CARMONA RESOURCES

SITE INFORMATION

Closure Report
Cottonmouth 23 Federal Com 002H (10.26.22)
Incident #NAPP2231926701
Eddy County, New Mexico
Unit A Sec 22 T26S R28E
32.0344°, -104.0675°

Crude Oil Release
Point of Release: Equipment malufunction
Release Date: 10.26.22
Volume Released: 3 Barrels of Crude Oil
Volume Recovered: 0 barrels of Crude Oil

CARMONA RESOURCES

Prepared for:
Concho Operating, LLC
15 West London Road
Loving, New Mexico 88256

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

TABLE OF CONTENTS

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

CARMONA RESOURCES

January 16, 2023

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

Re: Closure Report
Cottonmouth 23 Federal Com 002H (10.26.22)
Concho Operating, LLC
Site Location: Unit A, S22, T26S, R28E
(Lat 32.0344º, Long -104.0675º)
Eddy County, New Mexico

Mr. Bratcher:

On behalf of Concho Operating, LLC (COG), Carmona Resources, LLC has prepared this letter to document site assessment activities for the Cottonmouth 23 Federal Com 002H. The site is located at 32.0344, -104.0675 within Unit A, S22, T26S, R28E, and is in Eddy County, New Mexico (Figures 1 and 2).

1.0 Site information and Background

Based on the initial C-141 obtained from the New Mexico Oil Conservation Division (NMOCD), the release was discovered on October 26, 2022, caused by a high-level kill switch that failed to function, resulting in a flare fire. It released approximately three (3) barrels of crude oil, and zero (0) barrels of crude oil were recovered. The impacted area occurred on the pad, shown in Figure 3. The initial C-141 form is attached in Appendix C.

2.0 Site Characterization and Groundwater

The site is located within a high karst area. Based on a review of the New Mexico Office of State Engineers and USGS databases, one known water source is within a 0.50-mile radius of the location. The nearest identified well is approximately 0.42 miles Southwest of the site in S22, T26S, R28E and was drilled in 1998. The well has a reported depth to groundwater of 22.35' 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, thefollowing 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

On November 10, 2022, Carmona Resources, LLC performed site assessment activities to evaluate soil impacts stemming from the release. To assess the vertical and horizontal extent, two (2) sample points (S-1 and S-2) and three (3) horizontal samples (H-1 through H-3) were advanced to depths ranging from the surface to 2.5’ bgs inside the release area. See Figure 3 for the sample locations. For chemical analysis, the soil samples were collected and placed directly into laboratory-provided sample containers, stored on ice, and transported

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

CARMONA RESOURCES

under the proper chain-of-custody protocol to Eurofins Laboratories in Midland, Texas. The samples were analyzed for total petroleum hydrocarbons (TPH) by EPA method 8015, modified benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B, and chloride by EPA method 300.0. The laboratory reports, including analytical methods, results, and chain-of-custody documents, are attached in Appendix E.

See Table 1 for the analytical results.

5.0 Remediation Activities

Carmona Resources personnel were 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 December 12, 2022, per Subsection D of 19.15.29.12 NMAC. See Appendix C. The area of S-1 was excavated to a depth of 0.5' below the surface, and the area of S-2 was excavated to a depth of 2' below the surface to remove all the impacted soils. A total of six (6) floor confirmation samples were collected (CS-1 through CS-6), and six (6) sidewall samples (SW-1 through SW-6) were collected every 200 square feet to ensure the proper removal of the contaminated soils. All collected samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix E. The excavation depths and confirmation sample locations are shown in Figure 4.

The area of CS-6 was above the regulatory criteria for the site chloride values at 640 mg/kg. It was excavated an additional 0.5' and recollected. All final confirmation samples were below the regulatory requirements for TPH, BTEX, and chloride. Refer to Table 2.

Once the remediation activities were completed, the excavated areas were backfilled with clean material to surface grade. Approximately 73 cubic yards of material were excavated and transported offsite for proper disposal.

6.0 Conclusions

Based on the assessment results and the analytical data, no further actions are required at the site. The final C-141 is attached, and COG formally requests closure of the spill. If you have any questions regarding this report or need additional information, please get in touch with us at 432-813-1992.

