CARMONA RESOURCES

SITE INFORMATION

Closure Report
Hayduke 34 Federal Com 3H
Incident ID: NAPP2318426095
Eddy County, New Mexico
Unit I Sec 34 T25S R26E
32.08417°, -104.27296°

Point of Release:
Oil spilling out of oil tank due to water dump stuck in the closed position inside the containment
Release Date: 07/02/2023
Volume Released: 40 Barrels of Crude Oil
Volume Recovered: 40 Barrels of Crude Oil

CARMONA RESOURCES

Prepared for:
Cimarex Energy Co. of Colorado
6001 Deauville Blvd.
Suite 300
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

November 13, 2023

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

Re: Closure Report
Hayduke 34 Federal Com 3H
Incident ID: NAPP2318426095
Cimarex Energy Co. of Colorado
Site Location: Unit I, S34, T25S, R26E
(Lat 32.08417º, Long -104.27296º)
Eddy County, New Mexico

Mr. Bratcher:

On behalf of Cimarex Energy Co. of Colorado (Cimarex), Carmona Resources, LLC has prepared this letter to document site activities for the Hayduke 34 Federal Com 3H. The site is located at 32.08417º, -104.27296º within Unit I, S34, T25S, R26E, 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 leak was discovered on July 3, 2023, caused by the water dump stuck in the closed position, spilling oil out of the oil tank into the lined containment. It resulted in approximately forty (40) barrels of crude oil, and forty (40) barrels of crude oil were recovered. The impacted area is located on the pad within the containment area. Refer to Figure 3 for a spill overview. The initial C-141 form is attached in Appendix C.

2.0 Site Characterization and Groundwater

The site is located within a high karst area. Based on a review of the New Mexico Office of State Engineers and USGS databases, no known water sources are within a 0.50-mile radius of the location. The nearest identified well is approximately 1.45 miles Northwest of the site in S28, T25S, R26E and was drilled in 1992. The well has a reported depth to groundwater of 14.22' feet below the ground surface (ft bgs). A copy of the associated Summary Report is attached in Appendix D.

3.0 NMAC Regulatory Criteria

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

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

4.0 Site Assessment Activities

Liner Inspection

On July 19, 2023, a liner inspection was conducted to assess the liner's integrity within the facility. Before performing the liner inspection, the NMOCD division office was notified via email on July 14,

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432.813.1992

2023, per subsection D of 19.15.29.12 NMAC. See Appendix B. Upon inspection, the liner can be seen to have a few holes on the west side of the containment area. During this time, the tank battery and containment was scheduled to be downsized from six (6) oil and water tanks to three (3) oil and water tanks.

Initial Soil Assessment

On September 6, 2023, Carmona Resources, LLC performed site assessment activities to evaluate soil impacts. To assess the vertical and horizontal extent, six (6) soil samples and four (4) horizontal sample points were advanced to depths ranging from the surface to 0.5' bgs. Samples were collected in the area where holes were previously found in the lined containment. Those areas are represented by samples points S-1 through S-4. S-5, S-6, and H-4 were collected in the area where current production oil and water tanks are located. Holes were to sample those areas and were immediately patched. 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 Cardinal Laboratories in Hobbs, New Mexico. 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 4500. The laboratory reports, including analytical methods, results, and chain-of-custody documents, are attached in Appendix E. Refer to Table 1.

Horizontal Delineation

The areas of S-5, S-6, and H-1 through H-4 were below regulatory limits for benzene, total BTEX, TPH, and chloride concentrations. Refer to Table 1.

Vertical Delineation

The areas of S-1 through S-4 were not vertically delineated due to a dense rock layer during the initial soil assessment. Refer to Table 1.

5.0 Remediation Activities

Carmona Resources personnel were onsite to supervise the remediation activities, collect confirmation samples, and document backfill activities. Before collecting composite confirmation samples, the NMOCD division office was notified via email on October 27, 2023, per Subsection D of 19.15.29.12 NMAC. See Appendix C. The area of S-1 and S-2 were excavated to a depth of 5.0' bgs. The area of S-3 was excavated to a depth ranging from 2.0-2.25' bgs. The area of S-4 was excavated to a depth of 1.5' bgs. A total of ten (10) confirmation floor samples (CS-1 through CS-10) and thirteen (13) sidewall samples (SW-1 through SW-13) were collected every 200 square feet to ensure the proper removal of the contaminated soils. All collected samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by EPA Method 4500. 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.

The areas of CS-7, SW-9, and SW-13 exceeded reclamation and regulatory requirements for TPH. Those areas were immediately excavated, removed, and retested.

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

Once the remediation activities were completed, the excavated areas were backfilled with clean material to surface grade. Approximately 290 cubic yards of material were excavated and transported offsite for proper disposal.

CARMONA RESOURCES

6.0 Conclusions

Based on the assessment results and the analytical data, no further actions are required at the site. The affected liner has been inspected and found to be in serviceable condition in accordance with 19.15.29.11 A.(5)(a)(i-ii) of the New Mexico Administrative Code. The final C-141 is attached, and Cimarex formally requests the closure of the spill. If you have any questions regarding this report or need additional information, please contact us at 432-813-1992.

