Page 6

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.

<b><u>Closure Report Attachment Checklist</u>:</b> Each of the following in	tems must be included in the closure report.		
A scaled site and sampling diagram as described in 19.15.29.1	1 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	C District office must be notified 2 days prior to final sampling)		
Description of remediation activities			
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of	nediate contamination that pose a threat to groundwater, surface water, a C-141 report does not relieve the operator of responsibility for tions. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in		
	_ Title:		
Signature: <u>Aac</u>	Date:		
	Telephone:		
OCD Only			
Received by: Jocelyn Harimon	Date: 05/01/2023		
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations.		
Closure Approved by: <u>Robert Hamlet</u>	Date: 9/14/2023		
Printed Name: Robert Hamlet	Title: Environmental Specialist - Advanced		



# SITE INFORMATION

Closure Report Cuervo Federal 20H Incident ID: nRM2017853957 Lea County, New Mexico Unit A Sec 14 T23S R32E 32.311101°, -103.638130°

Crude Oil and Produced Water Release Point of Release: Overflow at the stuffing box during equipment maintenance Release Date: 06/18/2020 Volume Released: 5 Barrels of Crude Oil and 13 Barrels of Produced Water Volume Recovered: 5 Barrels of Crude Oil and 10 Barrels of Produced Water



Prepared for: Cimarex Energy Co. of Colorado 600 N. Marienfeld Street Suite 600 Midland, Texas 79701

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



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# **1.0 SITE INFORMATION AND BACKGROUND**

# 2.0 SITE CHARACTERIZATION AND GROUNDWATER

# **3.0 NMAC REGULATORY CRITERIA**

# 4.0 SITE ASSESSMENT ACTIVITIES

# **5.0 CONCLUSIONS**

# **FIGURES**

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FIGURE 3	SAMPLE LOCATION		

# **APPENDICES**

- APPENDIX A TABLES
- APPENDIX B PHOTOS
- APPENDIX C INITIAL AND FINAL C-141
- APPENDIX D SITE CHARACTERIZATION AND GROUNDWATER
- APPENDIX E LABORATORY REPORTS



April 27, 2023

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

Re: Closure Report Cuervo Federal 20H Cimarex Energy Co. of Colorado Site Location: Unit A, S14, T23S, R32E (Lat 32.311101°, Long -103.638130°) Lea County, New Mexico

To whom it may concern:

On behalf of Cimarex Energy Co. of Colorado (Cimarex), Carmona Resources, LLC has prepared this letter to document site activities for Cuervo Federal 20H. The site is located at 32.311101°, - 103.638130° within Unit A, S14, T23S, R32E, in Lea County, New Mexico (Figures 1 and 2).

## **1.0 Site Information and Background**

Based on the initial C-141 obtained from the New Mexico Oil Conservation Division (NMOCD), the leak was discovered on June 18, 2020, due to the stuffing box leaking during equipment maintenance. It resulted in the release of approximately five (5) barrels of crude oil and thirteen (13) barrels of produced water. Five (5) barrels of crude oil and ten (10) barrels of produced water were recovered. The impacted area is located on the pad and is 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 low karst area. Based on a review of the New Mexico Office of State Engineers and USGS databases, no known water sources are within a 0.50-mile radius of the location. The closest well is located approximately 2.12 miles Southeast of the site in S14, T23S, R32E and was drilled in 1980. On April 10, 2023, a groundwater determination bore was installed 0.37 miles east of the site at 32.310922°, -103.644669°. The bore was left open for 72 hours and was gauged using a water meter probe. The bore showed no signs of water at a depth of 105 feet below the ground surface (ft bgs). A copy of the groundwater determination bore log is attached in Appendix D.

## **3.0 NMAC Regulatory Criteria**

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

- Benzene: 10 milligrams per kilogram (mg/kg).
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg.
- TPH: 1,000 mg/kg (GRO + DRO).
- TPH: 2,500 mg/kg (GRO + DRO + MRO).
- Chloride: 20,000 mg/kg.



## **4.0 Site Assessment Activities**

On March 16, 2023, Carmona Resources was on-site to define the release horizontally and vertically. A total of three soil samples (S-1 through S-3) and four (4) horizontal sample points (H-1 through H-4) were installed to total depths ranging from surface to 2.0' ft bgs. For chemical analysis, the soil samples were collected and placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain of custody protocol to Cardinal Labs in Hobbs, New Mexico. The samples were analyzed for total petroleum hydrocarbons (TPH) by EPA method 8015, modified benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B, and chloride by EPA method 4500. The laboratory reports containing analytical methods, results, and chain-of-custody documents are attached in Appendix E. See Figure 3 for the sample locations.

The analytical results are provided in Table 1. All samples were below the regulatory requirements for TPH, BTEX, and chloride.

# 5.0 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 Cimarex formally requests the closure of the spill. If you have any questions regarding this report or need additional information, please contact us at 432-813-1992.