Sincerely,
Carmona Resources, LLC

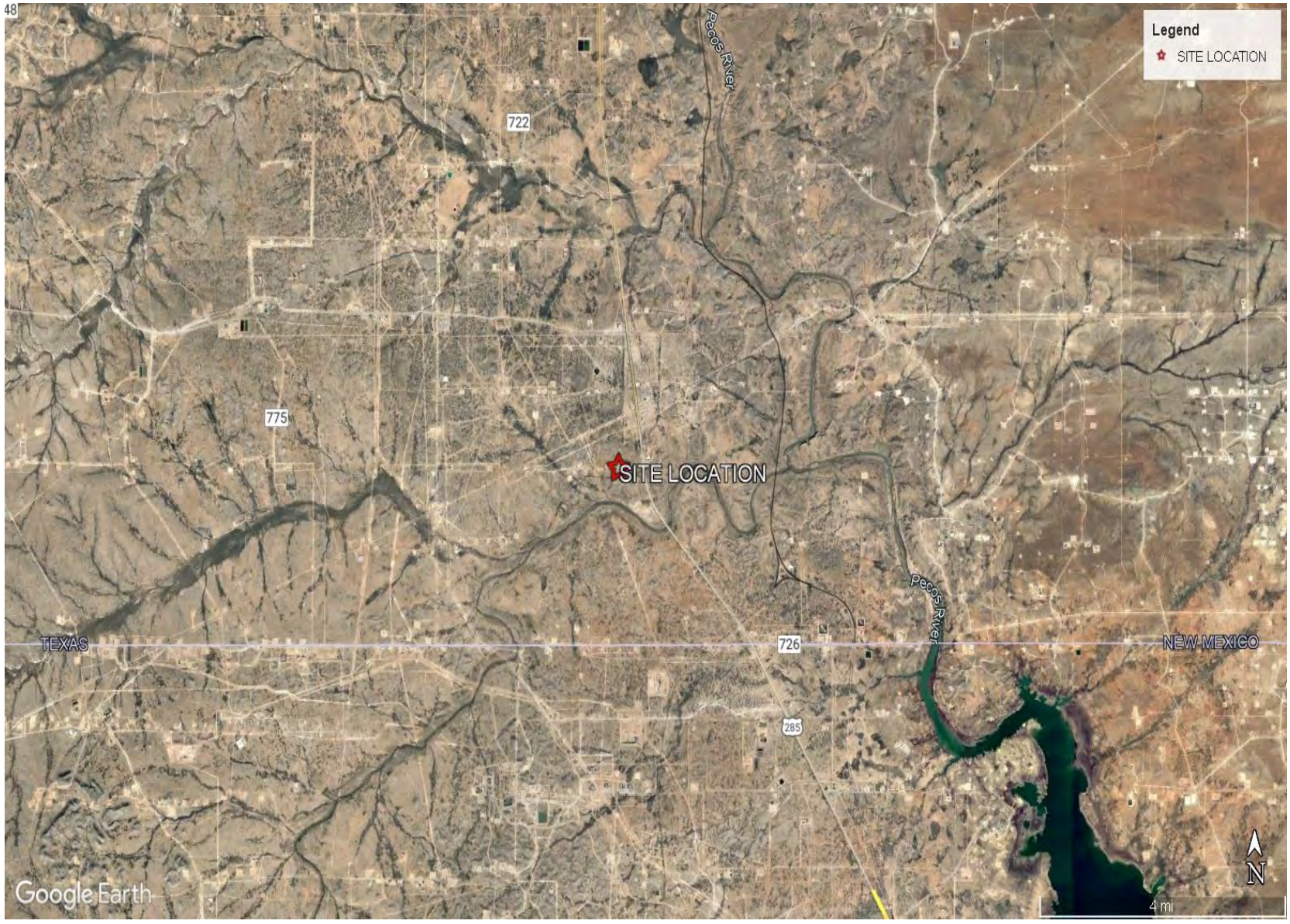
Mike Carmona
Environmental Manager

Conner Moehring
Sr. Project Manager

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

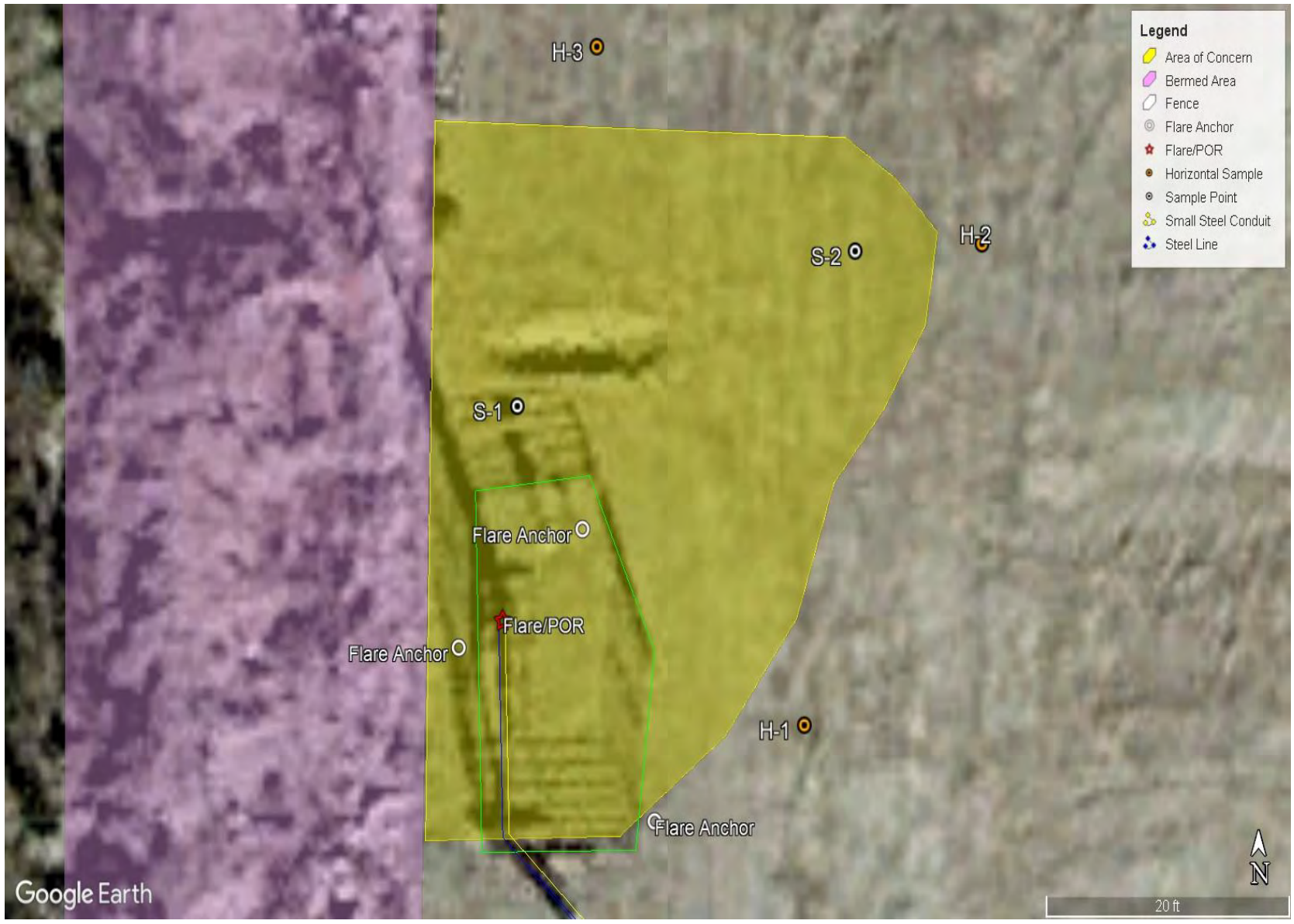
FIGURES

CARMONA RESOURCES

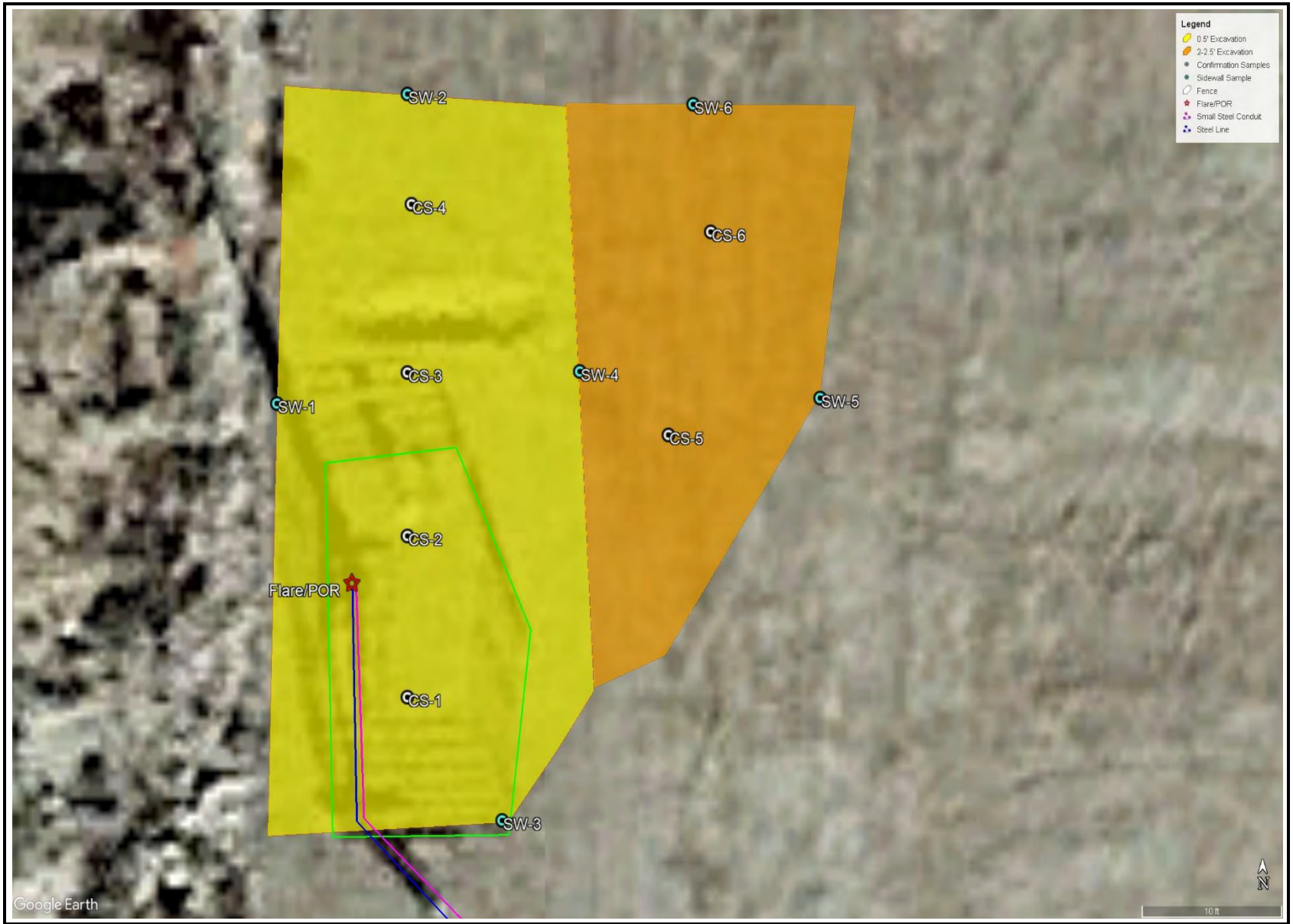


OVERVIEW MAP COG OPERATING, LLC COTTONMOUTH 23 FEDERAL COM 002H (10.26.22) EDDY COUNTY, NEW MEXICO 32.0344, -104.0675	CARMONA RESOURCES	FIGURE 1

TOPOGRAPHIC MAP COG OPERATING, LLC COTTONMOUTH 23 FEDERAL COM 002H (10.26.22) EDDY COUNTY, NEW MEXICO 32.0344, -104.0675	CARMONA RESOURCES	FIGURE 2



SAMPLE LOCATION MAP COG OPERATING, LLC COTTONMOUTH 23 FEDERAL COM 002H (10.26.22) EDDY COUNTY, NEW MEXICO 32.0344, -104.0675	CARMONA RESOURCES	FIGURE 3



EXCAVATION DEPTH MAP COG OPERATING, LLC COTTONMOUTH 23 FEDERAL COM 002H (10.26.22) EDDY COUNTY, NEW MEXICO 32.0344, -104.0675	CARMONA RESOURCES	FIGURE 4

APPENDIX A

CARMONA RESOURCES

Table 1
COG
Cottonmouth 23 Federal Com 2H (10.26.22)
Eddy County, New Mexico

Sample ID	Date	Depth (in)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	Total						
S-1	11/10/2022	0-3	**<49.9**	**150**	**409**	**559**	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	**1,750**
	"	6	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	39.9
	"	12	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	21.2
	"	18	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	19.4
	"	24	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	21.2
	"	30	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	12.0
S-2	11/10/2022	0-3	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	26.7
	"	6	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**647**
	"	12	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**1,460**
	"	18	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	**1,520**
H-1	11/10/2022	0-6	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	155
H-2	11/10/2022	0-6	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	215
H-3	11/10/2022	0-6	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	279
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
In - inches
(S) - Sample Point
(H) - Horizontal Sample
Removed

Table 2
COG
Cottonmouth 23 Federal Com 2H (10.26.22)
Eddy County, New Mexico

Sample ID	Date	Depth (ft)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	Total						
CS-1	12/14/2022	0.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
CS-2	12/14/2022	0.5	<10.0	33.3	10.1	43.4	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
CS-3	12/14/2022	0.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
CS-4	12/14/2022	0.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	320
CS-5	12/14/2022	2.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	272
CS-6	12/14/2022	2.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	640
	12/19/2022	2.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
SW-1	12/14/2022	0.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
SW-2	12/14/2022	0.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
SW-3	12/14/2022	0.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
SW-4	12/14/2022	1.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	448
SW-5	12/14/2022	2.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	368
SW-6	12/14/2022	2.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	240
Regulatory Criteria [A]						100 mg/kg	10 mg/kg	-	-	-	50 mg/kg	600 mg/kg

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

APPENDIX B

CARMONA RESOURCES

PHOTOGRAPHIC LOG

Concho Operating, LLC

Photograph No. 1

Facility: Cottonmouth 23 Federal Com 002H (10.26.22)

County: Eddy County, New Mexico

Description:
View North, area of CS-1 and CS-4 through CS-6.

Photograph No. 2

Facility: Cottonmouth 23 Federal Com 002H (10.26.22)

County: Eddy County, New Mexico

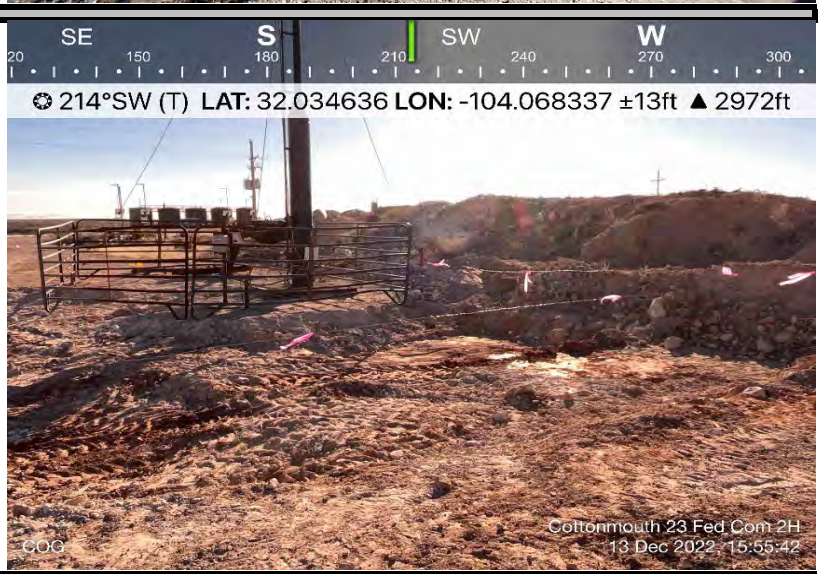
Description:
View North, area of CS-4 through CS-6.

Photograph No. 3

Facility: Cottonmouth 23 Federal Com 002H (10.26.22)

County: Eddy County, New Mexico

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



PHOTOGRAPHIC LOG

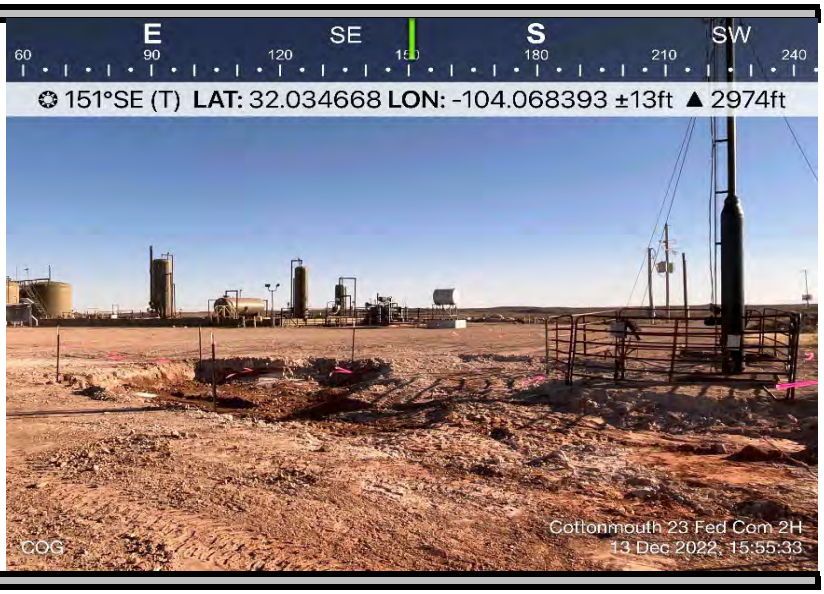
Concho Operating, LLC

Photograph No. 4

Facility: Cottonmouth 23 Federal Com 002H (10.26.22)

County: Eddy County, New Mexico

Description:
View Southeast, area of CS-1 through CS-6.



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	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # *(assigned by OCD)*
Contact mailing address	

Location of Release Source

Latitude _____ Longitude _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# *(if applicable)*

Unit Letter	Section	Township	Range	County

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)	Volume Recovered (bbls)
☐ 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		

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

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: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

L48 Spill Volume Estimate Form

Facility Name & Number:	Cottonmouth
Asset Area:	DBW
Release Discovery Date & Time:	10.26.22
Release Type:	Oil
Provide any known details about the event:	

Spill Calculation - Subsurface Spill - Rectangle

Was the release on pad or off-pad?	See reference table below
Has it rained at least a half inch in the last 24 hours?	See reference table below

Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Depth (in.)	Soil Spilled-Fluid Saturation	Estimated volume of each area (bbl.)	Total Estimated Volume of Spill (bbl.)	Percentage of Oil if Spilled Fluid is a Mixture	Total Estimated Volume of Spilled Oil (bbl.)	Total Estimated Volume of Spilled Liquid other than Oil (bbl.)
Rectangle A	13.0	40.0	1.50	10.50%	11.570	1.215			
Rectangle B	36.0	27.0	1.20	10.50%	17.302	1.817			
Rectangle C					0.000	0.000			
Rectangle D					0.000	0.000			
Rectangle E					0.000	0.000			
Rectangle F					0.000	0.000			
Rectangle G					0.000	0.000			
Rectangle H					0.000	0.000			
Rectangle I					0.000	0.000			
Rectangle J					0.000	0.000			
					Total Volume Release:	3.032			

State of New Mexico
Oil Conservation Division

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: Jacqui Harris Date: _____

email: _____ Telephone: _____

OCD Only

Received by: Jocelyn Harimon Date: 01/17/2023

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☐ Description of remediation activities

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

Printed Name: _____ Title: _____

Signature: Jacqui Harris Date: _____

email: _____ Telephone: _____

OCD Only

Received by: Jocelyn Harimon Date: 01/17/2023

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

Closure Approved by: Jennifer Nobui Date: _____

Printed Name: _____ Title: _____

From: Mike Carmona
Sent: Monday, December 12, 2022 1:39 PM
To: NMOCD Spill Notifications (OCD.Enviro@emnrd.nm.gov)
Cc: Conner Moehring; Harris, Jacqui
Subject: COG - Cottonmouth 23 Fed Com 2H (10.26.22) Sampling Notification - Incident No. NAPP2231926701

Good Afternoon,

On behalf of COG, Carmona Resources will collect confirmation samples for the remediation at the below-referenced site on 12/14/22 at around 1:00 p.m. Mountain Time. Please let me know if you have any questions.