Sincerely,

Carmona Resources, LLC

Ashton Thielke
Sr. Project Manager

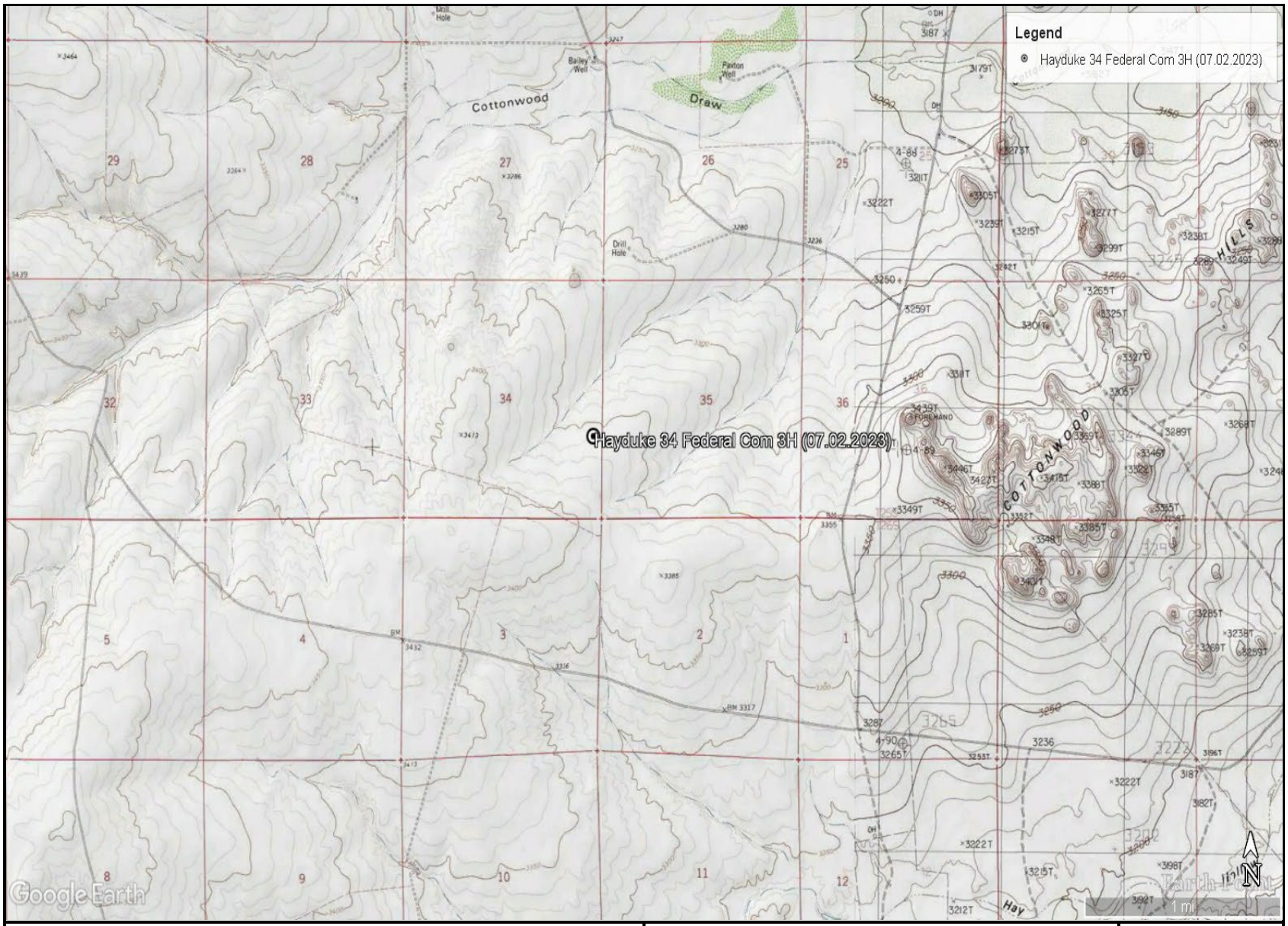
Conner Moehring
Sr. Project Manager

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

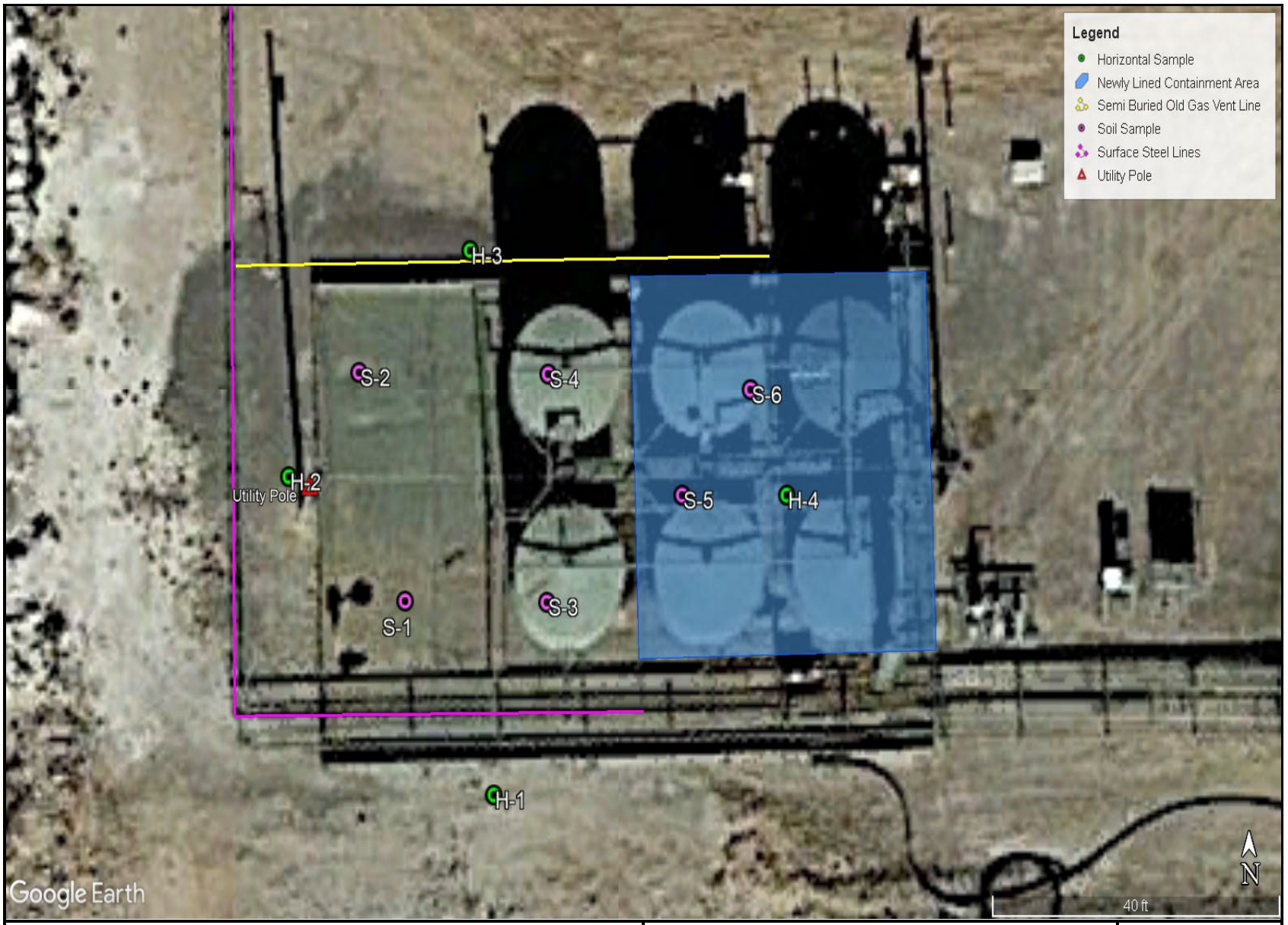
FIGURES

CARMONA RESOURCES

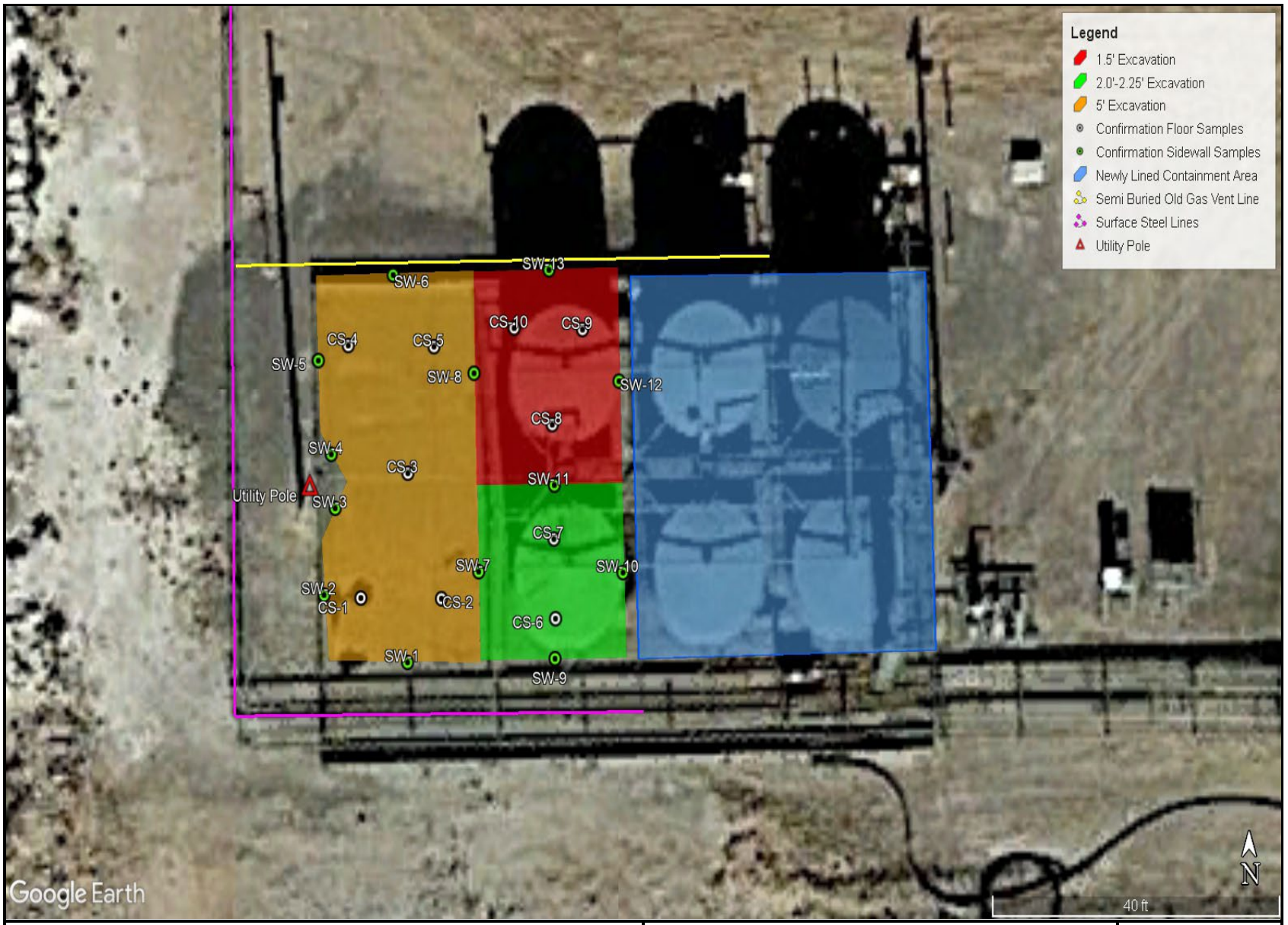
OVERVIEW MAP CIMAREX ENERGY CO. OF COLORADO HAYDUKE 34 FEDERAL COM 3H (07.02.2023) EDDY COUNTY, NEW MEXICO 32.08417°, -104.27296°	CARMONA RESOURCES	FIGURE 1



TOPOGRAPHIC MAP CIMAREX ENERGY CO. OF COLORADO HAYDUKE 34 FEDERAL COM 3H (07.02.2023) EDDY COUNTY, NEW MEXICO 32.08417°, -104.27296°	CARMONA RESOURCES	FIGURE 2



SAMPLE LOCATION MAP CIMAREX ENERGY CO. OF COLORADO HAYDUKE 34 FEDERAL COM 3H (07.02.2023) EDDY COUNTY, NEW MEXICO 32.08417°, -104.27296°	CARMONA RESOURCES	FIGURE 3



EXCAVATION DEPTH MAP CIMAREX ENERGY CO. OF COLORADO HAYDUKE 34 FEDERAL COM 3H (07.02.2023) EDDY COUNTY, NEW MEXICO 32.08417°, -104.27296°	CARMONA RESOURCES	FIGURE 4

APPENDIX A

CARMONA RESOURCES

Table 1
Cimarex
Heyduke 34 Fed Com 3H (07.02.2023)
Eddy County, New Mexico

Sample ID	Date	Depth (ft)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	Total						
S-1	9/7/2023	0-0.5'	**3,380**	**8,690**	**723**	**12,793**	<0.500	9.87	4.85	84.2	98.9	240
S-2	9/7/2023	0-0.5'	**1,260**	**7,650**	**752**	**9,662**	<0.050	0.171	<0.050	2.47	2.64	16.0
S-3	9/7/2023	0-0.5'	<10.0	34.2	<10.0	34.2	<0.050	<0.050	<0.050	<0.150	<0.300	304
S-4	9/7/2023	0-0.5'	**659**	**3,710**	**342**	**4,711**	<0.050	0.096	<0.050	2.83	2.93	272
S-5	9/7/2023	0-0.5'	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
S-6	9/7/2023	0-0.5'	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	304
H-1	9/7/2023	0-0.5'	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
H-2	9/7/2023	0-0.5'	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
H-3	9/7/2023	0-0.5'	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
H-4	9/7/2023	0-0.5'	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
Regulatory Criteria [A]						**100 mg/kg**	**10 mg/kg**				**50 mg/kg**	**600 mg/kg**

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

Table 2
Cimarex
Heyduke 34 Fed Com 3H (07.02.2023)
Eddy County, New Mexico

Sample ID	Date	Depth (ft)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	Total						
CS-1	10/31/2023	5.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
CS-2	10/31/2023	5.0	<10.0	31.3	<10.0	31.3	<0.050	<0.050	<0.050	<0.150	<0.300	96.0
CS-3	10/31/2023	5.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
CS-4	10/31/2023	5.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
CS-5	10/31/2023	5.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	464
CS-6	10/31/2023	2.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	512
CS-7	10/31/2023	2.0	10.2	**152**	<10.0	**162.2**	<0.050	<0.050	<0.050	0.431	0.431	64.0
	11/1/2023	2.25	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	160
CS-8	10/31/2023	1.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
CS-9	10/31/2023	1.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	400
CS-10	10/31/2023	1.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	288
Regulatory Criteria [A]						100 mg/kg	10 mg/kg				50 mg/kg	600 mg/kg

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

Table 2
Cimarex
Heyduke 34 Fed Com 3H (07.02.2023)
Eddy County, New Mexico

Sample ID	Date	Depth (ft)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	Total						
SW-1	10/31/2023	5.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
SW-2	10/31/2023	5.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
SW-3	10/31/2023	5.0	<10.0	76.0	<10.0	76.0	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
SW-4	10/31/2023	5.0	<10.0	10.1	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
SW-5	10/31/2023	5.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
SW-6	10/31/2023	5.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
SW-7	10/31/2023	3.0	<10.0	21.6	<10.0	21.6	<0.050	<0.050	<0.050	<0.150	<0.300	176
SW-8	10/31/2023	3.5	<10.0	37.3	<10.0	37.3	<0.050	<0.050	<0.050	<0.150	<0.300	160
SW-9	10/31/2023	2.0	19.1	**330**	22.3	**371.4**	<0.050	<0.050	<0.050	1.46	1.46	176
	11/1/2023	2.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	192
SW-10	10/31/2023	2.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	288
SW-11	10/31/2023	0.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	336
SW-12	10/31/2023	1.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	448
SW-13	10/31/2023	1.5	13.4	**128**	<10.0	**141.4**	<0.050	<0.050	<0.050	0.979	0.979	160
	11/1/2023	1.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
Regulatory Criteria[A]						100 mg/kg	10 mg/kg				50 mg/kg	600 mg/kg

(-) Not Analyzed
[A] – Table 1 - 19.15.29 NMAC
mg/kg - milligram per kilogram
TPH - Total Petroleum Hydrocarbons
ft - feet
(SW) Sidewall Sample
Removed

APPENDIX B

CARMONA RESOURCES

PHOTOGRAPHIC LOG

Cimarex Energy Co. of Colorado

Photograph No. 1

Facility: Hayduke 34 Federal Com 3H

County: Eddy County, New Mexico

Description:
View South, area of S-1 and S-2 during tank battery down sizing.

Photograph No. 2

Facility: Hayduke 34 Federal Com 3H

County: Eddy County, New Mexico

Description:
View Southeast, area of S-3 and S-4 during tank battery down sizing.

Photograph No. 3

Facility: Hayduke 34 Federal Com 3H

County: Eddy County, New Mexico

Description:
View Southwest, area of S-5, S-6, and H-4.

PHOTOGRAPHIC LOG

Cimarex Energy Co. of Colorado

Photograph No. 4

Facility: Hayduke 34 Federal Com 3H

County: Eddy County, New Mexico

Description:
View Southeast, area of CS-1 through CS-9.

Photograph No. 5

Facility: Hayduke 34 Federal Com 3H

County: Eddy County, New Mexico

Description:
View Southwest, area of CS-3 through CS-5.