Sincerely,

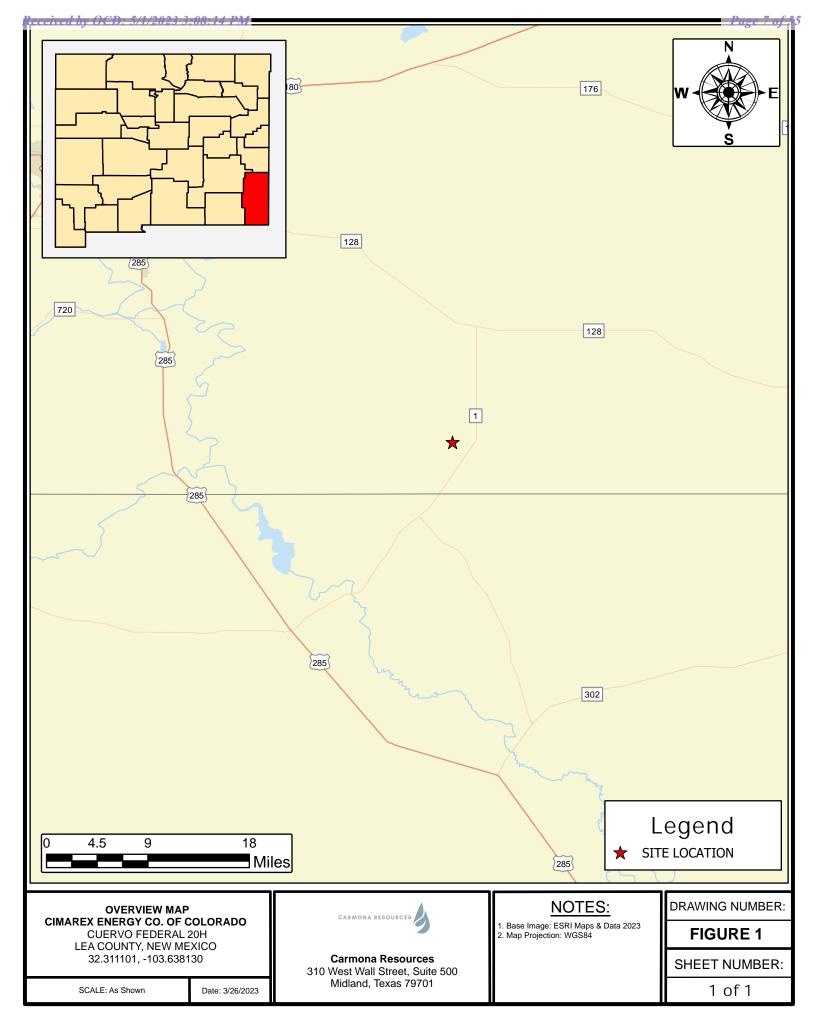
## **Carmona Resources, LLC**

Mike Carmona Environmental Manager

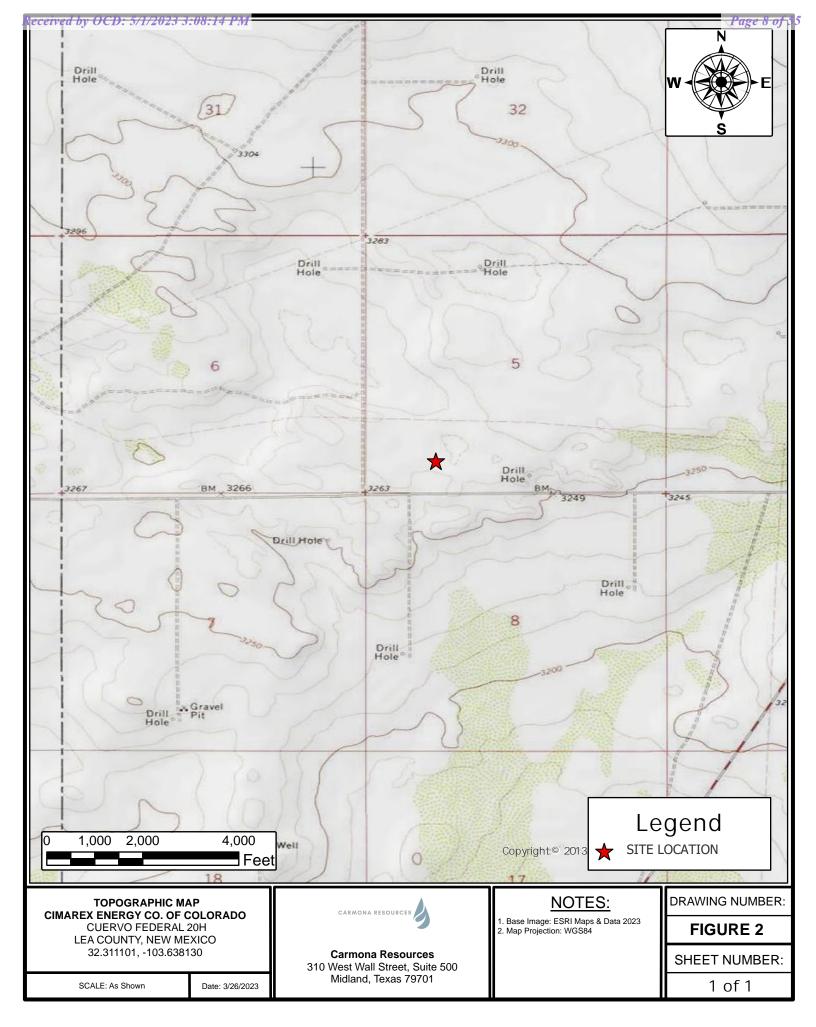
Ashton Thielke Sr. Project Manager



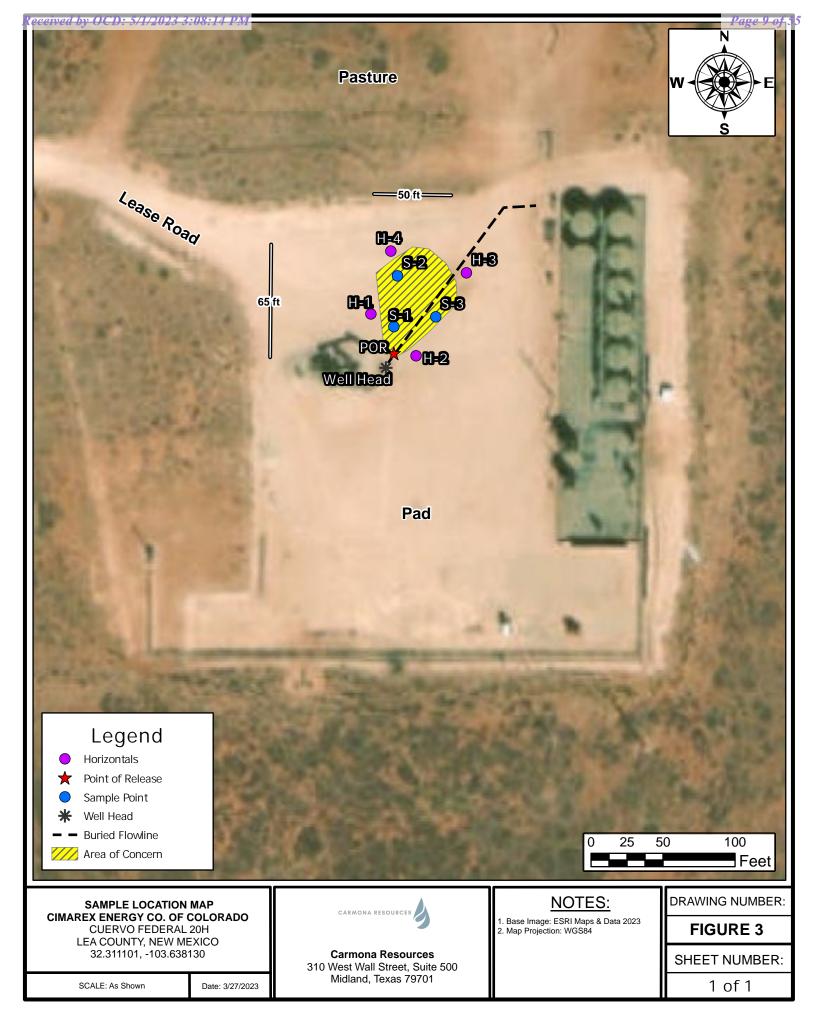




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# **APPENDIX** A



# Table 1 Cimarex Cuervo Federal 20H (06.18.2020) Lea County, New Mexico

Sample ID	Date	Donth (ft)		TPH	l (mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Date	Depth (ft)	GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
	3/16/2023	0-0.5'	<10.0	505	122	627	<0.050	<0.050	<0.050	<0.150	<0.300	944
S-1	"	0.5'-1.0'	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	160
5-1	"	1.0'-1.5'	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	112
	"	1.5'-2.0'	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	96.0
	3/16/2023	0-0.5'	<10.0	106	17.2	123	<0.050	<0.050	<0.050	<0.150	<0.300	176
S-2	"	0.5'-1.0'	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	208
	"	1.0'-1.5'	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	272
	3/16/2023	0-0.5'	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
0.0	"	0.5'-1.0'	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
S-3	"	1.0'-1.5'	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
	"	1.5'-2.0'	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
H-1	3/16/2023	0-0.5'	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	320
H-2	3/16/2023	0-0.5'	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	112
H-3	3/16/2023	0-0.5'	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	112
H-4	3/16/2023	0-0.5'	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
Regulato	ry Criteria <sup>A</sup>		1,000	mg/kg		2,500 mg/kg	10 mg/kg	-	-	-	50 mg/kg	20,000 mg/kg
	Applyzed											

(-) Not Analyzed

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<sup>A</sup> – Table 1 - 19.15.29 NMAC

mg/kg - milligram per kilogram

TPH - Total Petroleum Hydrocarbons