COG - Cottonmouth 23 Fed Com 2H
Incident No. NAPP2231926701
Sec 22 T26S R28E Unit A
32.034614, -104.068287
Eddy County, New Mexico

Mike J. Carmona
310 West Wall Street, Suite 415
Midland TX, 79701
M: 432-813-1992
Mcarmona@carmonaresources.com

CARMONA RESOURCES

APPENDIX D

CARMONA RESOURCES

Nearest Water Well

COG Operating

175' - Drilled 2017

120' - Drilled 1960

Cottonmouth 23 Fed Com 2H

120' - Drilled 1961

22.35' - Drilled 1998

145' - Drilled 2017

Legend

- 0.42 Miles
- 0.50 Mile Radius
- 0.62 Miles
- 0.62 Miles
- 0.93 Miles
- 0.98 Miles
- Cottonmouth 23 Fed Com 2H
- NMSEO Water Well
- USGS Water Well

Google Earth

3000 ft

N

High Karst

COG Operating

Legend

- Cottonmouth 23 Fed Com 2H
- High
- Medium

Cottonmouth 23 Fed Com 2H

Google Earth

N

1 mi

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 04022 POD1	CUB	ED	4	4	2	15	26S	28E	588082	3545647	1001	220	175	45
C 02160 S6	CUB	ED	3	3	1	14	26S	28E	588232	3545635*	1016	300	120	180
C 02160 S7	CUB	ED	3	3	1	22	26S	28E	586638	3543998*	1487	300	120	180
C 02481	CUB	ED		1	1	14	26S	28E	588326	3546138*	1527	200		
C 04022 POD2	CUB	ED	2	2	2	27	26S	28E	588106	3543082	1575	250	145	105
C 02160 S5	CUB	ED	1	1	1	14	26S	28E	588225	3546237*	1604	300	120	180
C 02160 S3	CUB	ED	2	2	1	14	26S	28E	588834	3546241*	1806	300	120	180
C 02160 S4	CUB	ED	2	2	1	14	26S	28E	588834	3546241*	1806	300	120	180
C 02479	CUB	ED		4	4	10	26S	28E	587909	3546534*	1883	200		
C 02480	CUB	ED		4	4	10	26S	28E	587909	3546534*	1883	150		
C 02160	CUB	ED	4	1	2	14	26S	28E	589243	3546044*	1883	300	120	180
C 02160 S	CUB	ED	1	1	2	14	26S	28E	589043	3546244*	1917	300	120	180
C 02160 S2	CUB	ED	1	1	2	14	26S	28E	589043	3546244*	1917	300	120	180
C 01668	CUB	ED		3	3	12	26S	28E	589957	3546554*	2747	250	100	150
C 02160 S8	CUB	ED	2	3	3	12	26S	28E	590056	3546653*	2887	200	120	80
C 02924	C	ED	1	3	2	11	26S	28E	589032	3547451*	2992			
C 02894	C	ED	2	2	3	12	26S	28E	590458	3547061*	3460	240		

Average Depth to Water: **125 feet**

Minimum Depth: **100 feet**

Maximum Depth: **175 feet**

Record Count: 17

UTMNAD83 Radius Search (in meters):

Easting (X): 587973.94 **Northing (Y):** 3544651.84 **Radius:** 4000

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

New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 02160 S6	3	3	1	14	26S	28E	588232	3545635*

Driller License: **Driller Company:**

Driller Name: HEMLER

Drill Start Date:		**Drill Finish Date:**	11/01/1960	**Plug Date:**	
Log File Date:		**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:		**Depth Well:**	300 feet	**Depth Water:**	120 feet

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

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	Twn	Rng	X	Y
	C 04022 POD1	4	4	2	15	26S	28E	588082	3545647

Driller License:	1184	**Driller Company:**	WEST TEXAS WATER WELL SERVICE		
Driller Name:	KEITH, RONNY				
Drill Start Date:	05/01/2017	**Drill Finish Date:**	05/05/2017	**Plug Date:**	
Log File Date:	06/05/2017	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	1 GPM
Casing Size:	12.25	**Depth Well:**	220 feet	**Depth Water:**	175 feet

Water Bearing Stratifications:	Top	Bottom	Description
	175	180	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	160	220

New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 02160 S7	3	3	1	22	26S	28E	586638	3543998*

Driller License: **Driller Company:**

Driller Name: HEMLER

Drill Start Date:		**Drill Finish Date:**	01/01/1961	**Plug Date:**	
Log File Date:		**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:		**Depth Well:**	300 feet	**Depth Water:**	120 feet

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

New Mexico Office of the State Engineer
Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 04022 POD2	2	2	2	27	26S	28E	588106	3543082

Driller License:	1184	**Driller Company:**	WEST TEXAS WATER WELL SERVICE		
Driller Name:	KEITH, RONNY				
Drill Start Date:	05/08/2017	**Drill Finish Date:**	05/12/2017	**Plug Date:**	
Log File Date:	06/05/2017	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	60 GPM
Casing Size:	12.25	**Depth Well:**	250 feet	**Depth Water:**	145 feet

Water Bearing Stratifications:	Top	Bottom	Description
	150	160	Sandstone/Gravel/Conglomerate
	160	180	Sandstone/Gravel/Conglomerate
	180	190	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	130	250

Click to hideNews Bulletins

- Effective October 24, 2022 hyperlinks to legacy Current Condition pages will automatically redirect users to the corresponding Monitoring Location page. Please see the Water Data For The Nation Blog for full details, including how to navigate back to the legacy Current Condition page, if desired.
- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for New Mexico

Click to hide state-specific text

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320145104041701

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

USGS 320145104041701 26S.28E.22.234431

Eddy County, New Mexico
Latitude 32°01'45", Longitude 104°04'17" NAD27
Land-surface elevation 2,980 feet above NGVD29
The depth of the well is 23.00 feet below land surface.
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 measu
1987-12-12		D	62610		2958.98	NGVD29	1	S		
1987-12-12		D	62611		2960.55	NAVD88	1	S		
1987-12-12		D	72019	21.02			1	S		
1998-01-22		D	62610		2957.65	NGVD29	1	S		
1998-01-22		D	62611		2959.22	NAVD88	1	S		
1998-01-22		D	72019	22.35			1	S		

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

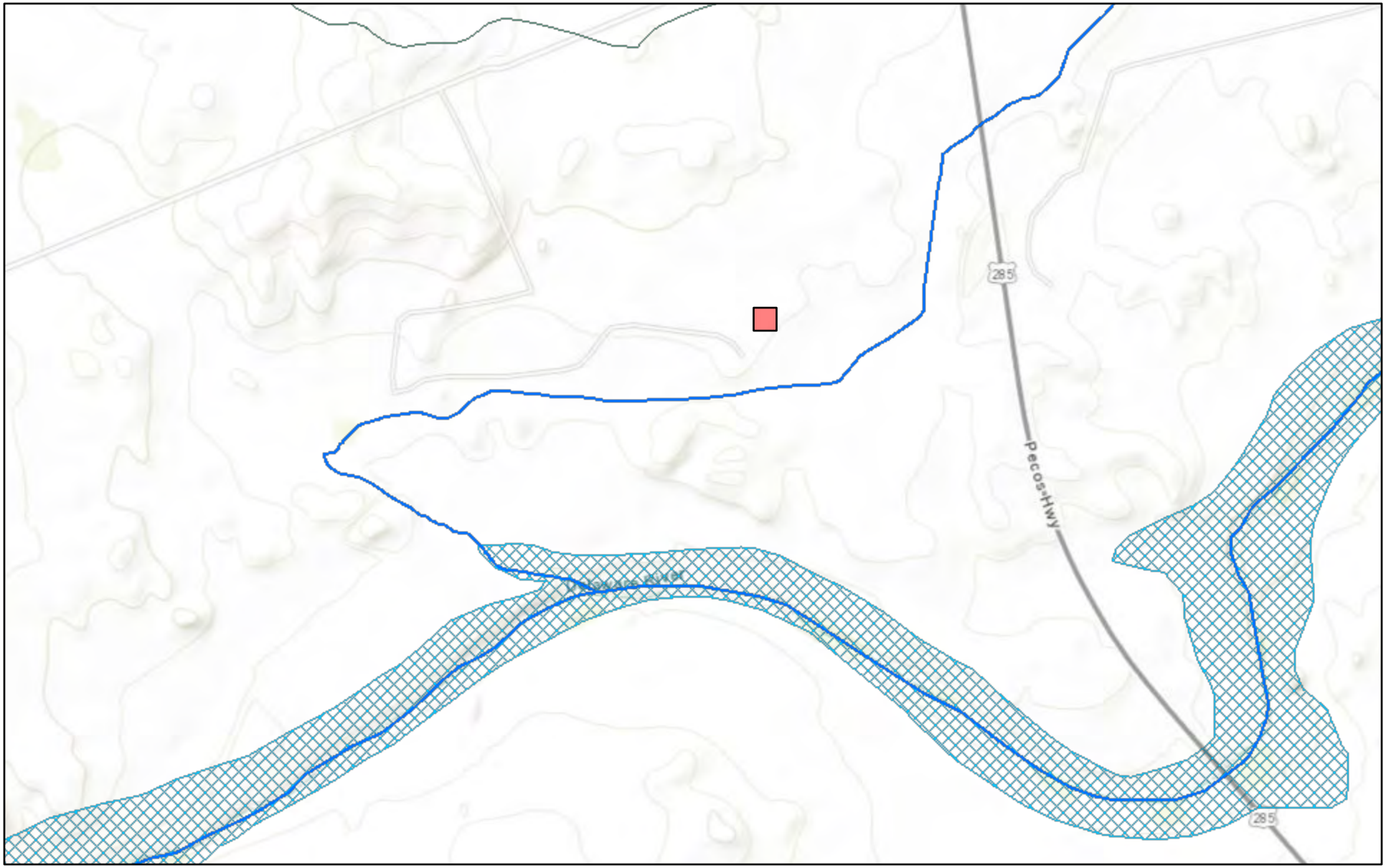
Section	Code	Description
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status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

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Accessibility FOIA Privacy Policies and Notices
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: 2022-11-15 09:31:58 EST
0.28 0.25 nadww02

New Mexico NFHL Data



November 15, 2022

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,

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APPENDIX E

CARMONA RESOURCES

eurofins | Environment Testing

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-21456-1
Laboratory Sample Delivery Group: Eddy County, New Mexico
Client Project/Site: Cottonmouth 23 Fed Com 2H

For:
Carmona Resources
310 W Wall St
Ste 415
Midland, Texas 79701

Attn: Conner Moehring

JKramer

Authorized for release by:
11/14/2022 2:13:41 PM

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

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Laboratory Job ID: 880-21456-1
SDG: Eddy County, New Mexico

Table of Contents

Definitions/Glossary

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

Job ID: 880-21456-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-21456-1

Receipt
The samples were received on 11/11/2022 8:41 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.5°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: S-1 (0-3") (880-21456-1), S-1 (6") (880-21456-2), S-1 (12") (880-21456-3), S-1 (18") (880-21456-4), S-1 (2') (880-21456-5), S-1 (2.5') (880-21456-6), S-2 (0-3") (880-21456-7), S-2 (6") (880-21456-8), S-2 (12') (880-21456-9), S-2 (18") (880-21456-10), H-1 (0-6") (880-21456-11), H-2 (0-6") (880-21456-12) and H-3 (0-6") (880-21456-13).