Photograph No. 6

Facility: Hayduke 34 Federal Com 3H

County: Eddy County, New Mexico

Description:
View Southeast, area of CS-6 through CS-10.

PHOTOGRAPHIC LOG

Cimarex Energy Co. of Colorado

Photograph No. 7

Facility: Hayduke 34 Federal Com 3H

County: Eddy County, New Mexico

Description:
View Southeast, area of backfilled excavation and lined containment.

Photograph No. 8

Facility: Hayduke 34 Federal Com 3H

County: Eddy County, New Mexico

Description:
View East, area of lined containment.

Photograph No. 9

Facility: Hayduke 34 Federal Com 3H

County: Eddy County, New Mexico

Description:
View Southwest, area of lined containment.

PHOTOGRAPHIC LOG

Cimarex Energy Co. of Colorado

Photograph No. 10

Facility: Hayduke 34 Federal Com 3H

County: Eddy County, New Mexico

Description:
View Southwest, area of lined containment.

APPENDIX C

CARMONA RESOURCES

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

State of New Mexico
Energy Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

Incident ID	nAPP2318426095
District RP	
Facility ID	fAPP2202542060
Application ID	

Release Notification

Responsible Party

Responsible Party: Cimarex Energy Co. of Colorado	OGRID: 162683
Contact Name: Laci Luig	Contact Telephone: (432) 571-7800
Contact email: laci.luig@coterra.com	Incident # *(assigned by OCD)* nAPP2318426095
Contact mailing address: 6001 Deauville Blvd., Suite 300N Midland, TX 79706	

Location of Release Source

Latitude 32.08417 Longitude -104.27296

(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Hayduke 34 Federal Com 3H	Site Type: Battery
Date Release Discovered: 7/2/2023	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
I	34	25S	26E	Eddy

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 40	Volume Recovered (bbls) 40
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Equipment Failure
The Lease Operator arrived on location and found oil spilling out of an oil tank. The 3 phase separator water dump was found stuck in the closed position. This resulted in all fluids being sent to an isolated oil tank. Once the tank filled, the high level kill switch failed to shut-in, allowing fluid to run out of the thief hatch and into the lined containment. An estimated 40 barrels oil was released, all fluids remained inside the containment. A vac truck was able to recover all fluids. The containment will be washed and a liner inspection will be scheduled in the coming weeks.
Spilled: 40 barrels oil Recovered: 40 barrels oil

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2318426095
District RP	
Facility ID	fAPP2202542060
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? Total amount of release is greater than 25 barrels.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? By: Laci Luig To: OCD Enviro, BLM By: Email	

Initial Response

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

☒ The source of the release has been stopped.

☒ The impacted area has been secured to protect human health and the environment.

☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

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

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

Printed Name: Laci Luig Title: ESH Specialist

Signature: Laci Luig Date: 7/3/2023

email: laci.luig@coterra.com Telephone: (432) 208-3035

OCD Only

Received by: Date:

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature:_____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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: _____

From: Wells, Shelly, EMNRD
To: Laci Luig
Cc: Bratcher, Michael, EMNRD; Hamlet, Robert, EMNRD
Subject: RE: [EXTERNAL] nAPP2318426095 Hayduke 34 Federal Com 3H liner inspection
Date: Friday, July 14, 2023 2:38:38 PM
Attachments: image001.jpg
0.jpg

WARNING: This email originated from outside of Coterra Energy. Do not click links or open attachments unless you recognize the sender, are expecting the content and know it is safe.

Good afternoon,

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Have a great weekend,

Shelly

Shelly Wells * Environmental Specialist-Advanced
Administrative Permitting Program
EMNRD-Oil Conservation Division
1220 S. St. Francis Drive|Santa Fe, NM 87505
(505)469-7520|Shelly.Wells@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

From: Laci Luig <Laci.Luig@coterra.com>
Sent: Friday, July 14, 2023 1:26 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; BLM Spill Notifications <BLM_NM_CFO_Spill@blm.gov>
Subject: [EXTERNAL] nAPP2318426095 Hayduke 34 Federal Com 3H liner inspection

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

Good afternoon,

A liner inspection at Cimarex Energy's Hayduke 34 Federal Com 3H Battery has been scheduled for Wednesday, July 19th at 8:30am (MST)

Incident ID: nAPP2318426095
Coordinates: 32.08417, -104.27296

Thank you,

Thank you,

Laci Luig | Environmental, Health & Safety Specialist
T: 432.571.7810 | M: 432.208.3035 | laci.luig@coterra.com | www.coterra.com
Coterra Energy Inc. | 6001 Deauville Blvd., Suite 300N | Midland, TX 79706

Coterra Energy Inc. is the result of the merger of Cimarex Energy Co. and Cabot Oil & Gas Corporation on October 1, 2021.

Ashton Thielke

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Friday, October 27, 2023 9:52 AM
To: Ashton Thielke
Cc: Laci Luig; Hamlet, Robert, EMNRD; Bratcher, Michael, EMNRD
Subject: RE: [EXTERNAL] nAPP2318426095 - Hayduke 34 Federal Com 3H (7.2.2023) - Confirmation Sampling Notification

Hi Ashton,

The OCD has received your notification. Include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thank you,

Shelly

Shelly Wells * Environmental Specialist-Advanced
Environmental Bureau
EMNRD-Oil Conservation Division
1220 S. St. Francis Drive|Santa Fe, NM 87505
(505)469-7520|Shelly.Wells@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

From: Ashton Thielke <Ashton.Thielke@coterra.com>
Sent: Friday, October 27, 2023 8:20 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Laci Luig <Laci.Luig@coterra.com>
Subject: [EXTERNAL] nAPP2318426095 - Hayduke 34 Federal Com 3H (7.2.2023) - Confirmation Sampling Notification

Good morning,

This email serves as notification for confirmation sampling on the Hayduke 34 Federal Com 3H. Confirmation sampling is scheduled to begin as early as 09:00 (MST) Thursday, November 2nd, weather and soil conditions permitting. Carmona Resources will be onsite to collect the confirmation samples.

An extension for this remediation will also be requested due to remediation occurring under the containment area in the tank battery, that has since been removed.

Remediation and Final closure report will be submitted no later than December 1, 2023.

Coordinates: 32.08417, -104.27296

Thank you,

Ashton Thielke | PBU - Environmental Consultant
T: 432.813.8988 | M: 281.753.5659 | Ashton.Thielke@coterra.com | www.coterra.com
Coterra Energy Inc. | 6001 Deauville Blvd., Suite 300N | Midland, TX 79706

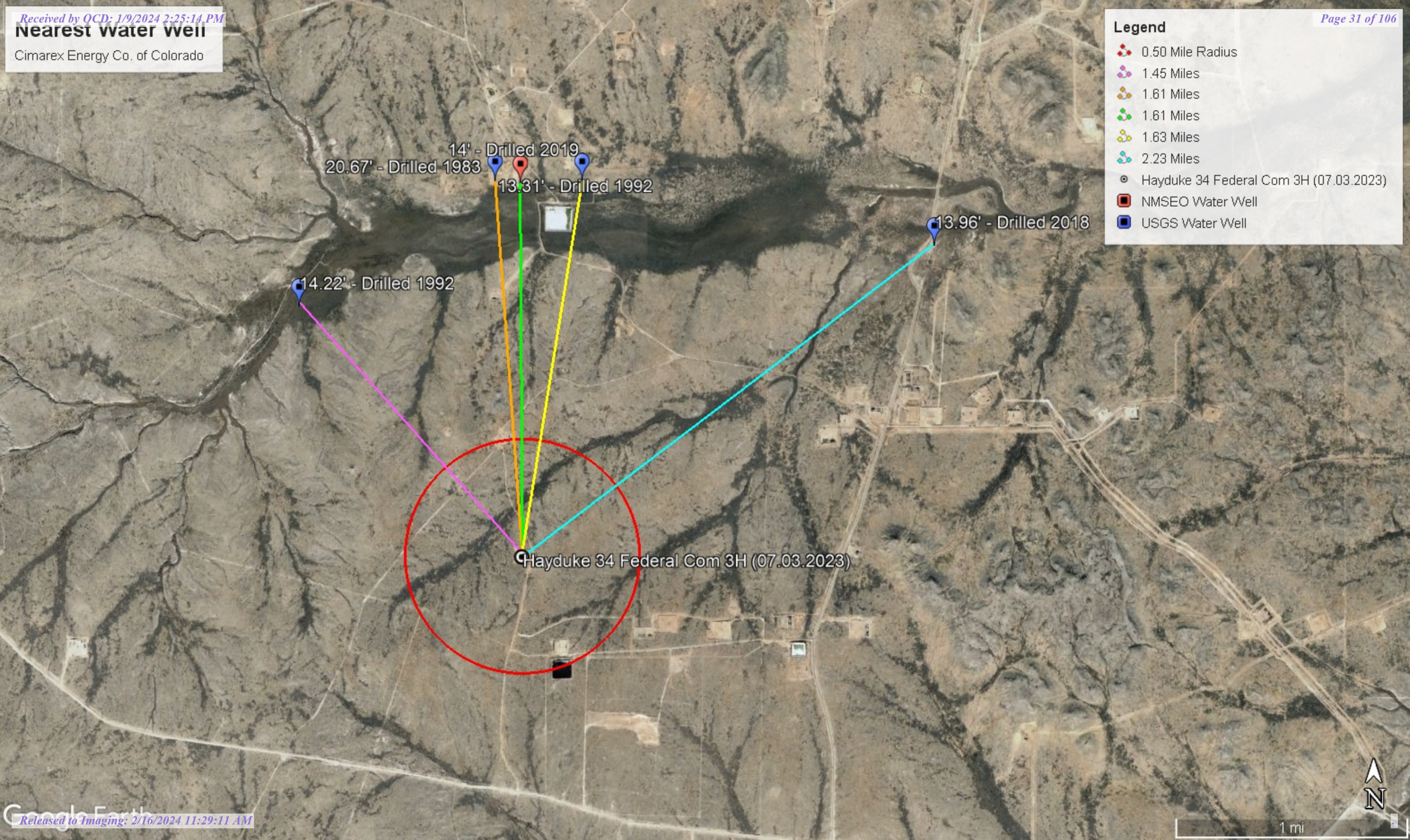
Coterra Energy Inc. is the result of the merger of Cimarex Energy Co. and Cabot Oil & Gas Corporation on October 1, 2021.