ft - feet

(H) - Horizontal Sample

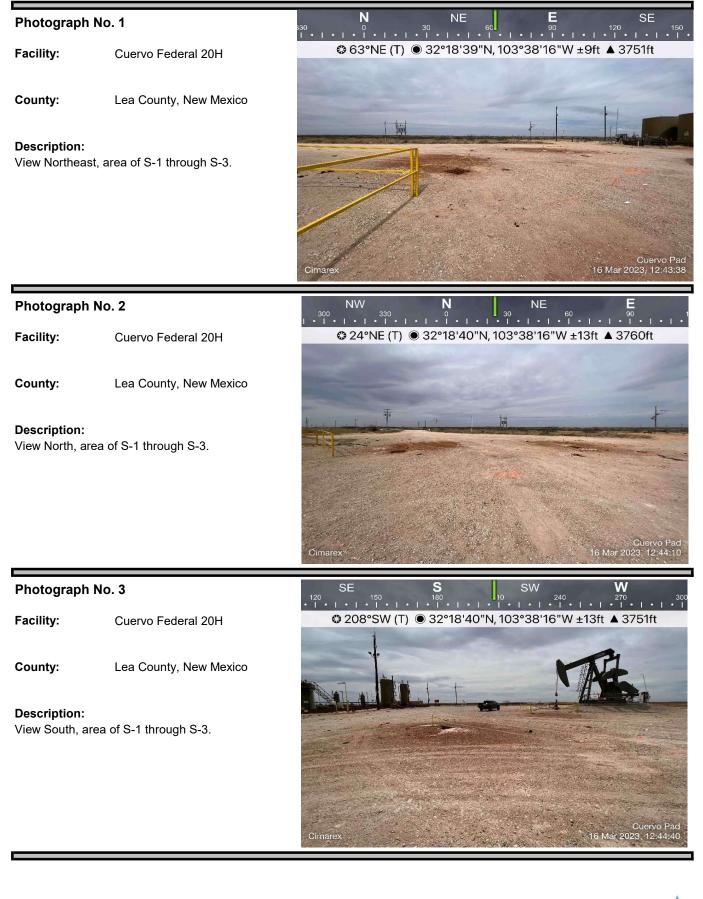
(S) - Sample Point

# **APPENDIX B**



# PHOTOGRAPHIC LOG

## Cimarex



# **APPENDIX C**



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

)

Page 15 bf 55

Incident ID	NRM2017853957
District RP	
Facility ID	
Application ID	

# **Release Notification**

# **Responsible Party**

Responsible Party Cimarex Energy Co. of Colorado	OGRID 162683	
Contact Name Laci Luig	Contact Telephone (432) 571-7800	
Contact email Iluig@cimarex.com	Incident # (assigned by OCD)	
Contact mailing address 600 N. Marienfeld Street, Ste. 600 Midland, TX 79701		

# **Location of Release Source**

Latitude \_32.311101

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Cuervo Federal 20H	Site Type Battery
Date Release Discovered 6/18/2020	API# (if applicable) <b>30-025-40559</b>

Unit Letter	Section	Township	Range	County
А	14	23S	32E	Lea

Surface Owner: State Federal Tribal Private (Name: \_

# **Nature and Volume of Release**

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

Crude Oil	Volume Released (bbls) 5 bbls	Volume Recovered (bbls) 5 bbls
Produced Water	Volume Released (bbls) 13 bbls	Volume Recovered (bbls) 10 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)
causi the st	ng a release. We released 13 barrels of p	roduced water and 5 barrels of oil out of arrels of water and 5 barrels of oil. We will

Page 2

Oil Conservation I	Division

Incident ID	NRM2017853957
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release?			
19.13.29.7(A) INMAC?				
🗌 Yes 🔳 No				
If YES, was immediate no	If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?			
From: Gloria Garza	Spills, Tammy Honea, BLM NM CFO Spill			
By: Email				
	Initial Response			
The responsible p	party must undertake the following actions immediately unless they could create a safety hazard that would result in injury			

The source of the release has been stopped.