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-21449-A-3-B MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-39319 and analytical batch 880-39341 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-39126 and analytical batch 880-39335 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-21456-1
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/11/22 10:54	11/11/22 21:18	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/11/22 10:54	11/11/22 21:18	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/11/22 10:54	11/11/22 21:18	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		11/11/22 10:54	11/11/22 21:18	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/11/22 10:54	11/11/22 21:18	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		11/11/22 10:54	11/11/22 21:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*11/11/22 10:54*	*11/11/22 21:18*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*11/11/22 10:54*	*11/11/22 21:18*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			11/14/22 11:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**559**		49.9		mg/Kg			11/14/22 13:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/11/22 09:33	11/13/22 15:03	1
Diesel Range Organics (Over C10-C28)	**150**		49.9		mg/Kg		11/11/22 09:33	11/13/22 15:03	1
Oil Range Organics (Over C28-C36)	**409**		49.9		mg/Kg		11/11/22 09:33	11/13/22 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*11/11/22 09:33*	*11/13/22 15:03*	*1*
o-Terphenyl	*98*		*70 - 130*	*11/11/22 09:33*	*11/13/22 15:03*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1750**		49.8		mg/Kg			11/14/22 12:18	10

Client Sample ID: S-1 (6")

Lab Sample ID: 880-21456-2
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/11/22 10:54	11/11/22 21:38	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/11/22 10:54	11/11/22 21:38	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/11/22 10:54	11/11/22 21:38	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/11/22 10:54	11/11/22 21:38	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/11/22 10:54	11/11/22 21:38	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/11/22 10:54	11/11/22 21:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*11/11/22 10:54*	*11/11/22 21:38*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*11/11/22 10:54*	*11/11/22 21:38*	*1*

Client Sample Results

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

Client Sample ID: S-1 (6")

Lab Sample ID: 880-21456-2
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/14/22 11:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/14/22 13:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/11/22 09:33	11/13/22 15:24	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/11/22 09:33	11/13/22 15:24	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/11/22 09:33	11/13/22 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*11/11/22 09:33*	*11/13/22 15:24*	*1*
o-Terphenyl	*99*		*70 - 130*	*11/11/22 09:33*	*11/13/22 15:24*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**39.9**		5.00		mg/Kg			11/14/22 12:33	1

Client Sample ID: S-1 (12")

Lab Sample ID: 880-21456-3
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/11/22 10:54	11/11/22 21:58	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/11/22 10:54	11/11/22 21:58	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/11/22 10:54	11/11/22 21:58	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		11/11/22 10:54	11/11/22 21:58	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/11/22 10:54	11/11/22 21:58	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		11/11/22 10:54	11/11/22 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*11/11/22 10:54*	*11/11/22 21:58*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*11/11/22 10:54*	*11/11/22 21:58*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			11/14/22 11:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/14/22 13:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/11/22 09:33	11/13/22 15:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/11/22 09:33	11/13/22 15:45	1

Client Sample Results

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

Client Sample ID: S-1 (12")

Lab Sample ID: 880-21456-3
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/11/22 09:33	11/13/22 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*11/11/22 09:33*	*11/13/22 15:45*	*1*
o-Terphenyl	*95*		*70 - 130*	*11/11/22 09:33*	*11/13/22 15:45*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**21.2**		4.97		mg/Kg			11/14/22 12:38	1

Client Sample ID: S-1 (18")

Lab Sample ID: 880-21456-4
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/11/22 10:54	11/11/22 22:19	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/11/22 10:54	11/11/22 22:19	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/11/22 10:54	11/11/22 22:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/11/22 10:54	11/11/22 22:19	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/11/22 10:54	11/11/22 22:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/11/22 10:54	11/11/22 22:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*11/11/22 10:54*	*11/11/22 22:19*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*11/11/22 10:54*	*11/11/22 22:19*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/14/22 11:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/14/22 13:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/11/22 09:33	11/13/22 16:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/11/22 09:33	11/13/22 16:27	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/11/22 09:33	11/13/22 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*11/11/22 09:33*	*11/13/22 16:27*	*1*
o-Terphenyl	*103*		*70 - 130*	*11/11/22 09:33*	*11/13/22 16:27*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19.4**		4.95		mg/Kg			11/14/22 12:53	1

Client Sample Results

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

Client Sample ID: S-1 (2')

Lab Sample ID: 880-21456-5
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/11/22 10:54	11/11/22 22:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/11/22 10:54	11/11/22 22:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/11/22 10:54	11/11/22 22:39	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/11/22 10:54	11/11/22 22:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/11/22 10:54	11/11/22 22:39	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/11/22 10:54	11/11/22 22:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*11/11/22 10:54*	*11/11/22 22:39*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*11/11/22 10:54*	*11/11/22 22:39*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/14/22 11:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/14/22 13:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/11/22 09:33	11/13/22 16:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/11/22 09:33	11/13/22 16:49	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/11/22 09:33	11/13/22 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*11/11/22 09:33*	*11/13/22 16:49*	*1*
o-Terphenyl	*104*		*70 - 130*	*11/11/22 09:33*	*11/13/22 16:49*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**21.2**		5.02		mg/Kg			11/14/22 12:58	1

Client Sample ID: S-1 (2.5')

Lab Sample ID: 880-21456-6
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/11/22 10:54	11/11/22 23:00	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/11/22 10:54	11/11/22 23:00	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/11/22 10:54	11/11/22 23:00	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/11/22 10:54	11/11/22 23:00	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/11/22 10:54	11/11/22 23:00	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/11/22 10:54	11/11/22 23:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*11/11/22 10:54*	*11/11/22 23:00*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*11/11/22 10:54*	*11/11/22 23:00*	*1*

Client Sample Results

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

Client Sample ID: S-1 (2.5')

Lab Sample ID: 880-21456-6
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/14/22 11:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/14/22 13:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/11/22 09:33	11/13/22 17:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/11/22 09:33	11/13/22 17:10	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/11/22 09:33	11/13/22 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*11/11/22 09:33*	*11/13/22 17:10*	*1*
o-Terphenyl	*103*		*70 - 130*	*11/11/22 09:33*	*11/13/22 17:10*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12.0**		5.00		mg/Kg			11/14/22 13:03	1

Client Sample ID: S-2 (0-3")

Lab Sample ID: 880-21456-7
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/11/22 10:54	11/12/22 00:49	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/11/22 10:54	11/12/22 00:49	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/11/22 10:54	11/12/22 00:49	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		11/11/22 10:54	11/12/22 00:49	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/11/22 10:54	11/12/22 00:49	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		11/11/22 10:54	11/12/22 00:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*11/11/22 10:54*	*11/12/22 00:49*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*11/11/22 10:54*	*11/12/22 00:49*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			11/14/22 11:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/14/22 13:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/11/22 09:33	11/13/22 17:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/11/22 09:33	11/13/22 17:31	1

Client Sample Results

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

Client Sample ID: S-2 (0-3")

Lab Sample ID: 880-21456-7
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/11/22 09:33	11/13/22 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*11/11/22 09:33*	*11/13/22 17:31*	*1*
o-Terphenyl	*104*		*70 - 130*	*11/11/22 09:33*	*11/13/22 17:31*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**26.7**		4.98		mg/Kg			11/14/22 13:08	1

Client Sample ID: S-2 (6")

Lab Sample ID: 880-21456-8
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/11/22 10:54	11/12/22 01:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/11/22 10:54	11/12/22 01:10	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/11/22 10:54	11/12/22 01:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/11/22 10:54	11/12/22 01:10	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/11/22 10:54	11/12/22 01:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/11/22 10:54	11/12/22 01:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*11/11/22 10:54*	*11/12/22 01:10*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*11/11/22 10:54*	*11/12/22 01:10*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/14/22 11:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			11/14/22 13:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/11/22 09:33	11/13/22 17:53	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/11/22 09:33	11/13/22 17:53	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/11/22 09:33	11/13/22 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*11/11/22 09:33*	*11/13/22 17:53*	*1*
o-Terphenyl	*111*		*70 - 130*	*11/11/22 09:33*	*11/13/22 17:53*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**647**		25.3		mg/Kg			11/14/22 13:13	5

Client Sample Results

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

Client Sample ID: S-2 (12')

Lab Sample ID: 880-21456-9
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/11/22 10:54	11/12/22 01:30	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/11/22 10:54	11/12/22 01:30	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/11/22 10:54	11/12/22 01:30	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/11/22 10:54	11/12/22 01:30	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/11/22 10:54	11/12/22 01:30	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/11/22 10:54	11/12/22 01:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*11/11/22 10:54*	*11/12/22 01:30*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*11/11/22 10:54*	*11/12/22 01:30*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/14/22 11:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/14/22 13:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/11/22 09:33	11/13/22 18:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/11/22 09:33	11/13/22 18:14	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/11/22 09:33	11/13/22 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*11/11/22 09:33*	*11/13/22 18:14*	*1*
o-Terphenyl	*109*		*70 - 130*	*11/11/22 09:33*	*11/13/22 18:14*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1460**		24.8		mg/Kg			11/14/22 13:17	5

Client Sample ID: S-2 (18")

Lab Sample ID: 880-21456-10
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/11/22 10:54	11/12/22 01:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/11/22 10:54	11/12/22 01:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/11/22 10:54	11/12/22 01:51	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/11/22 10:54	11/12/22 01:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/11/22 10:54	11/12/22 01:51	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/11/22 10:54	11/12/22 01:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*11/11/22 10:54*	*11/12/22 01:51*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*11/11/22 10:54*	*11/12/22 01:51*	*1*

Client Sample Results

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

Client Sample ID: S-2 (18")

Lab Sample ID: 880-21456-10
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/14/22 11:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/14/22 13:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/11/22 09:33	11/13/22 18:35	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/11/22 09:33	11/13/22 18:35	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/11/22 09:33	11/13/22 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*11/11/22 09:33*	*11/13/22 18:35*	*1*
o-Terphenyl	*98*		*70 - 130*	*11/11/22 09:33*	*11/13/22 18:35*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1520**		24.9		mg/Kg			11/14/22 13:22	5

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

Lab Sample ID: 880-21456-11
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/11/22 10:54	11/12/22 02:11	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/11/22 10:54	11/12/22 02:11	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/11/22 10:54	11/12/22 02:11	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/11/22 10:54	11/12/22 02:11	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/11/22 10:54	11/12/22 02:11	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/11/22 10:54	11/12/22 02:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*11/11/22 10:54*	*11/12/22 02:11*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*11/11/22 10:54*	*11/12/22 02:11*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/14/22 11:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/14/22 13:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/11/22 09:33	11/13/22 18:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/11/22 09:33	11/13/22 18:56	1

Client Sample Results

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-21456-11
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/11/22 09:33	11/13/22 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*11/11/22 09:33*	*11/13/22 18:56*	*1*
o-Terphenyl	*100*		*70 - 130*	*11/11/22 09:33*	*11/13/22 18:56*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**155**		25.0		mg/Kg			11/12/22 05:14	5

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

Lab Sample ID: 880-21456-12
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/11/22 10:54	11/12/22 02:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/11/22 10:54	11/12/22 02:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/11/22 10:54	11/12/22 02:32	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/11/22 10:54	11/12/22 02:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/11/22 10:54	11/12/22 02:32	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/11/22 10:54	11/12/22 02:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*11/11/22 10:54*	*11/12/22 02:32*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*11/11/22 10:54*	*11/12/22 02:32*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/14/22 11:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/14/22 13:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/11/22 09:33	11/13/22 19:18	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/11/22 09:33	11/13/22 19:18	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/11/22 09:33	11/13/22 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*11/11/22 09:33*	*11/13/22 19:18*	*1*
o-Terphenyl	*100*		*70 - 130*	*11/11/22 09:33*	*11/13/22 19:18*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**215**		4.97		mg/Kg			11/12/22 05:19	1

Client Sample Results

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

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

Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

Lab Sample ID: 880-21456-13

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/11/22 10:54	11/12/22 02:52	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/11/22 10:54	11/12/22 02:52	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/11/22 10:54	11/12/22 02:52	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/11/22 10:54	11/12/22 02:52	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/11/22 10:54	11/12/22 02:52	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/11/22 10:54	11/12/22 02:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*11/11/22 10:54*	*11/12/22 02:52*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*11/11/22 10:54*	*11/12/22 02:52*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/14/22 11:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			11/14/22 13:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/11/22 09:33	11/13/22 19:39	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/11/22 09:33	11/13/22 19:39	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/11/22 09:33	11/13/22 19:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*11/11/22 09:33*	*11/13/22 19:39*	*1*
o-Terphenyl	*111*		*70 - 130*	*11/11/22 09:33*	*11/13/22 19:39*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**279**		4.96		mg/Kg			11/14/22 10:29	1