APPENDIX D

CARMONA RESOURCES

Nearest Water Well

Cimarex Energy Co. of Colorado



High Karst

Cimarex Energy Co. of Colorado

Legend

- Hayduke 34 Federal Com 3H (07.03.2023)
- High
- Medium

Hayduke 34 Federal Com 3H (07.03.2023)

N

4 mi

Google Earth

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

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

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

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

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 02220	CUB	ED	3	1	2	26	25S	26E	569598	3552352*	2554	35		
C 04329 POD1	C	ED	2	2	2	27	25S	26E	568577	3552567	2571	57	14	43
C 03655 POD3	CUB	ED	1	4	4	22	25S	26E	568458	3553019	3026			
C 01013	C	ED			4	25	25S	26E	571505	3551456*	3242	245		
C 02221	CUB	ED	4	3	2	25	25S	26E	571412	3551961*	3422	35		

Average Depth to Water: **14 feet**

Minimum Depth: **14 feet**

Maximum Depth: **14 feet**

Record Count: 5

UTMNAD83 Radius Search (in meters):

Easting (X): 568610 **Northing (Y):** 3549996 **Radius:** 4000

***UTM location was derived from PLSS - see Help**

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? S

Groundwater | New Mexico | GO

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Groundwater levels for New Mexico

Click to hide state-specific text

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320559104172201

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 320559104172201 25S.26E.28.423113

Eddy County, New Mexico
Latitude 32°05'59", Longitude 104°17'22" NAD27
Land-surface elevation 3,283 feet above NAVD88
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measure
1983-02-01		D	62610		3266.82	NGVD29	1	Z		
1983-02-01		D	62611		3268.50	NAVD88	1	Z		
1983-02-01		D	72019	14.50			1	Z		
1987-10-08		D	62610		3268.06	NGVD29	1	Z		
1987-10-08		D	62611		3269.74	NAVD88	1	Z		
1987-10-08		D	72019	13.26			1	Z		
1992-11-19		D	62610		3267.10	NGVD29	P	S		
1992-11-19		D	62611		3268.78	NAVD88	P	S		
1992-11-19		D	72019	14.22			P	S		

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? S
Referenced vertical datum		NGVD29	National Geodetic Vertical Datum of 1929				
Status		1	Static				
Status		P	Pumping				
Method of measurement		S	Steel-tape measurement.				
Method of measurement		Z	Other.				
Measuring agency			Not determined				
Source of measurement			Not determined				
Water-level approval status		A	Approved for publication -- Processing and review completed.				

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U.S. Department of the Interior | U.S. Geological Survey
Title: Groundwater for New Mexico: Water Levels
URL: https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?

Page Contact Information: New Mexico Water Data Maintainer
Page Last Modified: 2023-11-08 10:35:08 EST
0.43 0.33 nadww02

New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
222B5	C 04329 POD1	2	2	2	27	25S	26E	568577	3552567

Driller License: 1348 **Driller Company:** TAYLOR WATER WELL SERVICE

Driller Name: CLINTON E TAYLOR

Drill Start Date:	06/07/2019	**Drill Finish Date:**	06/08/2019	**Plug Date:**	
Log File Date:	06/17/2019	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	100 GPM
Casing Size:	4.50	**Depth Well:**	57 feet	**Depth Water:**	14 feet

Water Bearing Stratifications:	Top	Bottom	Description
	14	24	Other/Unknown
	24	57	Other/Unknown

Casing Perforations:	Top	Bottom
	20	57

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: New Mexico | GO

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Groundwater levels for New Mexico

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Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320627104163001

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 320627104163001 25S.26E.27.21144

Eddy County, New Mexico
Latitude 32°06'27", Longitude 104°16'30" NAD27
Land-surface elevation 3,251 feet above NAVD88
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measure
1983-02-15		D	62610		3228.66	NGVD29	1	Z		
1983-02-15		D	62611		3230.33	NAVD88	1	Z		
1983-02-15		D	72019	20.67			1	Z		

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static

Section	Code	Description
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

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U.S. Department of the Interior | U.S. Geological Survey
Title: Groundwater for New Mexico: Water Levels
URL: https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?

Page Contact Information: New Mexico Water Data Maintainer
Page Last Modified: 2023-11-08 10:34:17 EST
0.44 0.33 nadww02

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: New Mexico | GO

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Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320627104160701

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 320627104160701 25S.26E.27.22200

Eddy County, New Mexico
Latitude 32°06'27", Longitude 104°16'07" NAD27
Land-surface elevation 3,239 feet above NAVD88
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measure
1983-02-01		D	62610		3221.16	NGVD29	1	Z		
1983-02-01		D	62611		3222.83	NAVD88	1	Z		
1983-02-01		D	72019	16.17			1	Z		
1987-10-08		D	62610		3224.30	NGVD29	1	Z		
1987-10-08		D	62611		3225.97	NAVD88	1	Z		
1987-10-08		D	72019	13.03			1	Z		
1992-11-19		D	62610		3224.02	NGVD29	P	S		
1992-11-19		D	62611		3225.69	NAVD88	P	S		
1992-11-19		D	72019	13.31			P	S		

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day

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

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Title: Groundwater for New Mexico: Water Levels
URL: https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?

Page Contact Information: New Mexico Water Data Maintainer
Page Last Modified: 2023-11-08 10:33:11 EST
0.4 0.32 nadww02

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? S

Groundwater | New Mexico | GO

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Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320616104142801

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 320616104142801 25S.26E.25.23231

Eddy County, New Mexico
Latitude 32°06'12.6", Longitude 104°14'33.9" NAD83
Land-surface elevation 3,188.60 feet above NGVD29
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Castile Formation (312CSTL) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measur
1978-01-25		D	62610		3184.39	NGVD29	1	Z		
1978-01-25		D	62611		3186.05	NAVD88	1	Z		
1978-01-25		D	72019	4.21			1	Z		
1983-02-01		D	62610		3185.96	NGVD29	1	Z		
1983-02-01		D	62611		3187.62	NAVD88	1	Z		
1983-02-01		D	72019	2.64			1	Z		
1987-10-08		D	62610		3185.63	NGVD29	1	Z		
1987-10-08		D	62611		3187.29	NAVD88	1	Z		
1987-10-08		D	72019	2.97			1	Z		
1992-11-04		D	62610		3186.55	NGVD29	1	S		
1992-11-04		D	62611		3188.21	NAVD88	1	S		
1992-11-04		D	72019	2.05			1	S		
1998-01-07		D	62610		3186.62	NGVD29	1	S		
1998-01-07		D	62611		3188.28	NAVD88	1	S		
1998-01-07		D	72019	1.98			1	S		

Date	Time	? Water-level date-time accuracy	? Parameter code		Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? S
2003-01-28		D	62610	3181.38	NGVD29	1	S	USGS
2003-01-28		D	62611	3183.04	NAVD88	1	S	USGS
2003-01-28		D	72019	7.22		1	S	USGS
2013-01-09	22:45 UTC	m	62610	3177.78	NGVD29	1	S	USGS
2013-01-09	22:45 UTC	m	62611	3179.44	NAVD88	1	S	USGS
2013-01-09	22:45 UTC	m	72019	10.82		1	S	USGS
2018-02-13	22:15 UTC	m	62610	3174.64	NGVD29	1	S	USGS
2018-02-13	22:15 UTC	m	62611	3176.30	NAVD88	1	S	USGS
2018-02-13	22:15 UTC	m	72019	13.96		1	S	USGS

Explanation

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

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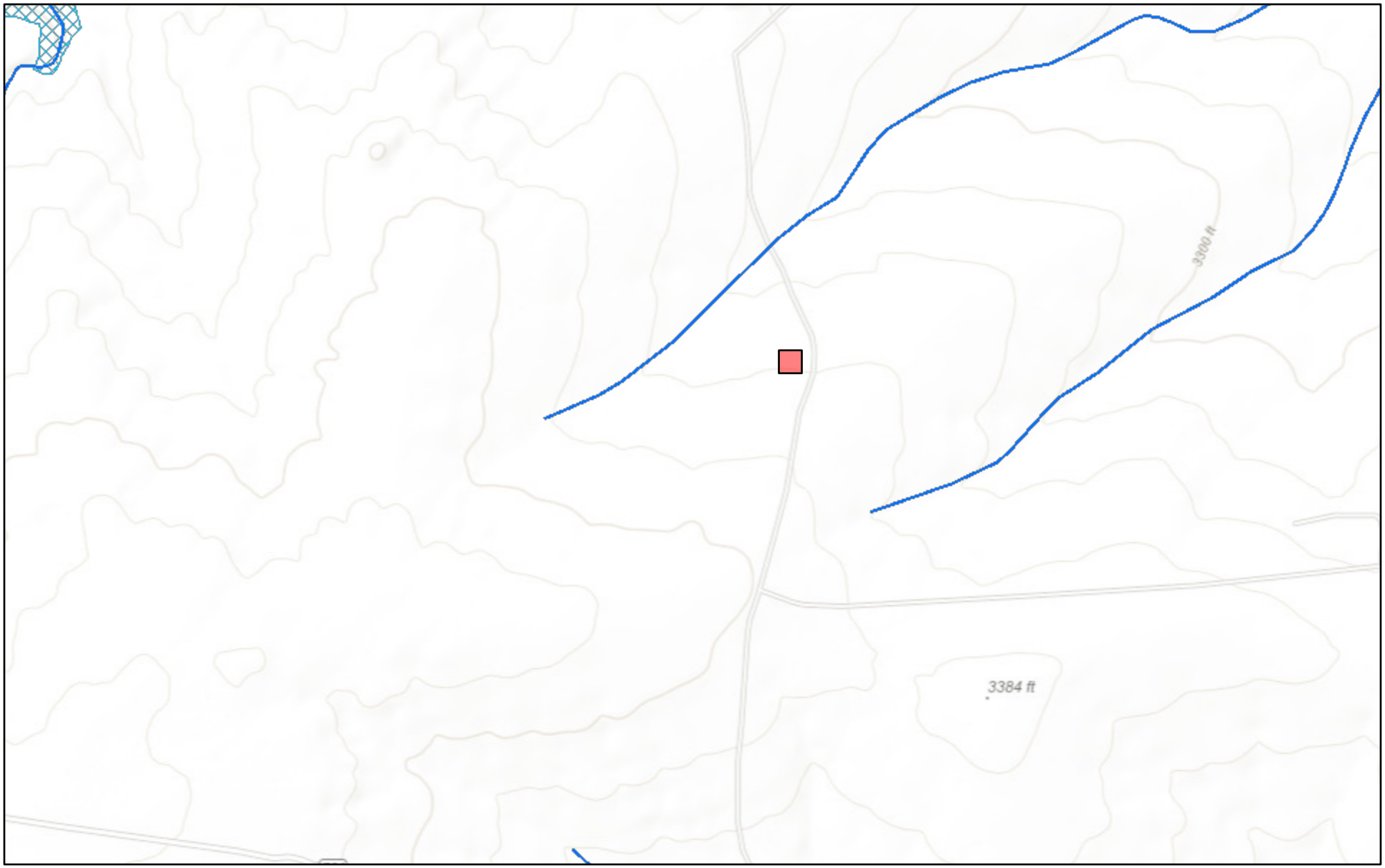
U.S. Department of the Interior | U.S. Geological Survey
Title: Groundwater for New Mexico: Water Levels
URL: https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?