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

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

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

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

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

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

Printed Name: Laci Luig	Title: Engineer Tech.
Signature: email: Iluig@cimarex.com	Date: $\frac{6/19/2020}{(132)}$ 571-7810
	Telephone: (432) 571-7810
OCD Only	
Received by: Ramona Marcus	Date: _6/26/2020

Received by OCD: 5/1/2023 3:08:14 PM Form C-141 State of New Mexico

Page 3

Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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# 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 <b>not</b> 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 1/2-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.

<b>Received by OCD: 5/1/20</b> Form C-141 Page 4	23 3:08:14 PM State of New Mexico Oil Conservation Division	n	Incident ID District RP Facility ID Application ID	Page 18 of 5
regulations all operators ar public health or the environ failed to adequately investi addition, OCD acceptance and/or regulations.	formation given above is true and complete to t e required to report and/or file certain release n mment. The acceptance of a C-141 report by th gate and remediate contamination that pose a t of a C-141 report does not relieve the operator	notifications and perform co the OCD does not relieve the hreat to groundwater, surfa of responsibility for comp	prrective actions for rele e operator of liability sho ice water, human health liance with any other fee	ases which may endanger ould their operations have or the environment. In deral, state, or local laws
Printed Name:		Title:		
	ŹÓ	Date:		
email:		Telephone:		
OCD Only				
Received by: Joce	lyn Harimon	Date:05/0	01/2023	

Incident ID	
District RP	
Facility ID	
Application ID	

# Closure

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

<b><u>Closure Report Attachment Checklist</u>:</b> Each of the following it	tems 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								
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and rer human health or the environment. In addition, OCD acceptance of a compliance with any other federal, state, or local laws and/or regula restore, reclaim, and re-vegetate the impacted surface area to the con accordance with 19.15.29.13 NMAC including notification to the O Printed Name:	tions. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in CD when reclamation and re-vegetation are complete.							
Signature: <u>A</u> ac' <del>A</del>	Date:							
email:	Telephone:							
OCD Only								
Received by: Jocelyn Harimon	Date: 05/01/2023							
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations.							
Closure Approved by:	Date:							
Printed Name:								

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# **APPENDIX D**





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196.65' - Drilled 1986

GWDB - >105' - 04.10.2023 Cuevo Federal 20H (06.18.2020)

1000

478.47' - Drilled 1976

400' - Drilled 1980

400' - Drilled 1957

# Legend

- 🍰 0.37 Miles
- 🕹 0.50 Mile Radius
- 🍰 2.12 Miles
- a 2.21 Miles
- 🍰 2.29 Miles
- 🍰 2.33 Miles
- Buried Flowline
- Cuevo Federal 20H (06.18.2020)

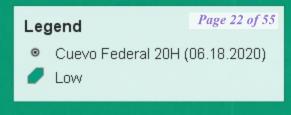
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- GWDB >105' 04.10.2023
- NMSEO Water Well
- USGS Water Well

1 mi

Cuevo Federal 20H (06.18.2020)

GReleased to Imaging: 9/14/2023 11:27:09 AM







Project Name : Date : Cuevo Federal 20H Monday, April 10, 2023 Sampler : Project No. : Michael Collier Lea County, New Mexico Location : Driller : 32.310922°, -103.644669° Coordinates : **H&R Enterprises** Method : Elevation : 3,730' Air Rotary Depth (ft.) WL Depth (ft.) WL Soil Description Lithology Soil Description Lithology (50') - Well Sorted Silty Sands with Clay, No gravels, 60% Silty Sand, 40% Clay, dry (SC). (0'-5') - Organic topsoil, no gravel or caliche. (55') - Well Sorted Silty Sands with Clay, No gravels, (5') - Light brown well graded gravel, caliche, no organics, dry (GM). 60% Silty Sand, 40% Clay, dry (SC). (60') - Well Sorted Silty Sands with Clay, No gravels, (10') - Light brown well graded gravel, caliche, no 60% Silty Sand, 40% Clay, dry (SC). organics, dry (GM). (15') - Light brown well graded gravel, caliche, no (65') - Well Sorted Silty Sands with Clay, No gravels, 65 60% Silty Sand, 40% Clay, dry (SC). organics, dry (GM). (70') - Well Sorted Silty Sands with Clay, No gravels, (20') - Brown/Light brown well graded gravel, 70% 70 60% Silty Sand, 40% Clay, dry (SC). Caliche, 30% Silty Sand, no organics, dry (SW). (75') - Well Sorted Silty Sands with Clay, No gravels, (25') - Brown/Light brown well graded gravel, 70% 75 60% Silty Sand, 40% Clay, dry (SC). Caliche, 30% Silty Sand, no organics, dry (SW). (80') - Well Sorted Silty Sands with Clay, No gravels, (30') - Brown/Light brown well graded gravel, 70% 60% Silty Sand, 40% Clay, dry (SC). Caliche, 30% Silty Sand, no organics, dry (SW). (85') - Well Sorted Silty Sands with Clay, No gravels, (35') - Light brown well graded gravel, 90% Silty Sand, 85 60% Silty Sand, 40% Clay, dry (SC). 10% Clay, dry (ML). (90') - Well Sorted Silty Sands with Clay, No gravels, (40') - Light brown well graded gravel, 90% Silty Sand, 90 60% Silty Sand, 40% Clay, dry (SC). 10% Clay, dry (ML). (95') - Well Sorted Silty Sands with Clay, No gravels, (45') - Well Sorted Silty Sands with Clay, No gravels, 60% Silty Sand, 40% Clay, dry (SC). 60% Silty Sand, 40% Clay, dry (SC). (100-105') - Well Sorted Silty Sands with Clay, No gravels, 60% Silty Sand, 40% Clay, dry (SC). 105