Surrogate Summary

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-21449-A-3-B MS	Matrix Spike	64 S1-	98
880-21449-A-3-C MSD	Matrix Spike Duplicate	97	107
880-21456-1	S-1 (0-3")	100	107
880-21456-2	S-1 (6")	92	102
880-21456-3	S-1 (12")	98	104
880-21456-4	S-1 (18")	88	110
880-21456-5	S-1 (2')	94	105
880-21456-6	S-1 (2.5')	102	109
880-21456-7	S-2 (0-3")	91	109
880-21456-8	S-2 (6")	98	113
880-21456-9	S-2 (12')	101	107
880-21456-10	S-2 (18")	105	109
880-21456-11	H-1 (0-6")	78	98
880-21456-12	H-2 (0-6")	101	108
880-21456-13	H-3 (0-6")	106	106
LCS 880-39319/1-A	Lab Control Sample	104	97
LCSD 880-39319/2-A	Lab Control Sample Dup	106	103
MB 880-39319/5-A	Method Blank	83	104

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-21456-1	S-1 (0-3")	93	98
880-21456-2	S-1 (6")	93	99
880-21456-3	S-1 (12")	89	95
880-21456-4	S-1 (18")	93	103
880-21456-5	S-1 (2')	96	104
880-21456-6	S-1 (2.5')	95	103
880-21456-7	S-2 (0-3")	97	104
880-21456-8	S-2 (6")	102	111
880-21456-9	S-2 (12')	100	109
880-21456-10	S-2 (18")	90	98
880-21456-11	H-1 (0-6")	92	100
880-21456-12	H-2 (0-6")	89	100
880-21456-13	H-3 (0-6")	97	111
890-3422-A-1-B MS	Matrix Spike	87	81
890-3422-A-1-C MSD	Matrix Spike Duplicate	78	72
LCS 880-39298/2-A	Lab Control Sample	105	113
LCSD 880-39298/3-A	Lab Control Sample Dup	92	98
MB 880-39298/1-A	Method Blank	104	122

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-39319/5-A
Matrix: Solid
Analysis Batch: 39341

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 39319

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/11/22 10:54	11/11/22 19:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/11/22 10:54	11/11/22 19:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/11/22 10:54	11/11/22 19:27	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/11/22 10:54	11/11/22 19:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/11/22 10:54	11/11/22 19:27	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/11/22 10:54	11/11/22 19:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*11/11/22 10:54*	*11/11/22 19:27*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*11/11/22 10:54*	*11/11/22 19:27*	*1*

Lab Sample ID: LCS 880-39319/1-A
Matrix: Solid
Analysis Batch: 39341

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 39319

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08765		mg/Kg		88	70 - 130		
Toluene			0.100	0.1023		mg/Kg		102	70 - 130		
Ethylbenzene			0.100	0.1090		mg/Kg		109	70 - 130		
m-Xylene & p-Xylene			0.200	0.2061		mg/Kg		103	70 - 130		
o-Xylene			0.100	0.09995		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-39319/2-A
Matrix: Solid
Analysis Batch: 39341

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 39319

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09578		mg/Kg		96	70 - 130	9	35
Toluene			0.100	0.1083		mg/Kg		108	70 - 130	6	35
Ethylbenzene			0.100	0.1164		mg/Kg		116	70 - 130	7	35
m-Xylene & p-Xylene			0.200	0.2178		mg/Kg		109	70 - 130	6	35
o-Xylene			0.100	0.1051		mg/Kg		105	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 880-21449-A-3-B MS
Matrix: Solid
Analysis Batch: 39341

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 39319

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.0998	0.08145		mg/Kg		82	70 - 130		
Toluene	<0.00200	U	0.0998	0.07884		mg/Kg		79	70 - 130		

QC Sample Results

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-21449-A-3-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 39341 — **Prep Batch: 39319**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.0998	0.08104		mg/Kg		81	70 - 130
m-Xylene & p-Xylene	<0.00401	U F1	0.200	0.1348	F1	mg/Kg		68	70 - 130
o-Xylene	<0.00200	U F1	0.0998	0.06252	F1	mg/Kg		62	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*64*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 880-21449-A-3-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 39341 — **Prep Batch: 39319**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0996	0.08277		mg/Kg		83	70 - 130	2	35
Toluene	<0.00200	U	0.0996	0.08438		mg/Kg		85	70 - 130	7	35
Ethylbenzene	<0.00200	U	0.0996	0.08531		mg/Kg		86	70 - 130	5	35
m-Xylene & p-Xylene	<0.00401	U F1	0.199	0.1538		mg/Kg		77	70 - 130	13	35
o-Xylene	<0.00200	U F1	0.0996	0.07799		mg/Kg		78	70 - 130	22	35

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

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

Lab Sample ID: MB 880-39298/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 39373 — **Prep Batch: 39298**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/11/22 09:33	11/13/22 09:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/11/22 09:33	11/13/22 09:25	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/11/22 09:33	11/13/22 09:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*11/11/22 09:33*	*11/13/22 09:25*	*1*
o-Terphenyl	*122*		*70 - 130*	*11/11/22 09:33*	*11/13/22 09:25*	*1*

Lab Sample ID: LCS 880-39298/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 39373 — **Prep Batch: 39298**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1126		mg/Kg		113	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1101		mg/Kg		110	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: LCS 880-39298/2-A
Matrix: Solid
Analysis Batch: 39373

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 39298

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: LCSD 880-39298/3-A
Matrix: Solid
Analysis Batch: 39373

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 39298

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	927.9		mg/Kg		93	70 - 130	19	20
Diesel Range Organics (Over C10-C28)			1000	959.4		mg/Kg		96	70 - 130	14	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: 890-3422-A-1-B MS
Matrix: Solid
Analysis Batch: 39373

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 39298

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	1006		mg/Kg		96	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	997	819.0		mg/Kg		81	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	87		70 - 130
o-Terphenyl	81		70 - 130

Lab Sample ID: 890-3422-A-1-C MSD
Matrix: Solid
Analysis Batch: 39373

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 39298

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	999.1		mg/Kg		95	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	776.3		mg/Kg		76	70 - 130	5	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	78		70 - 130
o-Terphenyl	72		70 - 130

QC Sample Results

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39126/1-A
Matrix: Solid
Analysis Batch: 39335

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/12/22 02:56	1

Lab Sample ID: LCS 880-39126/2-A
Matrix: Solid
Analysis Batch: 39335

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	266.1		mg/Kg		106	90 - 110

Lab Sample ID: LCSD 880-39126/3-A
Matrix: Solid
Analysis Batch: 39335

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	258.9		mg/Kg		104	90 - 110	3	20

Lab Sample ID: 890-3402-A-1-D MS
Matrix: Solid
Analysis Batch: 39335

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	195		249	466.5		mg/Kg		109	90 - 110

Lab Sample ID: 890-3402-A-1-E MSD
Matrix: Solid
Analysis Batch: 39335

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	195		249	456.2		mg/Kg		105	90 - 110	2	20

Lab Sample ID: 890-3414-A-3-B MS
Matrix: Solid
Analysis Batch: 39335

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1520	F1	1260	2880		mg/Kg		109	90 - 110

Lab Sample ID: 890-3414-A-3-C MSD
Matrix: Solid
Analysis Batch: 39335

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1520	F1	1260	3027	F1	mg/Kg		120	90 - 110	5	20

Lab Sample ID: MB 880-39286/1-A
Matrix: Solid
Analysis Batch: 39515

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/14/22 10:54	1

QC Sample Results

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 880-39286/2-A
Matrix: Solid
Analysis Batch: 39515

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	257.8		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-39286/3-A
Matrix: Solid
Analysis Batch: 39515

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	253.4		mg/Kg		101	90 - 110	2	20

Lab Sample ID: 880-21456-1 MS
Matrix: Solid
Analysis Batch: 39515

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1750		2490	4388		mg/Kg		106	90 - 110		

Lab Sample ID: 880-21456-1 MSD
Matrix: Solid
Analysis Batch: 39515

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1750		2490	4370		mg/Kg		105	90 - 110	0	20

QC Association Summary

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

GC VOA

Prep Batch: 39319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21456-1	S-1 (0-3")	Total/NA	Solid	5035	
880-21456-2	S-1 (6")	Total/NA	Solid	5035	
880-21456-3	S-1 (12")	Total/NA	Solid	5035	
880-21456-4	S-1 (18")	Total/NA	Solid	5035	
880-21456-5	S-1 (2')	Total/NA	Solid	5035	
880-21456-6	S-1 (2.5')	Total/NA	Solid	5035	
880-21456-7	S-2 (0-3")	Total/NA	Solid	5035	
880-21456-8	S-2 (6")	Total/NA	Solid	5035	
880-21456-9	S-2 (12')	Total/NA	Solid	5035	
880-21456-10	S-2 (18")	Total/NA	Solid	5035	
880-21456-11	H-1 (0-6")	Total/NA	Solid	5035	
880-21456-12	H-2 (0-6")	Total/NA	Solid	5035	
880-21456-13	H-3 (0-6")	Total/NA	Solid	5035	
MB 880-39319/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-39319/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-39319/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-21449-A-3-B MS	Matrix Spike	Total/NA	Solid	5035	
880-21449-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 39341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21456-1	S-1 (0-3")	Total/NA	Solid	8021B	39319
880-21456-2	S-1 (6")	Total/NA	Solid	8021B	39319
880-21456-3	S-1 (12")	Total/NA	Solid	8021B	39319
880-21456-4	S-1 (18")	Total/NA	Solid	8021B	39319
880-21456-5	S-1 (2')	Total/NA	Solid	8021B	39319
880-21456-6	S-1 (2.5')	Total/NA	Solid	8021B	39319
880-21456-7	S-2 (0-3")	Total/NA	Solid	8021B	39319
880-21456-8	S-2 (6")	Total/NA	Solid	8021B	39319
880-21456-9	S-2 (12')	Total/NA	Solid	8021B	39319
880-21456-10	S-2 (18")	Total/NA	Solid	8021B	39319
880-21456-11	H-1 (0-6")	Total/NA	Solid	8021B	39319
880-21456-12	H-2 (0-6")	Total/NA	Solid	8021B	39319
880-21456-13	H-3 (0-6")	Total/NA	Solid	8021B	39319
MB 880-39319/5-A	Method Blank	Total/NA	Solid	8021B	39319
LCS 880-39319/1-A	Lab Control Sample	Total/NA	Solid	8021B	39319
LCSD 880-39319/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	39319
880-21449-A-3-B MS	Matrix Spike	Total/NA	Solid	8021B	39319
880-21449-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	39319

Analysis Batch: 39426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21456-1	S-1 (0-3")	Total/NA	Solid	Total BTEX	
880-21456-2	S-1 (6")	Total/NA	Solid	Total BTEX	
880-21456-3	S-1 (12")	Total/NA	Solid	Total BTEX	
880-21456-4	S-1 (18")	Total/NA	Solid	Total BTEX	
880-21456-5	S-1 (2')	Total/NA	Solid	Total BTEX	
880-21456-6	S-1 (2.5')	Total/NA	Solid	Total BTEX	
880-21456-7	S-2 (0-3")	Total/NA	Solid	Total BTEX	
880-21456-8	S-2 (6")	Total/NA	Solid	Total BTEX	
880-21456-9	S-2 (12')	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

GC VOA (Continued)