Page Contact Information: New Mexico Water Data Maintainer
Page Last Modified: 2023-11-08 10:36:00 EST
0.43 0.33 nadww02

New Mexico NFHL Data



November 8, 2023

1:18,056

0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

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

nmflood.org is made possible through a collaboration with NMDHSEM,

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

APPENDIX E

CARMONA RESOURCES

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

September 12, 2023

ASHTON THIELKE

CARMONA RESOURCES

310 W WALL ST SUITE 415

MIDLAND, TX 79701

RE: HEYDUKE 34 FED COM 3H

Enclosed are the results of analyses for samples received by the laboratory on 09/07/23 14:01.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	09/07/2023	Sampling Date:	09/07/2023
Reported:	09/12/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: S - 1 (0-0.5') (H234858-01)

BTEX 8021B mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	09/08/2023	ND	2.04	102	2.00	1.01	
Toluene*	**9.87**	0.500	09/08/2023	ND	2.07	104	2.00	1.84	GC-NC1
Ethylbenzene*	**4.85**	0.500	09/08/2023	ND	2.00	100	2.00	1.19	GC-NC1
Total Xylenes*	**84.2**	1.50	09/08/2023	ND	6.03	100	6.00	1.57	
Total BTEX	**98.9**	3.00	09/08/2023	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID *197 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**240**	16.0	09/08/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**3380**	10.0	09/08/2023	ND	221	110	200	5.06	
DRO >C10-C28*	**8690**	10.0	09/08/2023	ND	233	116	200	6.64	
EXT DRO >C28-C36	**723**	10.0	09/08/2023	ND					

Surrogate: 1-Chlorooctane *579 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *149 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	09/07/2023	Sampling Date:	09/07/2023
Reported:	09/12/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: S - 2 (0-0.5') (H234858-02)

BTEX 8021B mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/08/2023	ND	1.81	90.6	2.00	5.83	
Toluene*	**0.171**	0.050	09/08/2023	ND	1.84	92.0	2.00	5.75	GC-NC1
Ethylbenzene*	<0.050	0.050	09/08/2023	ND	1.86	92.9	2.00	5.64	
Total Xylenes*	**2.47**	0.150	09/08/2023	ND	5.65	94.2	6.00	5.19	
Total BTEX	**2.64**	0.300	09/08/2023	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID *193 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	09/08/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**1260**	10.0	09/08/2023	ND	221	110	200	5.06	
DRO >C10-C28*	**7650**	10.0	09/08/2023	ND	233	116	200	6.64	
EXT DRO >C28-C36	**752**	10.0	09/08/2023	ND					

Surrogate: 1-Chlorooctane *303 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *132 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	09/07/2023	Sampling Date:	09/07/2023
Reported:	09/12/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: S - 3 (0-0.5') (H234858-03)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/08/2023	ND	1.81	90.6	2.00	5.83	
Toluene*	<0.050	0.050	09/08/2023	ND	1.84	92.0	2.00	5.75	
Ethylbenzene*	<0.050	0.050	09/08/2023	ND	1.86	92.9	2.00	5.64	
Total Xylenes*	<0.150	0.150	09/08/2023	ND	5.65	94.2	6.00	5.19	
Total BTEX	<0.300	0.300	09/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *119 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**304**	16.0	09/08/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/09/2023	ND	221	110	200	5.06	
DRO >C10-C28*	**34.2**	10.0	09/09/2023	ND	233	116	200	6.64	
EXT DRO >C28-C36	<10.0	10.0	09/09/2023	ND					

Surrogate: 1-Chlorooctane *96.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *125 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	09/07/2023	Sampling Date:	09/07/2023
Reported:	09/12/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: S - 4 (0-0.5') (H234858-04)

BTEX 8021B mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/08/2023	ND	1.81	90.6	2.00	5.83	
Toluene*	**0.096**	0.050	09/08/2023	ND	1.84	92.0	2.00	5.75	GC-NC1
Ethylbenzene*	<0.050	0.050	09/08/2023	ND	1.86	92.9	2.00	5.64	
Total Xylenes*	**2.83**	0.150	09/08/2023	ND	5.65	94.2	6.00	5.19	
Total BTEX	**2.93**	0.300	09/08/2023	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID *382 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**272**	16.0	09/08/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**659**	10.0	09/08/2023	ND	221	110	200	5.06	
DRO >C10-C28*	**3710**	10.0	09/08/2023	ND	233	116	200	6.64	
EXT DRO >C28-C36	**342**	10.0	09/08/2023	ND					

Surrogate: 1-Chlorooctane *191 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *103 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	09/07/2023	Sampling Date:	09/07/2023
Reported:	09/12/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: S - 5 (0-0.5') (H234858-05)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/08/2023	ND	1.81	90.6	2.00	5.83	
Toluene*	<0.050	0.050	09/08/2023	ND	1.84	92.0	2.00	5.75	
Ethylbenzene*	<0.050	0.050	09/08/2023	ND	1.86	92.9	2.00	5.64	
Total Xylenes*	<0.150	0.150	09/08/2023	ND	5.65	94.2	6.00	5.19	
Total BTEX	<0.300	0.300	09/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *120 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	09/08/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/09/2023	ND	221	110	200	5.06	
DRO >C10-C28*	<10.0	10.0	09/09/2023	ND	233	116	200	6.64	
EXT DRO >C28-C36	<10.0	10.0	09/09/2023	ND					

Surrogate: 1-Chlorooctane *103 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *132 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	09/07/2023	Sampling Date:	09/07/2023
Reported:	09/12/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: S - 6 (0-0.5') (H234858-06)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/08/2023	ND	1.81	90.6	2.00	5.83	
Toluene*	<0.050	0.050	09/08/2023	ND	1.84	92.0	2.00	5.75	
Ethylbenzene*	<0.050	0.050	09/08/2023	ND	1.86	92.9	2.00	5.64	
Total Xylenes*	<0.150	0.150	09/08/2023	ND	5.65	94.2	6.00	5.19	
Total BTEX	<0.300	0.300	09/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *119 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**304**	16.0	09/08/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/08/2023	ND	221	110	200	5.06	
DRO >C10-C28*	<10.0	10.0	09/08/2023	ND	233	116	200	6.64	
EXT DRO >C28-C36	<10.0	10.0	09/08/2023	ND					

Surrogate: 1-Chlorooctane *89.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *115 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Chain of Custody

Work Order No: H234858

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:	432-813-6823	Email:	laci.luig@coterra.com Ashton.Thielke@coterra.com

Work Order Comments

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

State of Project:

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

Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Heyduke 34 Fed Com 3H	Turn Around	
Project Number:	-	☑ Routine ☐ Rush	
Project Location	Eddy County, New Mexico	Due Date:	
Sampler's Name:	CRM		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Received Intact:	Yes No	Thermometer ID:	140
Cooler Custody Seals:	Yes No N/A	Correction Factor:	—
Sample Custody Seals:	Yes No N/A	Temperature Reading:	-0.1°c
Total Containers:		Corrected Temperature:	—

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	Pres. Code	BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 4500	Sample Comments
1	S-1 (0-0.5')	9/7/2023		X		G	1		X	X	X	
2	S-2 (0-0.5')	9/7/2023		X		G	1		X	X	X	
3	S-3 (0-0.5')	9/7/2023		X		G	1		X	X	X	
4	S-4 (0-0.5')	9/7/2023		X		G	1		X	X	X	
5	S-5 (0-0.5')	9/7/2023		X		G	1		X	X	X	
6	S-6 (0-0.5')	9/7/2023		X		G	1		X	X	X	

Parameters

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
	9-7-23 1401		

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

September 12, 2023

ASHTON THIELKE

CARMONA RESOURCES

310 W WALL ST SUITE 415

MIDLAND, TX 79701

RE: HEYDUKE 34 FED COM 3H

Enclosed are the results of analyses for samples received by the laboratory on 09/07/23 14:01.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	09/07/2023	Sampling Date:	09/07/2023
Reported:	09/12/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: H - 1 (0-0.5') (H234857-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/08/2023	ND	2.04	102	2.00	1.01	
Toluene*	<0.050	0.050	09/08/2023	ND	2.07	104	2.00	1.84	
Ethylbenzene*	<0.050	0.050	09/08/2023	ND	2.00	100	2.00	1.19	
Total Xylenes*	<0.150	0.150	09/08/2023	ND	6.03	100	6.00	1.57	
Total BTEX	<0.300	0.300	09/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	09/08/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/08/2023	ND	221	110	200	5.06	
DRO >C10-C28*	<10.0	10.0	09/08/2023	ND	233	116	200	6.64	
EXT DRO >C28-C36	<10.0	10.0	09/08/2023	ND					

Surrogate: 1-Chlorooctane *84.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *98.8 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	09/07/2023	Sampling Date:	09/07/2023
Reported:	09/12/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: H - 2 (0-0.5') (H234857-02)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/08/2023	ND	2.04	102	2.00	1.01	
Toluene*	<0.050	0.050	09/08/2023	ND	2.07	104	2.00	1.84	
Ethylbenzene*	<0.050	0.050	09/08/2023	ND	2.00	100	2.00	1.19	
Total Xylenes*	<0.150	0.150	09/08/2023	ND	6.03	100	6.00	1.57	
Total BTEX	<0.300	0.300	09/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	09/08/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/08/2023	ND	221	110	200	5.06	
DRO >C10-C28*	<10.0	10.0	09/08/2023	ND	233	116	200	6.64	
EXT DRO >C28-C36	<10.0	10.0	09/08/2023	ND					

Surrogate: 1-Chlorooctane *74.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *91.2 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	09/07/2023	Sampling Date:	09/07/2023
Reported:	09/12/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: H - 3 (0-0.5') (H234857-03)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/08/2023	ND	2.04	102	2.00	1.01	
Toluene*	<0.050	0.050	09/08/2023	ND	2.07	104	2.00	1.84	
Ethylbenzene*	<0.050	0.050	09/08/2023	ND	2.00	100	2.00	1.19	
Total Xylenes*	<0.150	0.150	09/08/2023	ND	6.03	100	6.00	1.57	
Total BTEX	<0.300	0.300	09/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	09/08/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/08/2023	ND	221	110	200	5.06	
DRO >C10-C28*	<10.0	10.0	09/08/2023	ND	233	116	200	6.64	
EXT DRO >C28-C36	<10.0	10.0	09/08/2023	ND					

Surrogate: 1-Chlorooctane *87.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *103 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	09/07/2023	Sampling Date:	09/07/2023
Reported:	09/12/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: H - 4 (0-0.5') (H234857-04)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/08/2023	ND	2.04	102	2.00	1.01	
Toluene*	<0.050	0.050	09/08/2023	ND	2.07	104	2.00	1.84	
Ethylbenzene*	<0.050	0.050	09/08/2023	ND	2.00	100	2.00	1.19	
Total Xylenes*	<0.150	0.150	09/08/2023	ND	6.03	100	6.00	1.57	
Total BTEX	<0.300	0.300	09/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	09/08/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/08/2023	ND	221	110	200	5.06	
DRO >C10-C28*	<10.0	10.0	09/08/2023	ND	233	116	200	6.64	
EXT DRO >C28-C36	<10.0	10.0	09/08/2023	ND					

Surrogate: 1-Chlorooctane *82.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *93.6 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

Chain of Custody

Work Order No: H234857

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:	432-813-6823	Email:	laci.luig@coterra.com Ashton.Thielke@coterra.com

Work Order Comments

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

State of Project:

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

Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Heyduke 34 Fed Com 3H	Turn Around	
Project Number:	-	☑ Routine ☐ Rush	
Project Location	Eddy County, New Mexico	Due Date:	
Sampler's Name:	CRM		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	Yes (No)
Received Intact:	(Yes) No	Thermometer ID:	140
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	-0.1°C
Total Containers:		Corrected Temperature:	

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2SO_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	Pres. Code	BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 4500	Sample Comments
1	H-1 (0-0.5')	9/7/2023		X		G	1		X	X	X	
2	H-2 (0-0.5')	9/7/2023		X		G	1		X	X	X	
3	H-3 (0-0.5')	9/7/2023		X		G	1		X	X	X	
4	H-4 (0-0.5')	9/7/2023		X		G	1		X	X	X	