Comments : Boring terminated at 105' with no presence of groundwater or moisture. Well measured 4/14/2023 with no detection of groundwater Dry @ 105'



- - -



# 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)	(0	•				2=NE 3 st to lar	s=SW 4=SE gest) (N∕	) AD83 UTM in me	eters)	(	In feet)	
POD Number	POD Sub- Code basin C	ounty	Q ( 64 1	-		Tws	Rng	х	Y	Distance	-	•	Water Column
C 02349	CUB	ED		23		23S		625678	3578004* 🌍	3396	525		
<u>C 02275</u>	CUB	LE	3	32	19	23S	33E	630843	3573557* 🌍	3421	650	400	250
<u>C 02276</u>	CUB	LE	3	14	19	23S	33E	630848	3573154* 🌍	3694	650	400	250
									Avera	ge Depth to	Water:	400	feet
										Minimum	Depth:	400	feet
										Maximum	Depth:	400	feet
Record Count: 3													
UTMNAD83 Radius	Search (in meter	rs):											

Easting (X): 628204

Northing (Y): 3575734

Radius: 4000

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



# New Mexico Office of the State Engineer **Point of Diversion Summary**

			(1			2=NE 3=S est to large		(NAD83	3 UTM in meters)	
Well Tag	POD	Number	Q6	4 Q16	Q4 8	Sec Twe	Rng		X Y	
	C 02	275	3	3	2	19 238	33E	63084	13 3573557* 🧧	
Driller Lice	ense:		Drill	er Con	ıpany	•				
Driller Nan	me:	ABBOT	Г BROTHERS							
Drill Start	Date:		Drill	Finish	Date	:	12/31/19	80	Plug Date:	
Log File Da	ate:		РСЖ	V Rev I	Date:				Source:	Shallow
Pump Type	e:		Pipe	Discha	rge Si	ize:			Estimated Yield	: 40 GPM
Casing Size		8.63	Dept	h Well	:		650 feet		Depth Water:	400 feet
	Meter	·Numbe	r: 514			Meter	· Make:		MASTER MET	FR
			<b>umber:</b> 15278'	74			· Multip	lior	10.0000	
		ber of Dia		/ -			Type:	ner.	Diversion	
		of Measu		0			n Flow 1	Porcont.	Diversion	
		Multipl		3			ing Freq		Quarterly	
							•			
Meter F	Reading	gs (in Acı	e-Feet)							
Read	l Date	Year	Mtr Reading	Flag	Rd	r Com	nent		Mtı	r Amount Onlin
02/28	8/1999	1999	260142	А	ms					0
04/15	5/1999	1999	294352	А	ms					1.050
07/18	8/1999	1999	320962	А	ms					0.817
11/28	8/1999	1999	367317	А	ms					1.423
	5/2000	2000	413837	А	mb					1.428
	5/2000	2000	474649	А	mb					1.866
	5/2000	2000	485983	А	RP	Г				0.348
01/19	9/2001	2000	530107	А	RP	Г				1.354
04/27	7/2001	2001	569967	А	RP	Г				1.223
	5/2001	2001	620178	А	ms					1.541
01/12	2/2002	2002	652573	А	tg					0.994
04/13	3/2002	2002	662745	А	RP	Г				0.312
07/12	2/2002	2002	674878	А	rm					0.372
01/01	1/2003	2002	714899	А	ms					1.228
07/11	1/2003	2003	751760	А	ms					1.131
	1/2003	2003	778772	А	ab					0.829
01/08	8/2004	2003	802123	А	ab					0.717
04/07	7/2004	2004	821801	А	RP	Г				0.604
	5/2004	2004	836507	А	RP					0.451
	2/2004	2004	844068	А	RP					0.232
01/26	5/2005	2004	877058	А	RP	Г				1.012
04/15	5/2005	2005	889933	А	RP	Г				0.395
08/03	3/2005	2005	891339	А	RP	Г				0.043
10/31	1/2005	2005	927761	А	RP	Г				1.118
01/31	1/2006	2005	941723	А	RP	Г				0.428

Respired by QCD: 5/1/2023 3:08:14 BMus/nmwrrs/ReportDispatcher?type=PODGHTML&name=PodGroundSummaryHTML.jrxml&basin=Cessor=7.0f 55

**YTD Met	er Amounts	s: Year		Amount	
04/01/2020	2020	120850	R	RPT	Meter Rollover
07/22/2019	2019	896990	А	RPT	
07/18/2013	2013	608566	Α	RPT	
03/20/2013	2012	608566	А	RPT	
04/15/2012	2012	608566	А	RPT	
01/10/2012	2012	608458	Α	RPT	
07/12/2011	2011	607344	Α	RPT	
02/13/2011	2011	599215	А	RPT	
1/09/2010	2010	598791	А	RPT	
8/23/2010	2010	598613	А	RPT	
5/13/2010	2010	592265	A	RPT	
1/02/2009	2009	537994	A	tw	
07/06/2009	2009	465558	A	RPT	
5/07/2009	2008	432782	A	RPT	
1/08/2009	2008	375616	A	RPT	
4/15/2008 7/11/2008	2008 2008	230341 273176	A A	RPT RPT	
1/03/2007	2007	189325	A	RPT	
7/13/2007	2007	148838	A	tw	
4/16/2007	2007	124935	Α	tw	
1/27/2006	2006	90114	А	RPT	
07/19/2006	2006	9421	R	tw	Meter Rollover
4/20/2006	2006	966263	А	RPT	

** YID Meter Amounts:	rear	Amount	
	1999	3.290	
	2000	4.996	
	2001	2.764	
	2002	2.906	
	2003	2.677	
	2004	2.299	
	2005	1.984	
	2006	4.553	
	2007	3.046	
	2008	5.718	
	2009	4.983	
	2010	1.866	
	2011	0.262	
	2012	0.037	
	2013	0	
	2019	8.851	
	2020	6.870	

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

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

2/28/23 10:11 AM

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**National Water Information System: Web Interface** 

**USGS** Water Resources

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

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Important: <u>Next Generation Monitoring Location Page</u>

### Search Results -- 1 sites found

Agency code = usgs site\_no list =

• 321950103400601

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

### USGS 321950103400601 23S.32E.03.31110

Lea County, New Mexico Latitude 32°19'50", Longitude 103°40'06" NAD27 Land-surface elevation 3,668 feet above NAVD88 This well is completed in the Other aquifers (N9999OTHER) national aquifer. This well is completed in the Chinle Formation (231CHNL) local aquifer.