Analysis Batch: 39426 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21456-10	S-2 (18")	Total/NA	Solid	Total BTEX	
880-21456-11	H-1 (0-6")	Total/NA	Solid	Total BTEX	
880-21456-12	H-2 (0-6")	Total/NA	Solid	Total BTEX	
880-21456-13	H-3 (0-6")	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 39298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21456-1	S-1 (0-3")	Total/NA	Solid	8015NM Prep	
880-21456-2	S-1 (6")	Total/NA	Solid	8015NM Prep	
880-21456-3	S-1 (12")	Total/NA	Solid	8015NM Prep	
880-21456-4	S-1 (18")	Total/NA	Solid	8015NM Prep	
880-21456-5	S-1 (2')	Total/NA	Solid	8015NM Prep	
880-21456-6	S-1 (2.5')	Total/NA	Solid	8015NM Prep	
880-21456-7	S-2 (0-3")	Total/NA	Solid	8015NM Prep	
880-21456-8	S-2 (6")	Total/NA	Solid	8015NM Prep	
880-21456-9	S-2 (12')	Total/NA	Solid	8015NM Prep	
880-21456-10	S-2 (18")	Total/NA	Solid	8015NM Prep	
880-21456-11	H-1 (0-6")	Total/NA	Solid	8015NM Prep	
880-21456-12	H-2 (0-6")	Total/NA	Solid	8015NM Prep	
880-21456-13	H-3 (0-6")	Total/NA	Solid	8015NM Prep	
MB 880-39298/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-39298/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-39298/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3422-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3422-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 39373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21456-1	S-1 (0-3")	Total/NA	Solid	8015B NM	39298
880-21456-2	S-1 (6")	Total/NA	Solid	8015B NM	39298
880-21456-3	S-1 (12")	Total/NA	Solid	8015B NM	39298
880-21456-4	S-1 (18")	Total/NA	Solid	8015B NM	39298
880-21456-5	S-1 (2')	Total/NA	Solid	8015B NM	39298
880-21456-6	S-1 (2.5')	Total/NA	Solid	8015B NM	39298
880-21456-7	S-2 (0-3")	Total/NA	Solid	8015B NM	39298
880-21456-8	S-2 (6")	Total/NA	Solid	8015B NM	39298
880-21456-9	S-2 (12')	Total/NA	Solid	8015B NM	39298
880-21456-10	S-2 (18")	Total/NA	Solid	8015B NM	39298
880-21456-11	H-1 (0-6")	Total/NA	Solid	8015B NM	39298
880-21456-12	H-2 (0-6")	Total/NA	Solid	8015B NM	39298
880-21456-13	H-3 (0-6")	Total/NA	Solid	8015B NM	39298
MB 880-39298/1-A	Method Blank	Total/NA	Solid	8015B NM	39298
LCS 880-39298/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39298
LCSD 880-39298/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39298
890-3422-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	39298
890-3422-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	39298

QC Association Summary

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

GC Semi VOA

Analysis Batch: 39496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21456-1	S-1 (0-3")	Total/NA	Solid	8015 NM	
880-21456-2	S-1 (6")	Total/NA	Solid	8015 NM	
880-21456-3	S-1 (12")	Total/NA	Solid	8015 NM	
880-21456-4	S-1 (18")	Total/NA	Solid	8015 NM	
880-21456-5	S-1 (2')	Total/NA	Solid	8015 NM	
880-21456-6	S-1 (2.5')	Total/NA	Solid	8015 NM	
880-21456-7	S-2 (0-3")	Total/NA	Solid	8015 NM	
880-21456-8	S-2 (6")	Total/NA	Solid	8015 NM	
880-21456-9	S-2 (12')	Total/NA	Solid	8015 NM	
880-21456-10	S-2 (18")	Total/NA	Solid	8015 NM	
880-21456-11	H-1 (0-6")	Total/NA	Solid	8015 NM	
880-21456-12	H-2 (0-6")	Total/NA	Solid	8015 NM	
880-21456-13	H-3 (0-6")	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 39126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21456-11	H-1 (0-6")	Soluble	Solid	DI Leach	
880-21456-12	H-2 (0-6")	Soluble	Solid	DI Leach	
880-21456-13	H-3 (0-6")	Soluble	Solid	DI Leach	
MB 880-39126/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39126/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39126/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3402-A-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3402-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
890-3414-A-3-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3414-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 39286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21456-1	S-1 (0-3")	Soluble	Solid	DI Leach	
880-21456-2	S-1 (6")	Soluble	Solid	DI Leach	
880-21456-3	S-1 (12")	Soluble	Solid	DI Leach	
880-21456-4	S-1 (18")	Soluble	Solid	DI Leach	
880-21456-5	S-1 (2')	Soluble	Solid	DI Leach	
880-21456-6	S-1 (2.5')	Soluble	Solid	DI Leach	
880-21456-7	S-2 (0-3")	Soluble	Solid	DI Leach	
880-21456-8	S-2 (6")	Soluble	Solid	DI Leach	
880-21456-9	S-2 (12')	Soluble	Solid	DI Leach	
880-21456-10	S-2 (18")	Soluble	Solid	DI Leach	
MB 880-39286/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39286/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39286/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-21456-1 MS	S-1 (0-3")	Soluble	Solid	DI Leach	
880-21456-1 MSD	S-1 (0-3")	Soluble	Solid	DI Leach	

Analysis Batch: 39335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21456-11	H-1 (0-6")	Soluble	Solid	300.0	39126
880-21456-12	H-2 (0-6")	Soluble	Solid	300.0	39126

QC Association Summary

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

HPLC/IC (Continued)

Analysis Batch: 39335 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21456-13	H-3 (0-6")	Soluble	Solid	300.0	39126
MB 880-39126/1-A	Method Blank	Soluble	Solid	300.0	39126
LCS 880-39126/2-A	Lab Control Sample	Soluble	Solid	300.0	39126
LCSD 880-39126/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39126
890-3402-A-1-D MS	Matrix Spike	Soluble	Solid	300.0	39126
890-3402-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	39126
890-3414-A-3-B MS	Matrix Spike	Soluble	Solid	300.0	39126
890-3414-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	39126

Analysis Batch: 39515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21456-1	S-1 (0-3")	Soluble	Solid	300.0	39286
880-21456-2	S-1 (6")	Soluble	Solid	300.0	39286
880-21456-3	S-1 (12")	Soluble	Solid	300.0	39286
880-21456-4	S-1 (18")	Soluble	Solid	300.0	39286
880-21456-5	S-1 (2')	Soluble	Solid	300.0	39286
880-21456-6	S-1 (2.5')	Soluble	Solid	300.0	39286
880-21456-7	S-2 (0-3")	Soluble	Solid	300.0	39286
880-21456-8	S-2 (6")	Soluble	Solid	300.0	39286
880-21456-9	S-2 (12')	Soluble	Solid	300.0	39286
880-21456-10	S-2 (18")	Soluble	Solid	300.0	39286
MB 880-39286/1-A	Method Blank	Soluble	Solid	300.0	39286
LCS 880-39286/2-A	Lab Control Sample	Soluble	Solid	300.0	39286
LCSD 880-39286/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39286
880-21456-1 MS	S-1 (0-3")	Soluble	Solid	300.0	39286
880-21456-1 MSD	S-1 (0-3")	Soluble	Solid	300.0	39286

Lab Chronicle

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-21456-1
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	39319	11/11/22 10:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39341	11/11/22 21:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39426	11/14/22 11:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			39496	11/14/22 13:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39298	11/11/22 09:33	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39373	11/13/22 15:03	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	39286	11/11/22 09:11	KS	EET MID
Soluble	Analysis	300.0		10			39515	11/14/22 12:18	CH	EET MID

Client Sample ID: S-1 (6")

Lab Sample ID: 880-21456-2
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	39319	11/11/22 10:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39341	11/11/22 21:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39426	11/14/22 11:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			39496	11/14/22 13:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39298	11/11/22 09:33	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39373	11/13/22 15:24	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	39286	11/11/22 09:11	KS	EET MID
Soluble	Analysis	300.0		1			39515	11/14/22 12:33	CH	EET MID

Client Sample ID: S-1 (12")

Lab Sample ID: 880-21456-3
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	39319	11/11/22 10:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39341	11/11/22 21:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39426	11/14/22 11:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			39496	11/14/22 13:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	39298	11/11/22 09:33	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39373	11/13/22 15:45	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	39286	11/11/22 09:11	KS	EET MID
Soluble	Analysis	300.0		1			39515	11/14/22 12:38	CH	EET MID

Client Sample ID: S-1 (18")

Lab Sample ID: 880-21456-4
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	39319	11/11/22 10:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39341	11/11/22 22:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39426	11/14/22 11:06	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

Client Sample ID: S-1 (18")

Lab Sample ID: 880-21456-4
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			39496	11/14/22 13:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	39298	11/11/22 09:33	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39373	11/13/22 16:27	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	39286	11/11/22 09:11	KS	EET MID
Soluble	Analysis	300.0		1			39515	11/14/22 12:53	CH	EET MID

Client Sample ID: S-1 (2')

Lab Sample ID: 880-21456-5
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	39319	11/11/22 10:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39341	11/11/22 22:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39426	11/14/22 11:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			39496	11/14/22 13:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39298	11/11/22 09:33	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39373	11/13/22 16:49	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	39286	11/11/22 09:11	KS	EET MID
Soluble	Analysis	300.0		1			39515	11/14/22 12:58	CH	EET MID

Client Sample ID: S-1 (2.5')

Lab Sample ID: 880-21456-6
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	39319	11/11/22 10:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39341	11/11/22 23:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39426	11/14/22 11:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			39496	11/14/22 13:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39298	11/11/22 09:33	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39373	11/13/22 17:10	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	39286	11/11/22 09:11	KS	EET MID
Soluble	Analysis	300.0		1			39515	11/14/22 13:03	CH	EET MID

Client Sample ID: S-2 (0-3")

Lab Sample ID: 880-21456-7
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	39319	11/11/22 10:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39341	11/12/22 00:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39426	11/14/22 11:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			39496	11/14/22 13:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39298	11/11/22 09:33	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39373	11/13/22 17:31	AJ	EET MID

Lab Chronicle

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

Client Sample ID: S-2 (0-3")

Lab Sample ID: 880-21456-7
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	39286	11/11/22 09:11	KS	EET MID
Soluble	Analysis	300.0		1			39515	11/14/22 13:08	CH	EET MID

Client Sample ID: S-2 (6")

Lab Sample ID: 880-21456-8
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	39319	11/11/22 10:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39341	11/12/22 01:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39426	11/14/22 11:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			39496	11/14/22 13:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	39298	11/11/22 09:33	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39373	11/13/22 17:53	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	39286	11/11/22 09:11	KS	EET MID
Soluble	Analysis	300.0		5			39515	11/14/22 13:13	CH	EET MID

Client Sample ID: S-2 (12')

Lab Sample ID: 880-21456-9
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	39319	11/11/22 10:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39341	11/12/22 01:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39426	11/14/22 11:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			39496	11/14/22 13:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	39298	11/11/22 09:33	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39373	11/13/22 18:14	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	39286	11/11/22 09:11	KS	EET MID
Soluble	Analysis	300.0		5			39515	11/14/22 13:17	CH	EET MID

Client Sample ID: S-2 (18")

Lab Sample ID: 880-21456-10
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	39319	11/11/22 10:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39341	11/12/22 01:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39426	11/14/22 11:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			39496	11/14/22 13:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	39298	11/11/22 09:33	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39373	11/13/22 18:35	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	39286	11/11/22 09:11	KS	EET MID
Soluble	Analysis	300.0		5			39515	11/14/22 13:22	CH	EET MID

Lab Chronicle

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-21456-11
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	39319	11/11/22 10:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39341	11/12/22 02:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39426	11/14/22 11:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			39496	11/14/22 13:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39298	11/11/22 09:33	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39373	11/13/22 18:56	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	39126	11/11/22 11:00	KS	EET MID
Soluble	Analysis	300.0		5	0 mL	1.0 mL	39335	11/12/22 05:14	CH	EET MID

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

Lab Sample ID: 880-21456-12
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	39319	11/11/22 10:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39341	11/12/22 02:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39426	11/14/22 11:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			39496	11/14/22 13:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39298	11/11/22 09:33	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39373	11/13/22 19:18	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	39126	11/11/22 11:00	KS	EET MID
Soluble	Analysis	300.0		1	0 mL	1.0 mL	39335	11/12/22 05:19	CH	EET MID

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

Lab Sample ID: 880-21456-13
Matrix: Solid
Date Collected: 11/10/22 00:00
Date Received: 11/11/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	39319	11/11/22 10:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39341	11/12/22 02:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39426	11/14/22 11:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			39496	11/14/22 13:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	39298	11/11/22 09:33	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39373	11/13/22 19:39	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	39126	11/11/22 11:00	KS	EET MID
Soluble	Analysis	300.0		1	0 mL	1.0 mL	39335	11/14/22 10:29	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Carmona Resources
Job ID: 880-21456-1
Project/Site: Cottonmouth 23 Fed Com 2H
SDG: Eddy County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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

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

Method Summary

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

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

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Carmona Resources
Project/Site: Cottonmouth 23 Fed Com 2H