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
	9-7-23 1401		

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

November 01, 2023

ASHTON THIELKE

CARMONA RESOURCES

310 W WALL ST SUITE 415

MIDLAND, TX 79701

RE: HEYDUKE 34 FED COM 3H

Enclosed are the results of analyses for samples received by the laboratory on 10/31/23 16:13.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: CS - 1 (5.0') (H235961-01)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.87	93.6	2.00	1.15	
Toluene*	<0.050	0.050	10/31/2023	ND	1.98	99.2	2.00	0.802	
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.00	100	2.00	0.891	
Total Xylenes*	<0.150	0.150	10/31/2023	ND	5.96	99.3	6.00	1.15	
Total BTEX	<0.300	0.300	10/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	11/01/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2023	ND	195	97.6	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/31/2023	ND	182	91.0	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	10/31/2023	ND					

Surrogate: 1-Chlorooctane *88.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *81.7 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: CS - 2 (5.0') (H235961-02)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.87	93.6	2.00	1.15	
Toluene*	<0.050	0.050	10/31/2023	ND	1.98	99.2	2.00	0.802	
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.00	100	2.00	0.891	
Total Xylenes*	<0.150	0.150	10/31/2023	ND	5.96	99.3	6.00	1.15	
Total BTEX	<0.300	0.300	10/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**96.0**	16.0	11/01/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2023	ND	195	97.6	200	3.40	
DRO >C10-C28*	**31.3**	10.0	10/31/2023	ND	182	91.0	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	10/31/2023	ND					

Surrogate: 1-Chlorooctane *91.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *82.9 %* *49.1-148*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: CS - 3 (5.0') (H235961-03)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.87	93.6	2.00	1.15	
Toluene*	<0.050	0.050	10/31/2023	ND	1.98	99.2	2.00	0.802	
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.00	100	2.00	0.891	
Total Xylenes*	<0.150	0.150	10/31/2023	ND	5.96	99.3	6.00	1.15	
Total BTEX	<0.300	0.300	10/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	11/01/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2023	ND	195	97.6	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/31/2023	ND	182	91.0	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	10/31/2023	ND					

Surrogate: 1-Chlorooctane *91.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *83.4 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: CS - 4 (5.0') (H235961-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.87	93.6	2.00	1.15	
Toluene*	<0.050	0.050	10/31/2023	ND	1.98	99.2	2.00	0.802	
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.00	100	2.00	0.891	
Total Xylenes*	<0.150	0.150	10/31/2023	ND	5.96	99.3	6.00	1.15	
Total BTEX	<0.300	0.300	10/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	11/01/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2023	ND	195	97.6	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/31/2023	ND	182	91.0	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	10/31/2023	ND					

Surrogate: 1-Chlorooctane *97.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *88.8 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: CS - 5 (5.0') (H235961-05)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.87	93.6	2.00	1.15	
Toluene*	<0.050	0.050	10/31/2023	ND	1.98	99.2	2.00	0.802	
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.00	100	2.00	0.891	
Total Xylenes*	<0.150	0.150	10/31/2023	ND	5.96	99.3	6.00	1.15	
Total BTEX	<0.300	0.300	10/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**464**	16.0	11/01/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2023	ND	195	97.6	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/31/2023	ND	182	91.0	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	10/31/2023	ND					

Surrogate: 1-Chlorooctane *94.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *85.2 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: CS - 6 (2.0') (H235961-06)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.96	98.0	2.00	2.54	
Toluene*	<0.050	0.050	10/31/2023	ND	1.95	97.5	2.00	0.997	
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.05	103	2.00	1.26	
Total Xylenes*	<0.150	0.150	10/31/2023	ND	6.26	104	6.00	1.76	
Total BTEX	<0.300	0.300	10/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**512**	16.0	11/01/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2023	ND	195	97.6	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/31/2023	ND	182	91.0	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	10/31/2023	ND					

Surrogate: 1-Chlorooctane *92.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *83.8 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: CS - 7 (2.0') (H235961-07)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.96	98.0	2.00	2.54	
Toluene*	<0.050	0.050	10/31/2023	ND	1.95	97.5	2.00	0.997	GC-NC
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.05	103	2.00	1.26	
Total Xylenes*	**0.431**	0.150	10/31/2023	ND	6.26	104	6.00	1.76	GC-NC1
Total BTEX	**0.431**	0.300	10/31/2023	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID *121 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	11/01/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**10.2**	10.0	10/31/2023	ND	195	97.6	200	3.40	
DRO >C10-C28*	**152**	10.0	10/31/2023	ND	182	91.0	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	10/31/2023	ND					

Surrogate: 1-Chlorooctane *91.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *85.8 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: CS - 8 (1.5') (H235961-08)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.96	98.0	2.00	2.54	
Toluene*	<0.050	0.050	10/31/2023	ND	1.95	97.5	2.00	0.997	
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.05	103	2.00	1.26	
Total Xylenes*	<0.150	0.150	10/31/2023	ND	6.26	104	6.00	1.76	
Total BTEX	<0.300	0.300	10/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	11/01/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2023	ND	195	97.6	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/31/2023	ND	182	91.0	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	10/31/2023	ND					

Surrogate: 1-Chlorooctane *92.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *85.5 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: CS - 9 (1.5') (H235961-09)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.96	98.0	2.00	2.54	
Toluene*	<0.050	0.050	10/31/2023	ND	1.95	97.5	2.00	0.997	
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.05	103	2.00	1.26	
Total Xylenes*	<0.150	0.150	10/31/2023	ND	6.26	104	6.00	1.76	
Total BTEX	<0.300	0.300	10/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.8 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**400**	16.0	11/01/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2023	ND	195	97.6	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/31/2023	ND	182	91.0	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	10/31/2023	ND					

Surrogate: 1-Chlorooctane *95.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *87.3 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: CS - 10 (1.5') (H235961-10)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.96	98.0	2.00	2.54	
Toluene*	<0.050	0.050	10/31/2023	ND	1.95	97.5	2.00	0.997	
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.05	103	2.00	1.26	
Total Xylenes*	<0.150	0.150	10/31/2023	ND	6.26	104	6.00	1.76	
Total BTEX	<0.300	0.300	10/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.9 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**288**	16.0	11/01/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2023	ND	195	97.6	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/31/2023	ND	182	91.0	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	10/31/2023	ND					

Surrogate: 1-Chlorooctane *97.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *90.2 %* *49.1-148*

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: SW - 1 (5.0') (H235961-11)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.96	98.0	2.00	2.54	
Toluene*	<0.050	0.050	10/31/2023	ND	1.95	97.5	2.00	0.997	
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.05	103	2.00	1.26	
Total Xylenes*	<0.150	0.150	10/31/2023	ND	6.26	104	6.00	1.76	
Total BTEX	<0.300	0.300	10/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.2 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	11/01/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2023	ND	195	97.6	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/31/2023	ND	182	91.0	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	10/31/2023	ND					

Surrogate: 1-Chlorooctane *81.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *74.8 %* *49.1-148*

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: SW - 2 (5.0') (H235961-12)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.96	98.0	2.00	2.54	
Toluene*	<0.050	0.050	10/31/2023	ND	1.95	97.5	2.00	0.997	
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.05	103	2.00	1.26	
Total Xylenes*	<0.150	0.150	10/31/2023	ND	6.26	104	6.00	1.76	
Total BTEX	<0.300	0.300	10/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.1 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	11/01/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2023	ND	195	97.6	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/31/2023	ND	182	91.0	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	10/31/2023	ND					

Surrogate: 1-Chlorooctane *89.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *81.5 %* *49.1-148*

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: SW - 3 (5.0') (H235961-13)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.96	98.0	2.00	2.54	
Toluene*	<0.050	0.050	10/31/2023	ND	1.95	97.5	2.00	0.997	
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.05	103	2.00	1.26	
Total Xylenes*	<0.150	0.150	10/31/2023	ND	6.26	104	6.00	1.76	
Total BTEX	<0.300	0.300	10/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	11/01/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2023	ND	195	97.6	200	3.40	
DRO >C10-C28*	**76.0**	10.0	10/31/2023	ND	182	91.0	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	10/31/2023	ND					

Surrogate: 1-Chlorooctane *92.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *86.8 %* *49.1-148*

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CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: SW - 4 (5.0') (H235961-14)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.96	98.0	2.00	2.54	
Toluene*	<0.050	0.050	10/31/2023	ND	1.95	97.5	2.00	0.997	
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.05	103	2.00	1.26	
Total Xylenes*	<0.150	0.150	10/31/2023	ND	6.26	104	6.00	1.76	
Total BTEX	<0.300	0.300	10/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	11/01/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2023	ND	195	97.6	200	3.40	
DRO >C10-C28*	**10.1**	10.0	10/31/2023	ND	182	91.0	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	10/31/2023	ND					

Surrogate: 1-Chlorooctane *90.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *81.9 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: SW - 5 (5.0') (H235961-15)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.96	98.0	2.00	2.54	
Toluene*	<0.050	0.050	10/31/2023	ND	1.95	97.5	2.00	0.997	
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.05	103	2.00	1.26	
Total Xylenes*	<0.150	0.150	10/31/2023	ND	6.26	104	6.00	1.76	
Total BTEX	<0.300	0.300	10/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	11/01/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2023	ND	195	97.6	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/31/2023	ND	182	91.0	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	10/31/2023	ND					

Surrogate: 1-Chlorooctane *76.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *70.4 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: SW - 6 (5.0') (H235961-16)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.96	98.0	2.00	2.54	
Toluene*	<0.050	0.050	10/31/2023	ND	1.95	97.5	2.00	0.997	
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.05	103	2.00	1.26	
Total Xylenes*	<0.150	0.150	10/31/2023	ND	6.26	104	6.00	1.76	
Total BTEX	<0.300	0.300	10/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.6 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	11/01/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2023	ND	195	97.6	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/31/2023	ND	182	91.0	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	10/31/2023	ND					

Surrogate: 1-Chlorooctane *88.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *81.0 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: SW - 7 (3.0') (H235961-17)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.96	98.0	2.00	2.54	
Toluene*	<0.050	0.050	10/31/2023	ND	1.95	97.5	2.00	0.997	
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.05	103	2.00	1.26	
Total Xylenes*	<0.150	0.150	10/31/2023	ND	6.26	104	6.00	1.76	
Total BTEX	<0.300	0.300	10/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**176**	16.0	11/01/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2023	ND	195	97.6	200	3.40	
DRO >C10-C28*	**21.6**	10.0	10/31/2023	ND	182	91.0	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	10/31/2023	ND					

Surrogate: 1-Chlorooctane *90.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *82.4 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: SW - 8 (3.5') (H235961-18)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.96	98.0	2.00	2.54	
Toluene*	<0.050	0.050	10/31/2023	ND	1.95	97.5	2.00	0.997	
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.05	103	2.00	1.26	
Total Xylenes*	<0.150	0.150	10/31/2023	ND	6.26	104	6.00	1.76	
Total BTEX	<0.300	0.300	10/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	11/01/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2023	ND	195	97.6	200	3.40	
DRO >C10-C28*	**37.3**	10.0	10/31/2023	ND	182	91.0	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	10/31/2023	ND					

Surrogate: 1-Chlorooctane *82.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *76.4 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: SW - 9 (2.0') (H235961-19)

BTEX 8021B mg/kg Analyzed By: JH/ S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.96	98.0	2.00	2.54	
Toluene*	<0.050	0.050	10/31/2023	ND	1.95	97.5	2.00	0.997	GC-NC
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.05	103	2.00	1.26	
Total Xylenes*	**1.46**	0.150	10/31/2023	ND	6.26	104	6.00	1.76	GC-NC1
Total BTEX	**1.46**	0.300	10/31/2023	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID *144 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**176**	16.0	11/01/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**19.1**	10.0	11/01/2023	ND	195	97.6	200	3.40	
DRO >C10-C28*	**330**	10.0	11/01/2023	ND	182	91.0	200	2.58	
EXT DRO >C28-C36	**22.3**	10.0	11/01/2023	ND					