### **Output formats**

Table of data

Tab-separated data

Graph of data

Reselect period

Date	Time	? Water- level date- time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measur
1972-09-13		D	62610		3462.10	NGVD29	1	Z		
1972-09-13		D	62611		3463.82	NAVD88	1	Z		
1972-09-13		D	72019	204.18			1	Z		
1977-03-10		D	62610		3452.43	NGVD29	1	Z		
1977-03-10		D	62611		3454.15	NAVD88	1	Z		
1977-03-10		D	72019	213.85			1	Z		
1981-03-26		D	62610		3468.94	NGVD29	1	Z		
1981-03-26		D	62611		3470.66	NAVD88	1	Z		
1981-03-26		D	72019	197.34			1	Z		
1986-04-16		D	62610		3469.63	NGVD29	1	Z		
1986-04-16		D	62611		3471.35	NAVD88	1	Z		
1986-04-16		D	72019	196.65			1	Z		

Explanation

## Received by QCD: 5/1/2023 3:08:14 PM

### USGS Groundwater for New Mexico: Water Levels -- 1 sites

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

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

Page Contact Information: <u>New Mexico Water Data Maintainer</u> Page Last Modified: 2023-02-28 12:17:48 EST 0.27 0.24 nadww02 USA.gov

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# New Mexico Office of the State Engineer **Point of Diversion Summary**

			• •			2=NE 3=S' st to larges	<i>,</i>	(NAD83	3 UTM in meters)	
Well Tag	POD	Number	Q6	4 Q16	Q4 S	ec Tws	Rng		X Y	
	C 02	276	3	1	4 1	9 238	33E	63084	8 3573154*	6
Driller Lice	nse:		Drill	er Con	npany:					
Driller Nam	ne:	ABBOT	Г BROTHERS							
Drill Start I	Date:		Drill	Finish	Date:	1	12/31/19	57	Plug Date:	
Log File Da	te:		РС	Rev I	Date:				Source:	Shallow
Pump Type:	:		Pipe	Discha	arge Si	ze:			Estimated Yie	ld: 40 GPM
Casing Size	:	8.63	Dept	h Well	:	(	650 feet		Depth Water:	400 feet
	Meter	Numbe	r: 515			Meter	Make:		MASTER MI	ETER
	Meter	· Serial N	umber: 152782	2		Meter	<sup>.</sup> Multipl	lier:	10.0000	
		per of Dia					Туре:		Diversion	
		of Measu		s			n Flow I	Percent:		
		e Multipl					ng Freq		Quarterly	
Meter R	x eading	ys (in Acı	··Feet)							
Read	_	Year	Mtr Reading	Flag	Rdi	· Comn	nent		N	Itr Amount Onlin
02/27/	/1999	1999	838142	А	ms					0
04/15/	/1999	1999	849194	А	ms					0.339
07/18/	/1999	1999	852511	А	ms					0.102
11/28/	/1999	1999	880506	А	ms					0.859
04/06/	/2000	2000	880525	А	mb					0.001
08/16/	/2000	2000	0	А	mb					0
08/16/	/2000	2000	3713	А	mb					0.114
09/15/	/2000	2000	34387	А	RP	Г				0.941
01/19/	/2001	2000	147434	А	RP	Г				3.469
04/27/	/2001	2001	250085	А	RP7	Γ				3.150
07/16/	/2001	2001	328518	А	ms					2.407
01/12/	/2002	2002	389056	А	tg					1.858
04/13/	/2002	2002	408878	А	RP7	ſ				0.608
07/12/		2002	440120	А	rm					0.959
01/01/	/2003	2002	505416	А	ms					2.004
04/28/		2003	536552	А	ms					0.956
07/11/		2003	693927	Α	RP.	Γ				4.830
10/16/		2003	693927	Α	ab					0
01/08/		2003	693927	A	ab	_				0
04/07/		2004	695806	A	RP					0.058
07/15/		2004	723969	A	RP.					0.864
10/12/		2004	739108	A	RP7					0.465
01/26/		2004	788665	A	RP7					1.521
04/15/		2005	814297	A	RP.					0.787
08/03/	/2005	2005	846601	А	RP	Ľ				0.991

Reseived, by: ACD: 5/1/2023 3:08:14 PM.mm.	us/nmwrrs/Repor	tDispa	atcher?type	e=PODGHTML&name=PodGroundSummaryHTML.jrxml&basin=
10/31/2005 2005	856320	А	RPT	0.298
01/31/2006 2005	866374	А	RPT	0.309
04/20/2006 2006	874208	А	RPT	0.240
07/19/2006 2006	889314	А	tw	0.464
11/27/2006 2006	917719	А	RPT	0.872
04/16/2007 2007	929550	А	RPT	0.363
07/13/2007 2007	936082	А	RPT	0.200
11/03/2007 2007	942871	А	RPT	0.208
04/15/2008 2008	944140	А	RPT	0.039
07/11/2008 2008	944909	А	RPT	0.024
01/08/2009 2008	964144	А	RPT	0.590
05/07/2009 2009	976275	А	RPT	0.372
07/06/2009 2009	984911	А	RPT	0.265
11/12/2009 2009	106368	R	tw	Meter Rollover 3.727
05/13/2010 2010	257600	А	RPT	4.641
08/23/2010 2010	315189	А	RPT	1.767
11/09/2010 2010	317933	А	RPT	0.084
02/13/2011 2011	373250	А	RPT	1.698
07/12/2011 2011	468021	А	RPT	2.908
01/10/2012 2012	570894	А	RPT	3.157
04/15/2012 2012	671162	А	RPT	3.077
03/20/2013 2012	783611	А	RPT	3.451
07/18/2013 2013	842234	А	RPT	1.799
07/22/2019 2019	977178	А	RPT	4.141
04/01/2020 2020	977178	А	RPT	0
**YTD Meter Amoun	ts: Year		Amount	
	1999		1.300	
	2000		4.525	
	2001		5.557	
	2002		5.429	
	2003		5.786	
	2004		2.908	
	2005		2.385	
	2006		1.576	
	2007		0.771	
	2008		0.653	
	2009		4.364	
	2010		6.492	
	2011		4.606	
	2012		9.685	
	2013		1.799	
	0010		4 + 4 +	
	2019 2020		4.141 0	