Job ID: 880-21456-1
SDG: Eddy County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-21456-1	S-1 (0-3")	Solid	11/10/22 00:00	11/11/22 08:41
880-21456-2	S-1 (6")	Solid	11/10/22 00:00	11/11/22 08:41
880-21456-3	S-1 (12")	Solid	11/10/22 00:00	11/11/22 08:41
880-21456-4	S-1 (18")	Solid	11/10/22 00:00	11/11/22 08:41
880-21456-5	S-1 (2')	Solid	11/10/22 00:00	11/11/22 08:41
880-21456-6	S-1 (2.5')	Solid	11/10/22 00:00	11/11/22 08:41
880-21456-7	S-2 (0-3")	Solid	11/10/22 00:00	11/11/22 08:41
880-21456-8	S-2 (6")	Solid	11/10/22 00:00	11/11/22 08:41
880-21456-9	S-2 (12')	Solid	11/10/22 00:00	11/11/22 08:41
880-21456-10	S-2 (18")	Solid	11/10/22 00:00	11/11/22 08:41
880-21456-11	H-1 (0-6")	Solid	11/10/22 00:00	11/11/22 08:41
880-21456-12	H-2 (0-6")	Solid	11/10/22 00:00	11/11/22 08:41
880-21456-13	H-3 (0-6")	Solid	11/10/22 00:00	11/11/22 08:41

Work Order No: 21456

Page 1 of 2

Project Manager	Conner Moehring	Bill to (if different)	Jacqui Harris
Company Name	Carmona Resources	Company Name	COG
Address.	310 W Wall St Ste 415	Address.	15 W London Rd
City, State ZIP	Midland, TX 79701	City, State ZIP	Loving, NM 88258
Phone	432-813-6823	Email	jacqui harris@conocophillips 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.	Cottonmouth 23 Fed Com 2H	Turn Around	
Project Number		☐ Routine ☑ Rush	
Project Location	Eddy County, New Mexico	Due Date	72 Hrs
Sampler's Name	MM		
PO #			

SAMPLE RECEIPT			
Temp Blank.	Yes No	Wet Ice	Yes No
Received Intact:	Yes No	Thermometer ID	IR2
Cooler Custody Seals	Yes No N/A	Correction Factor	-.30
Sample Custody Seals	Yes No N/A	Temperature Reading	4.8
Total Containers.		Corrected Temperature	4.5

ANALYSIS REQUEST

Sample Identification	Date	Time	Soil	Water	Grab/ Comp	# of Cont	Pres. Code	BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 300.0
S-1 (0-3")	11/10/2022		X		G	1		X	X	X
S-1 (6")	11/10/2022		X		G	1		X	X	X
S-1 (12")	11/10/2022		X		G	1		X	X	X
S-1 (18")	11/10/2022		X		G	1		X	X	X
S-1 (2')	11/10/2022		X		G	1		X	X	X
S-1 (2 5')	11/10/2022		X		G	1		X	X	X
S-2 (0-3")	11/10/2022		X		G	1		X	X	X
S-2 (6")	11/10/2022		X		G	1		X	X	X
S-2 (12')	11/10/2022		X		G	1		X	X	X
S-2 (18")	11/10/2022		X		G	1		X	X	X

Preservative Codes

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

Sample Comments

402

880-21456 Chain of Custody

Comments

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
Mike Carmona	11/11/2022 841		

Work Order No: 21456

11/14/2022

Page 2 of 2

Project Manager	Conner Moehring	Bill to (if different)	Jacqui Harris
Company Name.	Carmona Resources	Company Name	COG
Address	310 W Wall St Ste 415	Address	15 W London Rd
City, State ZIP	Midland, TX 79701	City, State ZIP	Loving, NM 88258
Phone	432-813-6823	Email	jacqui.harris@conocophillips.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	Cottonmouth 23 Fed Com 2H	Turn Around	
Project Number		☐ Routine ☑ Rush	
Project Location	Eddy County, New Mexico	Due Date	72 Hrs
Sampler's Name.	MM		
PO #:			

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

Preservative Codes

None NO; DI Water H_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 300.0	Sample Comments
H-1 (0-6")	11/10/2022		X		G	1		X	X	X	
H-2 (0-6")	11/10/2022		X		G	1		X	X	X	
H-3 (0-6")	11/10/2022		X		G	1		X	X	X	

Loc: 880
21456

Comments:

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
Mike Carmona	11/11/2022 841		

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-21456-1
SDG Number: Eddy County, New Mexico

Login Number: 21456
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

CARDINAL Laboratories

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

December 19, 2022

CONNER MOEHRING

CARMONA RESOURCES

310 W WALL ST SUITE 415

MIDLAND, TX 79701

RE: COTTONMOUTH 23 FED COM 2H

Enclosed are the results of analyses for samples received by the laboratory on 12/16/22 8:10.

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
CONNER MOEHRING
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	12/16/2022	Sampling Date:	12/14/2022
Reported:	12/19/2022	Sampling Type:	Soil
Project Name:	COTTONMOUTH 23 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	1181	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY COUNTY, NEW MEXICO		

Sample ID: CS - 1 (0.5') (H225952-01)

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	12/16/2022	ND	2.14	107	2.00	4.90	
Toluene*	<0.050	0.050	12/16/2022	ND	2.15	108	2.00	5.71	
Ethylbenzene*	<0.050	0.050	12/16/2022	ND	2.12	106	2.00	4.84	
Total Xylenes*	<0.150	0.150	12/16/2022	ND	6.58	110	6.00	5.11	
Total BTEX	<0.300	0.300	12/16/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *110 %* *69.9-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	12/16/2022	ND	432	108	400	7.69	

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	12/17/2022	ND	198	99.0	200	1.87	
DRO >C10-C28*	<10.0	10.0	12/17/2022	ND	208	104	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	12/17/2022	ND					

Surrogate: 1-Chlorooctane *73.3 %* *45.3-161*

Surrogate: 1-Chlorooctadecane *79.3 %* *46.3-178*

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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
CONNER MOEHRING
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	12/16/2022	Sampling Date:	12/14/2022
Reported:	12/19/2022	Sampling Type:	Soil
Project Name:	COTTONMOUTH 23 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	1181	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY COUNTY, NEW MEXICO		

Sample ID: CS - 2 (0.5') (H225952-02)

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	12/16/2022	ND	2.14	107	2.00	4.90	
Toluene*	<0.050	0.050	12/16/2022	ND	2.15	108	2.00	5.71	
Ethylbenzene*	<0.050	0.050	12/16/2022	ND	2.12	106	2.00	4.84	
Total Xylenes*	<0.150	0.150	12/16/2022	ND	6.58	110	6.00	5.11	
Total BTEX	<0.300	0.300	12/16/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *112 %* *69.9-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	12/16/2022	ND	432	108	400	7.69	

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	12/17/2022	ND	198	99.0	200	1.87	
DRO >C10-C28*	**33.3**	10.0	12/17/2022	ND	208	104	200	3.52	
EXT DRO >C28-C36	**10.1**	10.0	12/17/2022	ND					

Surrogate: 1-Chlorooctane *83.2 %* *45.3-161*

Surrogate: 1-Chlorooctadecane *90.8 %* *46.3-178*

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Analytical Results For:

CARMONA RESOURCES
CONNER MOEHRING
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	12/16/2022	Sampling Date:	12/14/2022
Reported:	12/19/2022	Sampling Type:	Soil
Project Name:	COTTONMOUTH 23 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	1181	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY COUNTY, NEW MEXICO		

Sample ID: CS - 3 (0.5') (H225952-03)

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	12/16/2022	ND	2.14	107	2.00	4.90	
Toluene*	<0.050	0.050	12/16/2022	ND	2.15	108	2.00	5.71	
Ethylbenzene*	<0.050	0.050	12/16/2022	ND	2.12	106	2.00	4.84	
Total Xylenes*	<0.150	0.150	12/16/2022	ND	6.58	110	6.00	5.11	
Total BTEX	<0.300	0.300	12/16/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *109 %* *69.9-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	12/16/2022	ND	432	108	400	7.69	

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	12/17/2022	ND	198	99.0	200	1.87	
DRO >C10-C28*	<10.0	10.0	12/17/2022	ND	208	104	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	12/17/2022	ND					

Surrogate: 1-Chlorooctane *85.2 %* *45.3-161*

Surrogate: 1-Chlorooctadecane *91.2 %* *46.3-178*

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Analytical Results For:

CARMONA RESOURCES
CONNER MOEHRING
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	12/16/2022	Sampling Date:	12/14/2022
Reported:	12/19/2022	Sampling Type:	Soil
Project Name:	COTTONMOUTH 23 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	1181	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY COUNTY, NEW MEXICO		

Sample ID: CS - 4 (0.5') (H225952-04)

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	12/17/2022	ND	2.14	107	2.00	4.90	
Toluene*	<0.050	0.050	12/17/2022	ND	2.15	108	2.00	5.71	
Ethylbenzene*	<0.050	0.050	12/17/2022	ND	2.12	106	2.00	4.84	
Total Xylenes*	<0.150	0.150	12/17/2022	ND	6.58	110	6.00	5.11	
Total BTEX	<0.300	0.300	12/17/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *111 %* *69.9-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**320**	16.0	12/16/2022	ND	432	108	400	7.69	

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	12/17/2022	ND	198	99.0	200	1.87	
DRO >C10-C28*	<10.0	10.0	12/17/2022	ND	208	104	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	12/17/2022	ND					

Surrogate: 1-Chlorooctane *87.7 %* *45.3-161*

Surrogate: 1-Chlorooctadecane *94.9 %* *46.3-178*

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Analytical Results For:

CARMONA RESOURCES
CONNER MOEHRING
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	12/16/2022	Sampling Date:	12/14/2022
Reported:	12/19/2022	Sampling Type:	Soil
Project Name:	COTTONMOUTH 23 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	1181	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY COUNTY, NEW MEXICO		

Sample ID: CS - 5 (2') (H225952-05)

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	12/16/2022	ND	2.04	102	2.00	2.58	
Toluene*	<0.050	0.050	12/16/2022	ND	2.16	108	2.00	3.07	
Ethylbenzene*	<0.050	0.050	12/16/2022	ND	2.15	107	2.00	3.04	
Total Xylenes*	<0.150	0.150	12/16/2022	ND	6.62	110	6.00	3.70	
Total BTEX	<0.300	0.300	12/16/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *69.9-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**272**	16.0	12/16/2022	ND	432	108	400	7.69	

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	12/17/2022	ND	198	99.0	200	1.87	
DRO >C10-C28*	<10.0	10.0	12/17/2022	ND	208	104	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	12/17/2022	ND					

Surrogate: 1-Chlorooctane *84.8 %* *45.3-161*

Surrogate: 1-Chlorooctadecane *93.2 %* *46.3-178*

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Analytical Results For:

CARMONA RESOURCES
CONNER MOEHRING
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	12/16/2022	Sampling Date:	12/14/2022
Reported:	12/19/2022	Sampling Type:	Soil
Project Name:	COTTONMOUTH 23 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	1181	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY COUNTY, NEW MEXICO		

Sample ID: CS - 6 (2') (H225952-06)

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	12/16/2022	ND	2.04	102	2.00	2.58	
Toluene*	<0.050	0.050	12/16/2022	ND	2.16	108	2.00	3.07	
Ethylbenzene*	<0.050	0.050	12/16/2022	ND	2.15	107	2.00	3.04	
Total Xylenes*	<0.150	0.150	12/16/2022	ND	6.62	110	6.00	3.70	
Total BTEX	<0.300	0.300	12/16/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *69.9-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**640**	16.0	12/16/2022	ND	432	108	400	7.69	

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	12/17/2022	ND	198	99.0	200	1.87	
DRO >C10-C28*	<10.0	10.0	12/17/2022	ND	208	104	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	12/17/2022	ND					

Surrogate: 1-Chlorooctane *86.6 %* *45.3-161*

Surrogate: 1-Chlorooctadecane *93.3 %* *46.3-178*

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Analytical Results For:

CARMONA RESOURCES
CONNER MOEHRING
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	12/16/2022	Sampling Date:	12/14/2022
Reported:	12/19/2022	Sampling Type:	Soil
Project Name:	COTTONMOUTH 23 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	1181	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY COUNTY, NEW MEXICO		

Sample ID: SW - 1 (0.5') (H225952-07)