Surrogate: 1-Chlorooctane *88.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *86.8 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: SW - 10 (2.0') (H235961-20)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.96	98.0	2.00	2.54	
Toluene*	<0.050	0.050	10/31/2023	ND	1.95	97.5	2.00	0.997	
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.05	103	2.00	1.26	
Total Xylenes*	<0.150	0.150	10/31/2023	ND	6.26	104	6.00	1.76	
Total BTEX	<0.300	0.300	10/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *107 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**288**	16.0	11/01/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/01/2023	ND	195	97.6	200	3.40	
DRO >C10-C28*	<10.0	10.0	11/01/2023	ND	182	91.0	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	11/01/2023	ND					

Surrogate: 1-Chlorooctane *88.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *80.8 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: SW - 11 (0.5') (H235961-21)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.96	98.0	2.00	2.54	
Toluene*	<0.050	0.050	10/31/2023	ND	1.95	97.5	2.00	0.997	
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.05	103	2.00	1.26	
Total Xylenes*	<0.150	0.150	10/31/2023	ND	6.26	104	6.00	1.76	
Total BTEX	<0.300	0.300	10/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**336**	16.0	11/01/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2023	ND	197	98.5	200	3.24	
DRO >C10-C28*	<10.0	10.0	10/31/2023	ND	203	102	200	1.67	
EXT DRO >C28-C36	<10.0	10.0	10/31/2023	ND					

Surrogate: 1-Chlorooctane *93.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *96.2 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: SW - 12 (1.5') (H235961-22)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2023	ND	1.96	98.0	2.00	2.54	
Toluene*	<0.050	0.050	10/31/2023	ND	1.95	97.5	2.00	0.997	
Ethylbenzene*	<0.050	0.050	10/31/2023	ND	2.05	103	2.00	1.26	
Total Xylenes*	<0.150	0.150	10/31/2023	ND	6.26	104	6.00	1.76	
Total BTEX	<0.300	0.300	10/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**448**	16.0	11/01/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2023	ND	197	98.5	200	3.24	
DRO >C10-C28*	<10.0	10.0	10/31/2023	ND	203	102	200	1.67	
EXT DRO >C28-C36	<10.0	10.0	10/31/2023	ND					

Surrogate: 1-Chlorooctane *92.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *95.1 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	10/31/2023	Sampling Date:	10/31/2023
Reported:	11/01/2023	Sampling Type:	Soil
Project Name:	HEYDUKE 34 FED COM 3H	Sampling Condition:	Cool & Intact
Project Number:	2133	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - EDDY CO, NEW MEXICO		

Sample ID: SW - 13 (1.5') (H235961-23)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/01/2023	ND	1.96	98.0	2.00	2.54	
Toluene*	<0.050	0.050	11/01/2023	ND	1.95	97.5	2.00	0.997	GC-NC
Ethylbenzene*	<0.050	0.050	11/01/2023	ND	2.05	103	2.00	1.26	
Total Xylenes*	**0.979**	0.150	11/01/2023	ND	6.26	104	6.00	1.76	GC-NC1
Total BTEX	**0.979**	0.300	11/01/2023	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID *117 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	11/01/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**13.4**	10.0	11/01/2023	ND	197	98.5	200	3.24	
DRO >C10-C28*	**128**	10.0	11/01/2023	ND	203	102	200	1.67	
EXT DRO >C28-C36	<10.0	10.0	11/01/2023	ND					

Surrogate: 1-Chlorooctane *95.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *97.4 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
GC-NC	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Chain of Custody

Work Order No: H235961

Page 1 of 3

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:	432-813-6823	Email:	laci.luig@coterra.com Ashton.Thielke@coterra.com

Work Order Comments

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

State of Project:

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

Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Heyduke 34 Fed Com 3H	Turn Around	
Project Number:	2133	☐ Routine	☑ Rush
Project Location	Eddy County, New Mexico	Due Date:	24hr.
Sampler's Name:	GPJ		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	Yes (No)
Received Intact:	(Yes) No	Thermometer ID:	140
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	—
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	0.6°C
Total Containers:	23	Corrected Temperature:	—

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	Pres. Code	BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 4500	Sample Comments
1	CS-1 (5.0')	10/31/2023		X		C	1		X	X	X	
2	CS-2 (5.0')	10/31/2023		X		C	1		X	X	X	
3	CS-3 (5.0')	10/31/2023		X		C	1		X	X	X	
4	CS-4 (5.0')	10/31/2023		X		C	1		X	X	X	
5	CS-5 (5.0')	10/31/2023		X		C	1		X	X	X	
6	CS-6 (2.0')	10/31/2023		X		C	1		X	X	X	
7	CS-7 (2.0')	10/31/2023		X		C	1		X	X	X	
8	CS-8 (1.5')	10/31/2023		X		C	1		X	X	X	
9	CS-9 (1.5')	10/31/2023		X		C	1		X	X	X	
10	CS-10 (1.5')	10/31/2023		X		C	1		X	X	X	

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
	10-31-23 16:13		10-31-23-16:13

Chain of Custody

Work Order No: H235961

Page 2 of 3

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:	432-813-6823	Email:	laci.luig@coterra.com Ashton.Thielke@coterra.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ rownfields ☐ RC $ ☐ perfund ☐

State of Project:

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

Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Heyduke 34 Fed Com 3H	Turn Around	
Project Number:	2133	☐ Routine ☑ Rush	
Project Location	Eddy County, New Mexico	Due Date:	24hr.
Sampler's Name:	GPJ		
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Received Intact:	Yes No	Thermometer ID:	140	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	—	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	0.6°c	
Total Containers:	23	Corrected Temperature:	—	

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	Pres. Code	Parameters: BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 4500	Sample Comments
11	SW-1 (5.0')	10/31/2023		X		C	1		X	X	X	
12	SW-2 (5.0')	10/31/2023		X		C	1		X	X	X	
13	SW-3 (5.0')	10/31/2023		X		C	1		X	X	X	
14	SW-4 (5.0')	10/31/2023		X		C	1		X	X	X	
15	SW-5 (5.0')	10/31/2023		X		C	1		X	X	X	
16	SW-6 (5.0')	10/31/2023		X		C	1		X	X	X	
17	SW-7 (3.0')	10/31/2023		X		C	1		X	X	X	
18	SW-8 (3.5')	10/31/2023		X		C	1		X	X	X	
19	SW-9 (2.0')	10/31/2023		X		C	1		X	X	X	
20	SW-10 (2.0')	10/31/2023		X		C	1		X	X	X	

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
	10-31-23 16:13		10-31-23 16:13

Chain of Custody

Work Order No: H235961

Page 3 of 3

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:	432-813-6823	Email:	laci.luig@coterra.com Ashton.Thielke@coterra.com

Work Order Comments

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

State of Project:

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

Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Heyduke 34 Fed Com 3H	Turn Around	☐ Routine ☑ Rush
Project Number:	2133	Due Date:	24hr.
Project Location	Eddy County, New Mexico		
Sampler's Name:	GPJ		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	Yes (No)
Received Intact:	(Yes) No	Thermometer ID:	140
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	—
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	0.6°C
Total Containers:	23	Corrected Temperature:	—

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	Pres. Code	Parameters: BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 4500	Sample Comments
21	SW-11 (0.5')	10/31/2023		X		C	1		X	X	X	
22	SW-12 (1.5')	10/31/2023		X		C	1		X	X	X	
23	SW-13 (1.5')	10/31/2023		X		C	1		X	X	X	

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
	10-31-23 1673		10-31-23 16:13

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

November 06, 2023

ASHTON THIELKE

CARMONA RESOURCES

310 W WALL ST SUITE 415

MIDLAND, TX 79701

RE: HEYDUKE 34 FED COM 3H

Enclosed are the results of analyses for samples received by the laboratory on 11/01/23 16:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES 310 W WALL ST SUITE 415 MIDLAND TX, 79701	Project: HEYDUKE 34 FED COM 3H Project Number: 2133 Project Manager: ASHTON THIELKE Fax To:	Reported: 06-Nov-23 16:35

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CS - 7 (2.25')	H235994-01	Soil	01-Nov-23 15:00	01-Nov-23 16:35
SW - 9 (2.0')	H235994-02	Soil	01-Nov-23 15:02	01-Nov-23 16:35
SW - 13 (1.5')	H235994-03	Soil	01-Nov-23 15:04	01-Nov-23 16:35

11/06/23 - Login had a typo on sample -03. This is the revised report and will replace the one sent on 11/02/23.

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES 310 W WALL ST SUITE 415 MIDLAND TX, 79701	Project: HEYDUKE 34 FED COM 3H Project Number: 2133 Project Manager: ASHTON THIELKE Fax To:	Reported: 06-Nov-23 16:35

CS - 7 (2.25')

H235994-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**160**		16.0	mg/kg	4	3110214	AC	02-Nov-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	3110104	JH/	01-Nov-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3110104	JH/	01-Nov-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3110104	JH/	01-Nov-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3110104	JH/	01-Nov-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3110104	JH/	01-Nov-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*114 %*	*71.5-134*		*3110104*	JH/	*01-Nov-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	3110134	MS	01-Nov-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3110134	MS	01-Nov-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3110134	MS	01-Nov-23	8015B	
Surrogate: 1-Chlorooctane			*92.5 %*	*48.2-134*		*3110134*	MS	*01-Nov-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*103 %*	*49.1-148*		*3110134*	MS	*01-Nov-23*	*8015B*	

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Analytical Results For:

CARMONA RESOURCES 310 W WALL ST SUITE 415 MIDLAND TX, 79701	Project: HEYDUKE 34 FED COM 3H Project Number: 2133 Project Manager: ASHTON THIELKE Fax To:	Reported: 06-Nov-23 16:35

SW - 9 (2.0')

H235994-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**192**		16.0	mg/kg	4	3110214	AC	02-Nov-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	3110104	JH/	01-Nov-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3110104	JH/	01-Nov-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3110104	JH/	01-Nov-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3110104	JH/	01-Nov-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3110104	JH/	01-Nov-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*116 %*	*71.5-134*		*3110104*	JH/	*01-Nov-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	3110134	MS	02-Nov-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3110134	MS	02-Nov-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3110134	MS	02-Nov-23	8015B	
Surrogate: 1-Chlorooctane			*84.9 %*	*48.2-134*		*3110134*	MS	*02-Nov-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*94.6 %*	*49.1-148*		*3110134*	MS	*02-Nov-23*	*8015B*	

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

CARMONA RESOURCES 310 W WALL ST SUITE 415 MIDLAND TX, 79701	Project: HEYDUKE 34 FED COM 3H Project Number: 2133 Project Manager: ASHTON THIELKE Fax To:	Reported: 06-Nov-23 16:35

SW - 13 (1.5')

H235994-03 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**48.0**		16.0	mg/kg	4	3110214	AC	02-Nov-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	3110104	JH/	01-Nov-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3110104	JH/	01-Nov-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3110104	JH/	01-Nov-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3110104	JH/	01-Nov-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3110104	JH/	01-Nov-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*113 %*	*71.5-134*		*3110104*	JH/	*01-Nov-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	3110134	MS	02-Nov-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3110134	MS	02-Nov-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3110134	MS	02-Nov-23	8015B	
Surrogate: 1-Chlorooctane			*94.8 %*	*48.2-134*		*3110134*	MS	*02-Nov-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*107 %*	*49.1-148*		*3110134*	MS	*02-Nov-23*	*8015B*	