\*UTM location was derived from PLSS - see Help

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USGS Water Resources

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Groundwater	~	New Mexico	~	GO

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Important: <u>Next Generation Monitoring Location Page</u>

### Search Results -- 1 sites found

Agency code = usgs site\_no list =

• 321732103401701

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

### USGS 321732103401701 23S.32E.21.223444

Lea County, New Mexico Latitude 32°17'32", Longitude 103°40'17" NAD27 Land-surface elevation 3,682 feet above NAVD88 The depth of the well is 550 feet below land surface. This well is completed in the Other aquifers (N9999OTHER) national aquifer. This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

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

Date	Time	? Water- level date- time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source ( measur(
1972-09-21		D	62610		3199.51	NGVD29	Р	Z		
1972-09-21		D	62611		3201.25	NAVD88	Р	Z		
1972-09-21		D	72019	480.75			Р	Z		
1976-12-07		D	62610		3201.79	NGVD29	1	Z		
1976-12-07		D	62611		3203.53	NAVD88	1	Z		
1976-12-07		D	72019	478.47			1	Z		

		Explanation
Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface

## Received by QCD: 5/1/2023 3:08:14 PM

### USGS Groundwater for New Mexico: Water Levels -- 1 sites

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Section	Code	Description
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Status	Р	Pumping
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	А	Approved for publication Processing and review completed.

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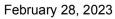
Accessibility FOIA Privacy Policies and Notices

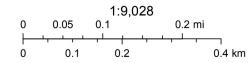
U.S. Department of the Interior | U.S. Geological Survey Title: Groundwater for New Mexico: Water Levels URL: https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?

Page Contact Information: <u>New Mexico Water Data Maintainer</u> Page Last Modified: 2023-02-28 12:16:45 EST 0.3 0.24 nadww02 USA.gov

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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**





March 20, 2023

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

RE: CUERVO FEDERAL #020H (06.18.2020)

Enclosed are the results of analyses for samples received by the laboratory on 03/16/23 14:56.

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 <a href="https://www.tceq.texas.gov/field/qa/lab\_accred\_certif.html">www.tceq.texas.gov/field/qa/lab\_accred\_certif.html</a>.

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. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	03/16/2023	Sampling Date:	03/16/2023
Reported:	03/20/2023	Sampling Type:	Soil
Project Name:	CUERVO FEDERAL #020H (06.18.2020)	Sampling Condition:	Cool & Intact
Project Number:	1244	Sample Received By:	Shalyn Rodriguez
Project Location:	CIMAREX - LEA CO, NEW MEXICO		

#### Sample ID: S - 1 (0-0.5') (H231211-01)

BTEX 8021B	mg	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2023	ND	2.01	101	2.00	1.49	
Toluene*	<0.050	0.050	03/17/2023	ND	2.01	101	2.00	1.32	
Ethylbenzene*	<0.050	0.050	03/17/2023	ND	1.99	99.5	2.00	1.27	
Total Xylenes*	<0.150	0.150	03/17/2023	ND	6.02	100	6.00	0.762	
Total BTEX	<0.300	0.300	03/17/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 71.5-13	4						
Chloride, SM4500Cl-B	mg	/kg	Analyze	Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	944	16.0	03/20/2023	ND	416	104	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2023	ND	173	86.4	200	5.93	
DRO >C10-C28*	505	10.0	03/17/2023	ND	191	95.6	200	9.93	
EXT DRO >C28-C36	122	10.0	03/17/2023	ND					
Surrogate: 1-Chlorooctane	82.7	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	109	% 49.1-14	8						

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/16/2023	Sampling Date:	03/16/2023
Reported:	03/20/2023	Sampling Type:	Soil
Project Name:	CUERVO FEDERAL #020H (06.18.2020)	Sampling Condition:	Cool & Intact
Project Number:	1244	Sample Received By:	Shalyn Rodriguez
Project Location:	CIMAREX - LEA CO, NEW MEXICO		

#### Sample ID: S - 1 (0.5'-1') (H231211-02)

BTEX 8021B	mg,	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2023	ND	2.01	101	2.00	1.49	
Toluene*	<0.050	0.050	03/17/2023	ND	2.01	101	2.00	1.32	
Ethylbenzene*	<0.050	0.050	03/17/2023	ND	1.99	99.5	2.00	1.27	
Total Xylenes*	<0.150	0.150	03/17/2023	ND	6.02	100	6.00	0.762	
Total BTEX	<0.300	0.300	03/17/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	107 5	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	03/20/2023	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2023	ND	173	86.4	200	5.93	
DRO >C10-C28*	<10.0	10.0	03/17/2023	ND	191	95.6	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	03/17/2023	ND					
Surrogate: 1-Chlorooctane	92.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	107	% 49.1-14	8						

#### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/16/2023	Sampling Date:	03/16/2023
Reported:	03/20/2023	Sampling Type:	Soil
Project Name:	CUERVO FEDERAL #020H (06.18.2020)	Sampling Condition:	Cool & Intact
Project Number:	1244	Sample Received By:	Shalyn Rodriguez
Project Location:	CIMAREX - LEA CO, NEW MEXICO		