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	12/16/2022	ND	2.04	102	2.00	2.58	
Toluene*	<0.050	0.050	12/16/2022	ND	2.16	108	2.00	3.07	
Ethylbenzene*	<0.050	0.050	12/16/2022	ND	2.15	107	2.00	3.04	
Total Xylenes*	<0.150	0.150	12/16/2022	ND	6.62	110	6.00	3.70	
Total BTEX	<0.300	0.300	12/16/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *69.9-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	12/16/2022	ND	432	108	400	7.69	

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	12/17/2022	ND	198	99.0	200	1.87	
DRO >C10-C28*	<10.0	10.0	12/17/2022	ND	208	104	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	12/17/2022	ND					

Surrogate: 1-Chlorooctane *75.5 %* *45.3-161*

Surrogate: 1-Chlorooctadecane *81.3 %* *46.3-178*

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Analytical Results For:

CARMONA RESOURCES
CONNER MOEHRING
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	12/16/2022	Sampling Date:	12/14/2022
Reported:	12/19/2022	Sampling Type:	Soil
Project Name:	COTTONMOUTH 23 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	1181	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY COUNTY, NEW MEXICO		

Sample ID: SW - 2 (0.5') (H225952-08)

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	12/16/2022	ND	2.04	102	2.00	2.58	
Toluene*	<0.050	0.050	12/16/2022	ND	2.16	108	2.00	3.07	
Ethylbenzene*	<0.050	0.050	12/16/2022	ND	2.15	107	2.00	3.04	
Total Xylenes*	<0.150	0.150	12/16/2022	ND	6.62	110	6.00	3.70	
Total BTEX	<0.300	0.300	12/16/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *69.9-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	12/16/2022	ND	432	108	400	7.69	

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	12/17/2022	ND	198	99.0	200	1.87	
DRO >C10-C28*	<10.0	10.0	12/17/2022	ND	208	104	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	12/17/2022	ND					

Surrogate: 1-Chlorooctane *78.4 %* *45.3-161*

Surrogate: 1-Chlorooctadecane *85.1 %* *46.3-178*

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Analytical Results For:

CARMONA RESOURCES
CONNER MOEHRING
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	12/16/2022	Sampling Date:	12/14/2022
Reported:	12/19/2022	Sampling Type:	Soil
Project Name:	COTTONMOUTH 23 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	1181	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY COUNTY, NEW MEXICO		

Sample ID: SW - 3 (0.5') (H225952-09)

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	12/16/2022	ND	2.04	102	2.00	2.58	
Toluene*	<0.050	0.050	12/16/2022	ND	2.16	108	2.00	3.07	
Ethylbenzene*	<0.050	0.050	12/16/2022	ND	2.15	107	2.00	3.04	
Total Xylenes*	<0.150	0.150	12/16/2022	ND	6.62	110	6.00	3.70	
Total BTEX	<0.300	0.300	12/16/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *69.9-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	12/16/2022	ND	432	108	400	7.69	

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	12/17/2022	ND	198	99.0	200	1.87	
DRO >C10-C28*	<10.0	10.0	12/17/2022	ND	208	104	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	12/17/2022	ND					

Surrogate: 1-Chlorooctane *79.7 %* *45.3-161*

Surrogate: 1-Chlorooctadecane *88.0 %* *46.3-178*

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Analytical Results For:

CARMONA RESOURCES
CONNER MOEHRING
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	12/16/2022	Sampling Date:	12/14/2022
Reported:	12/19/2022	Sampling Type:	Soil
Project Name:	COTTONMOUTH 23 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	1181	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY COUNTY, NEW MEXICO		

Sample ID: SW - 4 (1.5') (H225952-10)

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	12/16/2022	ND	2.04	102	2.00	2.58	
Toluene*	<0.050	0.050	12/16/2022	ND	2.16	108	2.00	3.07	
Ethylbenzene*	<0.050	0.050	12/16/2022	ND	2.15	107	2.00	3.04	
Total Xylenes*	<0.150	0.150	12/16/2022	ND	6.62	110	6.00	3.70	
Total BTEX	<0.300	0.300	12/16/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *69.9-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**448**	16.0	12/16/2022	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	12/17/2022	ND	198	99.0	200	1.87	
DRO >C10-C28*	<10.0	10.0	12/17/2022	ND	208	104	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	12/17/2022	ND					

Surrogate: 1-Chlorooctane *79.8 %* *45.3-161*

Surrogate: 1-Chlorooctadecane *88.0 %* *46.3-178*

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Analytical Results For:

CARMONA RESOURCES
CONNER MOEHRING
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	12/16/2022	Sampling Date:	12/14/2022
Reported:	12/19/2022	Sampling Type:	Soil
Project Name:	COTTONMOUTH 23 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	1181	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY COUNTY, NEW MEXICO		

Sample ID: SW - 5 (2') (H225952-11)

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	12/16/2022	ND	2.04	102	2.00	2.58	
Toluene*	<0.050	0.050	12/16/2022	ND	2.16	108	2.00	3.07	
Ethylbenzene*	<0.050	0.050	12/16/2022	ND	2.15	107	2.00	3.04	
Total Xylenes*	<0.150	0.150	12/16/2022	ND	6.62	110	6.00	3.70	
Total BTEX	<0.300	0.300	12/16/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *69.9-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**368**	16.0	12/16/2022	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	12/17/2022	ND	198	99.0	200	1.87	
DRO >C10-C28*	<10.0	10.0	12/17/2022	ND	208	104	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	12/17/2022	ND					

Surrogate: 1-Chlorooctane *80.4 %* *45.3-161*

Surrogate: 1-Chlorooctadecane *85.6 %* *46.3-178*

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
CONNER MOEHRING
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	12/16/2022	Sampling Date:	12/14/2022
Reported:	12/19/2022	Sampling Type:	Soil
Project Name:	COTTONMOUTH 23 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	1181	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY COUNTY, NEW MEXICO		

Sample ID: SW - 6 (2') (H225952-12)

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	12/16/2022	ND	2.04	102	2.00	2.58	
Toluene*	<0.050	0.050	12/16/2022	ND	2.16	108	2.00	3.07	
Ethylbenzene*	<0.050	0.050	12/16/2022	ND	2.15	107	2.00	3.04	
Total Xylenes*	<0.150	0.150	12/16/2022	ND	6.62	110	6.00	3.70	
Total BTEX	<0.300	0.300	12/16/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *69.9-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**240**	16.0	12/16/2022	ND	416	104	400	3.77	QM-07

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	12/17/2022	ND	198	99.0	200	1.87	
DRO >C10-C28*	<10.0	10.0	12/17/2022	ND	208	104	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	12/17/2022	ND					

Surrogate: 1-Chlorooctane *98.0 %* *45.3-161*

Surrogate: 1-Chlorooctadecane *106 %* *46.3-178*

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

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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: H225952

Page 1 of 2

Project Manager:	Conner Moehring	Bill to: (if different)	Jacqui Harris
Company Name:	Carmona Resources	Company Name:	COG
Address:	310 W Wall St Ste 415	Address:	15 W London Rd
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Loving, NM 88258
Phone:	432-813-6823	Email:	jacqui.harris@conocophillips.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:	Cottonmouth 23 Fed Com 2H	Turn Around	Pres. Code
Project Number:	1181	☐ Routine ☑ Rush	
Project Location	Eddy County, New Mexico	Due Date: 24 Hrs	
Sampler's Name:	MM		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Received Intact:	(Yes) No	Thermometer ID:	113
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.6°C
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	2.7°C
Total Containers:		Corrected Temperature:	2.1

Preservative Codes

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

Sample Identification	Date	Time	Soil	Water	Grab/ Comp	# of Cont	BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 4500	Sample Comments
CS-1 (0.5')	12/14/2022		X		C	1	X	X	X	
CS-2 (0.5')	12/14/2022		X		C	1	X	X	X	
CS-3 (0.5')	12/14/2022		X		C	1	X	X	X	
CS-4 (0.5')	12/14/2022		X		C	1	X	X	X	
CS-5 (2')	12/14/2022		X		C	1	X	X	X	
CS-6 (2')	12/14/2022		X		C	1	X	X	X	
SW-1 (0.5')	12/14/2022		X		C	1	X	X	X	
SW-2 (0.5')	12/14/2022		X		C	1	X	X	X	
SW-3 (0.5')	12/14/2022		X		C	1	X	X	X	
SW-4 (1.5')	12/14/2022		X		C	1	X	X	X	

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
	12-16-22 0810		

Chain of Custody

Work Order No: H225952

Page 2 of 2

Project Manager:	Conner Moehring	Bill to: (if different)	Jacqui Harris
Company Name:	Carmona Resources	Company Name:	COG
Address:	310 W Wall St Ste 415	Address:	15 W London Rd
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Loving, NM 88258
Phone:	432-813-6823	Email:	jacqui.harris@conocophillips.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:	Cottonmouth 23 Fed Com 2H	Turn Around	
Project Number:	1181	☐ Routine	☑ Rush
Project Location	Eddy County, New Mexico	Due Date:	24 Hrs
Sampler's Name:	MM		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Received Intact:	(Yes) No	Thermometer ID:	IR3
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.6°C
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	2.7°C
Total Containers:		Corrected Temperature:	2.1°C

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
11	SW-5 (2')	12/14/2022		X		C	1		X	X	X	
12	SW-6 (2')	12/14/2022		X		C	1		X	X	X	

Parameters

ANALYSIS REQUEST

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
	12-16-22 0840		

CARDINAL Laboratories

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

December 20, 2022

CONNER MOEHRING

CARMONA RESOURCES

310 W WALL ST SUITE 415

MIDLAND, TX 79701

RE: COTTONMOUTH 23 FED COM 2H

Enclosed are the results of analyses for samples received by the laboratory on 12/19/22 13:35.

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	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
CONNER MOEHRING
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	12/19/2022	Sampling Date:	12/19/2022
Reported:	12/20/2022	Sampling Type:	Soil
Project Name:	COTTONMOUTH 23 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	1181	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY COUNTY, NEW MEXICO		

Sample ID: CS - 6 (2.5') (H225997-01)

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	12/20/2022	ND	2.06	103	2.00	0.847	
Toluene*	<0.050	0.050	12/20/2022	ND	2.20	110	2.00	0.0658	
Ethylbenzene*	<0.050	0.050	12/20/2022	ND	2.19	109	2.00	2.20	
Total Xylenes*	<0.150	0.150	12/20/2022	ND	6.75	113	6.00	1.82	
Total BTEX	<0.300	0.300	12/20/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *108 %* *69.9-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	12/19/2022	ND	416	104	400	0.00	

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	12/19/2022	ND	208	104	200	6.58	
DRO >C10-C28*	<10.0	10.0	12/19/2022	ND	205	103	200	11.6	
EXT DRO >C28-C36	<10.0	10.0	12/19/2022	ND					

Surrogate: 1-Chlorooctane *75.2 %* *45.3-161*

Surrogate: 1-Chlorooctadecane *80.3 %* *46.3-178*

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

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	CARMONA RESOURCES
Project Manager:	CONNER MOEHRING
Address:	310 W. WALL STE Ste 415
City: Midland	State: TX Zip: 79701
Phone #: (432) 813 6823	Fax #:
Project #: 1181	Project Owner:
Project Name:	Cottonmouth 23 Fed com 2H
Project Location:	Eddy CO, NM
Sampler Name:	CRM

BILL TO

P.O. #:	
Company:	COG
Attn:	Jacqui Harris
Address:	15 W London RD
City:	LOVING
State: NM	Zip: 88258
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING DATE	TIME	BTEX 8021B	TPH 8015M (GRO+DRO+MRO)	Chloride 4500										
H225997-1	LS-6 (2.5)	C	1			X					X		12/19/22		X	X	X										

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 12-19-22	Received By:	
Relinquished By:	Time: 1335	Received By:	
	Date:		
	Time:		

Verbal Result: ☐ Yes ☐ No Add'l Phone #:
All Results are emailed. Please provide Email address:

REMARKS: Email Results to: cmochring@carmonaresources.com, MIKE CARMONA mcarmona@carmonaresources.com

Turnaround Time: Standard ☐ Rush ☑ 24HRS.

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No; Intact ☐ Yes ☐ No

Observed Temp. °C

Corrected Temp. °C

Thermometer ID #113
Correction Factor -0.6°C

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Observed Temp. °C 3.7
Corrected Temp. °C 3.1

Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No

CHECKED BY: (Initials) TO

FORM-006 R 3.3 07/18/22

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

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

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

CONDITIONS

Action 176685

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 176685
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	3/23/2023