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Analytical Results For:

CARMONA RESOURCES 310 W WALL ST SUITE 415 MIDLAND TX, 79701	Project: HEYDUKE 34 FED COM 3H Project Number: 2133 Project Manager: ASHTON THIELKE Fax To:	Reported: 06-Nov-23 16:35

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3110214 - 1:4 DI Water										
Blank (3110214-BLK1)				Prepared & Analyzed: 02-Nov-23						
Chloride	ND	16.0	mg/kg							
LCS (3110214-BS1)				Prepared & Analyzed: 02-Nov-23						
Chloride	416	16.0	mg/kg	400		104	80-120			
LCS Dup (3110214-BSD1)				Prepared & Analyzed: 02-Nov-23						
Chloride	416	16.0	mg/kg	400		104	80-120	0.00	20	

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CARDINAL Laboratories

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Analytical Results For:

CARMONA RESOURCES 310 W WALL ST SUITE 415 MIDLAND TX, 79701	Project: HEYDUKE 34 FED COM 3H Project Number: 2133 Project Manager: ASHTON THIELKE Fax To:	Reported: 06-Nov-23 16:35

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3110104 - Volatiles										
Blank (3110104-BLK1)				Prepared & Analyzed: 01-Nov-23						
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	*0.0568*		mg/kg	*0.0500*		*114*	*71.5-134*			
LCS (3110104-BS1)				Prepared & Analyzed: 01-Nov-23						
Benzene	1.86	0.050	mg/kg	2.00		92.9	82.8-130			
Toluene	1.97	0.050	mg/kg	2.00		98.6	86-128			
Ethylbenzene	1.99	0.050	mg/kg	2.00		99.6	85.9-128			
m,p-Xylene	4.02	0.100	mg/kg	4.00		101	89-129			
o-Xylene	1.99	0.050	mg/kg	2.00		99.6	86.1-125			
Total Xylenes	6.02	0.150	mg/kg	6.00		100	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	*0.0537*		mg/kg	*0.0500*		*107*	*71.5-134*			
LCS Dup (3110104-BSD1)				Prepared & Analyzed: 01-Nov-23						
Benzene	1.80	0.050	mg/kg	2.00		90.1	82.8-130	3.04	15.8	
Toluene	1.94	0.050	mg/kg	2.00		96.8	86-128	1.81	15.9	
Ethylbenzene	1.95	0.050	mg/kg	2.00		97.7	85.9-128	1.94	16	
m,p-Xylene	3.95	0.100	mg/kg	4.00		98.8	89-129	1.77	16.2	
o-Xylene	1.94	0.050	mg/kg	2.00		97.0	86.1-125	2.70	16.7	
Total Xylenes	5.89	0.150	mg/kg	6.00		98.2	88.2-128	2.07	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	*0.0542*		mg/kg	*0.0500*		*108*	*71.5-134*			

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

CARMONA RESOURCES 310 W WALL ST SUITE 415 MIDLAND TX, 79701	Project: HEYDUKE 34 FED COM 3H Project Number: 2133 Project Manager: ASHTON THIELKE Fax To:	Reported: 06-Nov-23 16:35

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3110134 - General Prep - Organics										
Blank (3110134-BLK1)				Prepared & Analyzed: 01-Nov-23						
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	*48.6*		mg/kg	*50.0*		*97.2*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*55.2*		mg/kg	*50.0*		*110*	*49.1-148*			
LCS (3110134-BS1)				Prepared & Analyzed: 01-Nov-23						
GRO C6-C10	169	10.0	mg/kg	200		84.4	66.4-123			
DRO >C10-C28	180	10.0	mg/kg	200		90.0	66.5-118			
Total TPH C6-C28	349	10.0	mg/kg	400		87.2	77.6-123			
Surrogate: 1-Chlorooctane	*47.7*		mg/kg	*50.0*		*95.3*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*52.1*		mg/kg	*50.0*		*104*	*49.1-148*			
LCS Dup (3110134-BSD1)				Prepared & Analyzed: 01-Nov-23						
GRO C6-C10	167	10.0	mg/kg	200		83.3	66.4-123	1.25	17.7	
DRO >C10-C28	177	10.0	mg/kg	200		88.5	66.5-118	1.63	21	
Total TPH C6-C28	344	10.0	mg/kg	400		85.9	77.6-123	1.44	18.5	
Surrogate: 1-Chlorooctane	*49.5*		mg/kg	*50.0*		*99.0*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*53.7*		mg/kg	*50.0*		*107*	*49.1-148*			

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Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

Chain of Custody

Work Order No: H235994

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:	432-813-6823	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:	Heyduke 34 Fed Com 3H	Turn Around	Pres. Code
Project Number:	2133	☐ Routine ☑ Rush	
Project Location	Eddy County, New Mexico	Due Date: 24hr.	
Sampler's Name:	AT		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	Yes (No)
Received Intact:	(Yes) No	Thermometer ID:	140
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	—
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	6.7
Total Containers:		Corrected Temperature:	—

Sample Identification	Date	Time	Soil	Water	Grab/ Comp	# of Cont	BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 4500
CS-7 (2.25')	11/1/2023	1500	X		C	1	X	X	X
SW-9 (2.0')	11/1/2023	1502	X		C	1	X	X	X
SW-13 (1.5')	11/1/2023	1504	X		C	1	X	X	X

ANALYSIS REQUEST

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 Comments

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
	11-1-23 1635		

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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 301756

QUESTIONS

Operator: CIMAREX ENERGY CO. OF COLORADO 6001 Deauville Blvd, Ste 300N Midland, TX 79706	OGRID: 162683
	Action Number: 301756
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2318426095**
Incident Name	**NAPP2318426095 HAYDUKE 34 FEDERAL COM 3H @ 0**
Incident Type	**Oil Release**
Incident Status	**Remediation Closure Report Received**
Incident Facility	**[fAPP2202542060] HAYDUKE 34 FED COM 3H**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	Hayduke 34 Federal Com 3H
Date Release Discovered	07/02/2023
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	Cause: Equipment Failure | Production Tank | Crude Oil | Released: 40 BBL | Recovered: 40 BBL | Lost: 0 BBL.
Produced Water Released (bbls) Details	*Not answered.*
Is the concentration of chloride in the produced water >10,000 mg/l	*Not answered.*
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	The Lease Operator arrived on location and found oil spilling out of an oil tank. The 3 phase separator water dump was found stuck in the closed position. This resulted in all fluids being sent to an isolated oil tank. Once the tank filled, the high level kill switch failed to shut-in, allowing fluid to run out of the thief hatch and into the lined containment. An estimated 40 barrels oil was released, all fluids remained inside the containment. A vac truck was able to recover all fluids. The containment will be washed and a liner inspection will be scheduled in the coming weeks. Spilled: 40 barrels oil Recovered: 40 barrels oil

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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. OF COLORADO 6001 Deauville Blvd, Ste 300N Midland, TX 79706	OGRID: 162683
	Action Number: 301756
	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: Laci Luig Title: ES&H Specialist Email: DL_PermianEnvironmental@coterra.com Date: 01/09/2024

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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
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Santa Fe, NM 87505

QUESTIONS (continued)

Operator: CIMAREX ENERGY CO. OF COLORADO 6001 Deauville Blvd, Ste 300N Midland, TX 79706	OGRID: 162683
	Action Number: 301756
	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)	Less than or equal 25 (ft.)
What method was used to determine the depth to ground water	U.S. Geological Survey
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	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (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	Zero feet, overlying, or within area
Categorize the risk of this well / site being in a karst geology	High
A 100-year floodplain	Between ½ and 1 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
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)	512
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	12793
GRO+DRO (EPA SW-846 Method 8015M)	12070
BTEX (EPA SW-846 Method 8021B or 8260B)	98.9
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	10/23/2023
On what date will (or did) the final sampling or liner inspection occur	10/27/2023
On what date will (or was) the remediation complete(d)	10/27/2023
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	1920
What is the estimated volume (in cubic yards) that will be remediated	290
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: CIMAREX ENERGY CO. OF COLORADO 6001 Deauville Blvd, Ste 300N Midland, TX 79706	OGRID: 162683
	Action Number: 301756
	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: Laci Luig Title: ES&H Specialist Email: DL_PermianEnvironmental@coterra.com Date: 01/09/2024
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: CIMAREX ENERGY CO. OF COLORADO 6001 Deauville Blvd, Ste 300N Midland, TX 79706	OGRID: 162683
	Action Number: 301756
	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: CIMAREX ENERGY CO. OF COLORADO 6001 Deauville Blvd, Ste 300N Midland, TX 79706	OGRID: 162683
	Action Number: 301756
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**301736**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**11/02/2023**
What was the (estimated) number of samples that were to be gathered	**23**
What was the sampling surface area in square feet	**1920**

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	1920
What was the total volume (cubic yards) remediated	290
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)	Dig and Haul remediation, see closure report

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: Laci Luig Title: ES&H Specialist Email: DL_PermianEnvironmental@coterra.com Date: 01/09/2024

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QUESTIONS (continued)

Operator: CIMAREX ENERGY CO. OF COLORADO 6001 Deauville Blvd, Ste 300N Midland, TX 79706	OGRID: 162683
	Action Number: 301756
	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 301756

CONDITIONS

Operator:	OGRID:
CIMAREX ENERGY CO. OF COLORADO 6001 Deauville Blvd, Ste 300N Midland, TX 79706	162683
	Action Number: 301756
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
bhall	Remediation Closure approved. All areas not reasonably needed for production or subsequent drilling operations will need to be reclaimed and revegetated as soon as practical. Areas reasonably needed for production or subsequent drilling operations will need to be reclaimed and revegetated as soon as they are no longer reasonably needed.	2/16/2024
bhall	The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	2/16/2024
bhall	A revegetation report will not be accepted until the release area, including areas reasonably needed for production or drilling activities, are complete. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable. All revegetation activities will need to be documented and included in the revegetation report.	2/16/2024
bhall	The revegetation report will need to include: • Executive Summary of the revegetation activities including: Seed mix; Method of seeding; Dates of when the release area was reseeded; Information pertinent to inspections; Information about any amendments added to the soil; Information on how the vegetative cover established meets the life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds per 19.15.29.13 D.(3) NMAC; and any additional information. • Scaled Site Map including area that was revegetated in square feet; • Pictures of the revegetated areas during reseeding activities, inspections, and final pictures when revegetation is achieved.	2/16/2024
bhall	Per 19.15.29.13 E. NMAC, if a reclamation and revegetation report has been submitted to the surface owner, it may be used if the requirements of the surface owner provide equal or better protection of freshwater, human health, and the environment. A copy of the approval of the reclamation and revegetation report from the surface owner and a copy of the approved reclamation and revegetation report will need to be submitted to the OCD via the Permitting website.	2/16/2024
bhall	Please be advised that none of the closure samples were collected on the date that was given in the sampling notification. Per 19.15.29.12D. (1)(a) NMAC the responsible party must verbally notify the appropriate division district office two business days prior to conducting final sampling. This two day notification gives the OCD the chance to witness the sampling but a variance to this rule can be approved if the variance is requested prior to performing the sampling. Future sampling events will need to occur on the date of given in the notification or a variance will need to be requested prior to sampling.	2/16/2024