:40	SI	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	105325	03/15/25 00:47	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: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-25

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
300.0		Solid	Chloride
8015 NM		Solid	Total TPH
8015B NM	8015NM Prep	Solid	Diesel Range Organics (Over C10-C28)
8015B NM	8015NM Prep	Solid	Gasoline Range Organics (GRO)-C6-C10
8015B NM	8015NM Prep	Solid	Oil Range Organics (Over C28-C36)
8021B	5035	Solid	Benzene
8021B	5035	Solid	Ethylbenzene
8021B	5035	Solid	m-Xylene & p-Xylene
8021B	5035	Solid	o-Xylene
8021B	5035	Solid	Toluene
8021B	5035	Solid	Xylenes, Total
Total BTEX		Solid	Total BTEX

Method Summary

Client: Carmona Resources
Project/Site: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

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: Tar Heel 19-18-7 Federal Com 5H

Job ID: 880-55645-1
SDG: Eddy Co, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-55645-1	CS-1 (2"-3")	Solid	03/13/25 00:00	03/14/25 09:48
880-55645-2	CS-2 (2"-3")	Solid	03/13/25 00:00	03/14/25 09:48
880-55645-3	CS-3 (2"-3")	Solid	03/13/25 00:00	03/14/25 09:48
880-55645-4	CS-4 (2"-3")	Solid	03/13/25 00:00	03/14/25 09:48
880-55645-5	CS-5 (2"-3")	Solid	03/13/25 00:00	03/14/25 09:48
880-55645-6	CS-6 (2"-3")	Solid	03/13/25 00:00	03/14/25 09:48
880-55645-7	CS-7 (2"-3")	Solid	03/13/25 00:00	03/14/25 09:48
880-55645-8	CS-8 (2"-3")	Solid	03/13/25 00:00	03/14/25 09:48

Released to Imaging: 6/4/2025 10:46:07 AM

Received by OCD: 3/20/2025 12:03:26 PM

Chain of Custody

880-55645 Chain of Custody

Page 1 of .

Project Manager:	Ashton Thielke	Bill to: (if different)	Laci Luig
Company Name:	Carmona Resources	Company Name:	Cimarex Energy
Address:	310 W Wall St Ste 500	Address:	600 N Marienfield St, Suite 600
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	432-813-8988	Email:	laci.luig@coterra.com ashton.thielke@coterra.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐

State of Project:

Reporting: Level II ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐

Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Tar Heel 19-18-7 Federal Com 5H	Turn Around	
Project Number:	2594	☐ Routine	☑ Rush
Project Location	Eddy Co, NM	Due Date:	24hr
Sampler's Name:	GPJ/JM		
PO #:			

SAMPLE RECEIPT

Temp Blank:	Yes No	Wet Ice:	Yes No
Received Intact:	Yes No	Thermometer ID:	IR5
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-.1
Sample Custody Seals:	Yes No N/A	Temperature Reading:	-1.1
Total Containers:		Corrected Temperature:	-1.2

ANALYSIS REQUEST

Sample Identification	Date	Time	Soil	Water	Grab/ Comp	# of Cont	BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 300.0	Hold	Sample Comments
CS-1 (2"-3")	3/13/2025		X		Grab	1	X	X	X		
CS-2 (2"-3")	3/13/2025		X		Grab	1	X	X	X		
CS-3 (2"-3")	3/13/2025		X		Grab	1	X	X	X		
CS-4 (2"-3")	3/13/2025		X		Grab	1	X	X	X		
CS-5 (2"-3")	3/13/2025		X		Grab	1	X	X	X		
CS-6 (2"-3")	3/13/2025		X		Grab	1	X	X	X		
CS-7 (2"-3")	3/13/2025		X		Grab	1	X	X	X		
CS-8 (2"-3")	3/13/2025		X		Grab	1	X	X	X		

Preservative Codes

None: NO	DI Water: H_2O
Cool: Cool	MeOH: Me
HCL: HC	HNO_3: HN
H_2S0_4: H_2	NaOH: Na
H_3PO_4: HP	
$NaHSO_4$: NABIS	
$Na_2S_2O_3$: $NaSO_3$	
Zn Acetate+NaOH: Zn	
NaOH+Ascorbic Acid: SAPC	

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
	3/14/25 9:48am	3/14/25 9:48	3/14/25

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-55645-1
SDG Number: Eddy Co, NM

Login Number: 55645
List Number: 1
Creator: Vasquez, Julisa

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	

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Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS

Action 444210

QUESTIONS

Operator: Coterra Energy Operating Co. 6001 Deauville Blvd Midland, TX 79706	OGRID: 215099
	Action Number: 444210
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2424334807**
Incident Name	**NAPP2424334807 TAR HEEL 19-18-7 FEDERAL COM 5H @ 0**
Incident Type	**Oil Release**
Incident Status	**Remediation Closure Report Received**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	TAR HEEL 19-18-7 FEDERAL COM 5H
Date Release Discovered	08/30/2024
Surface Owner	Federal

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	*Not answered.*
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	Cause: Equipment Failure | Transport | Drilling Mud/Fluid | Released: 72 BBL | Recovered: 72 BBL | Lost: 0 BBL.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	We had a reportable release along State Line Road in Eddy County, NM. A J.E.S. Energy truck was hauling oil based drill cuttings from Cimarex Energy's Tar Heel 19-18-7 Federal Com 5H to Milestone Environmental Landfill in Orla, TX. Approximately 30 minutes after leaving location, the seal on the J.E.S. Energy end dump trailer failed while driving down State Line Road towards C-1. Once the driver saw the trail of cuttings on the lease road, he stopped and reported the incident to his Supervisor. The total length of the release is 0.30 miles. An emergency One-Call was placed for the area and a crew was dispatched to the site to remove the cuttings and surface scrape impacted area of the road. All scraped up cuttings and impacted soils were hauled to Milestone Environmental Landfill for disposal. Released: 72 bbls Oil Based Mud Cuttings Recovered: 72 bbls

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QUESTIONS (continued)

Operator: Coterra Energy Operating Co. 6001 Deauville Blvd Midland, TX 79706	OGRID: 215099
	Action Number: 444210
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

Initial Response *The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.*	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

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

I hereby agree and sign off to the above statement	Name: Nathaniel Rose Title: EHS Specialists Email: nathaniel.rose@coterra.com Date: 03/20/2025

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QUESTIONS (continued)

Operator: Coterra Energy Operating Co. 6001 Deauville Blvd Midland, TX 79706	OGRID: 215099
	Action Number: 444210
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	Attached Document
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between ½ and 1 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between ½ and 1 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between ½ and 1 (mi.)
Categorize the risk of this well / site being in a karst geology	Medium
A 100-year floodplain	Between ½ and 1 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	2650
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	1130
GRO+DRO (EPA SW-846 Method 8015M)	1130
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	03/13/2025
On what date will (or did) the final sampling or liner inspection occur	03/13/2025
On what date will (or was) the remediation complete(d)	03/13/2025
What is the estimated surface area (in square feet) that will be reclaimed	1580
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	1580
What is the estimated volume (in cubic yards) that will be remediated	20
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: Coterra Energy Operating Co. 6001 Deauville Blvd Midland, TX 79706	OGRID: 215099
	Action Number: 444210
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	LEA LAND LANDFILL [fEEM0112342028]
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Nathaniel Rose Title: EHS Specialists Email: nathaniel.rose@coterra.com Date: 03/20/2025
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: Coterra Energy Operating Co. 6001 Deauville Blvd Midland, TX 79706	OGRID: 215099
	Action Number: 444210
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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QUESTIONS (continued)

Operator: Coterra Energy Operating Co. 6001 Deauville Blvd Midland, TX 79706	OGRID: 215099
	Action Number: 444210
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**441111**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**03/13/2025**
What was the (estimated) number of samples that were to be gathered	**7**
What was the sampling surface area in square feet	**3200**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	**Yes**
Was this release entirely contained within a lined containment area	**No**
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	1580
What was the total volume (cubic yards) remediated	20
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	0
What was the total volume (in cubic yards) reclaimed	0
Summarize any additional remediation activities not included by answers (above)	"Site assessment completed, discussed with NMOCD staff numerous times and collected background samples to prove lease road contains elevated chlorides. Requested a grab sample variance and variance to remediate areas that ONLY exceed in TPH. See appendix C for email communication. Area scraped and grab samples collected"

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

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

I hereby agree and sign off to the above statement	Name: Nathaniel Rose Title: EHS Specialists Email: nathaniel.rose@coterra.com Date: 03/20/2025

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS (continued)

Operator: Coterra Energy Operating Co. 6001 Deauville Blvd Midland, TX 79706	OGRID: 215099
	Action Number: 444210
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Reclamation Report *Only answer the questions in this group if all reclamation steps have been completed.*	
Requesting a reclamation approval with this submission	No

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CONDITIONS

Action 444210

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CONDITIONS

Created By	Condition	Condition Date
scott.rodgers	None	6/4/2025