#### Sample ID: S - 1 (1.0'-1.5') (H231211-03)

BTEX 8021B	mg,	′kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2023	ND	2.11	106	2.00	4.61	
Toluene*	<0.050	0.050	03/17/2023	ND	2.18	109	2.00	5.66	
Ethylbenzene*	<0.050	0.050	03/17/2023	ND	2.14	107	2.00	6.29	
Total Xylenes*	<0.150	0.150	03/17/2023	ND	6.62	110	6.00	6.42	
Total BTEX	<0.300	0.300	03/17/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.8	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	03/20/2023	ND	416	104	400	3.77	
TPH 8015M	mg,	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2023	ND	173	86.4	200	5.93	
DRO >C10-C28*	<10.0	10.0	03/17/2023	ND	191	95.6	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	03/17/2023	ND					
Surrogate: 1-Chlorooctane	73.8	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	85.5	% 49.1-14	8						

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\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/16/2023	Sampling Date:	03/16/2023
Reported:	03/20/2023	Sampling Type:	Soil
Project Name:	CUERVO FEDERAL #020H (06.18.2020)	Sampling Condition:	Cool & Intact
Project Number:	1244	Sample Received By:	Shalyn Rodriguez
Project Location:	CIMAREX - LEA CO, NEW MEXICO		

#### Sample ID: S - 1 (1.5-2.0') (H231211-04)

BTEX 8021B	mg/	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2023	ND	2.11	106	2.00	4.61	
Toluene*	<0.050	0.050	03/17/2023	ND	2.18	109	2.00	5.66	
Ethylbenzene*	<0.050	0.050	03/17/2023	ND	2.14	107	2.00	6.29	
Total Xylenes*	<0.150	0.150	03/17/2023	ND	6.62	110	6.00	6.42	
Total BTEX	<0.300	0.300	03/17/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.8	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	03/20/2023	ND	416	104	400	3.77	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2023	ND	173	86.4	200	5.93	
DRO >C10-C28*	<10.0	10.0	03/17/2023	ND	191	95.6	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	03/17/2023	ND					
Surrogate: 1-Chlorooctane	94.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	112 9	% 49.1-14	8						

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

Received:	03/16/2023	Sampling Date:	03/16/2023
Reported:	03/20/2023	Sampling Type:	Soil
Project Name:	CUERVO FEDERAL #020H (06.18.2020)	Sampling Condition:	Cool & Intact
Project Number:	1244	Sample Received By:	Shalyn Rodriguez
Project Location:	CIMAREX - LEA CO, NEW MEXICO		

#### Sample ID: S - 2 (0-0.5') (H231211-05)

BTEX 8021B	mg/	′kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2023	ND	2.11	106	2.00	4.61	
Toluene*	<0.050	0.050	03/17/2023	ND	2.18	109	2.00	5.66	
Ethylbenzene*	<0.050	0.050	03/17/2023	ND	2.14	107	2.00	6.29	
Total Xylenes*	<0.150	0.150	03/17/2023	ND	6.62	110	6.00	6.42	
Total BTEX	<0.300	0.300	03/17/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	92.5	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	03/20/2023	ND	416	104	400	3.77	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2023	ND	173	86.4	200	5.93	
DRO >C10-C28*	106	10.0	03/17/2023	ND	191	95.6	200	9.93	
EXT DRO >C28-C36	17.2	10.0	03/17/2023	ND					
Surrogate: 1-Chlorooctane	77.7	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	94.6	% 49.1-14	8						

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

Received:	03/16/2023	Sampling Date:	03/16/2023
Reported:	03/20/2023	Sampling Type:	Soil
Project Name:	CUERVO FEDERAL #020H (06.18.2020)	Sampling Condition:	Cool & Intact
Project Number:	1244	Sample Received By:	Shalyn Rodriguez
Project Location:	CIMAREX - LEA CO, NEW MEXICO		

#### Sample ID: S - 2 (0.5'-1') (H231211-06)

BTEX 8021B	mg,	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2023	ND	2.11	106	2.00	4.61	
Toluene*	<0.050	0.050	03/17/2023	ND	2.18	109	2.00	5.66	
Ethylbenzene*	<0.050	0.050	03/17/2023	ND	2.14	107	2.00	6.29	
Total Xylenes*	<0.150	0.150	03/17/2023	ND	6.62	110	6.00	6.42	
Total BTEX	<0.300	0.300	03/17/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.2	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	03/20/2023	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2023	ND	173	86.4	200	5.93	
DRO >C10-C28*	<10.0	10.0	03/17/2023	ND	191	95.6	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	03/17/2023	ND					
Surrogate: 1-Chlorooctane	90.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	112 9	% 49.1-14	8						

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

Received:	03/16/2023	Sampling Date:	03/16/2023
Reported:	03/20/2023	Sampling Type:	Soil
Project Name:	CUERVO FEDERAL #020H (06.18.2020)	Sampling Condition:	Cool & Intact
Project Number:	1244	Sample Received By:	Shalyn Rodriguez
Project Location:	CIMAREX - LEA CO, NEW MEXICO		

#### Sample ID: S - 2 (1.0'-1.5') (H231211-07)

BTEX 8021B	mg/	kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2023	ND	2.11	106	2.00	4.61	
Toluene*	<0.050	0.050	03/17/2023	ND	2.18	109	2.00	5.66	
Ethylbenzene*	<0.050	0.050	03/17/2023	ND	2.14	107	2.00	6.29	
Total Xylenes*	<0.150	0.150	03/17/2023	ND	6.62	110	6.00	6.42	
Total BTEX	<0.300	0.300	03/17/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	94.0	% 71.5-13	4						
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	03/20/2023	ND	416	104	400	3.77	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2023	ND	173	86.4	200	5.93	
DRO >C10-C28*	<10.0	10.0	03/17/2023	ND	191	95.6	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	03/17/2023	ND					
Surrogate: 1-Chlorooctane	82.3	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	96.0	% 49.1-14	8						

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

Received:	03/16/2023	Sampling Date:	03/16/2023
Reported:	03/20/2023	Sampling Type:	Soil
Project Name:	CUERVO FEDERAL #020H (06.18.2020)	Sampling Condition:	Cool & Intact
Project Number:	1244	Sample Received By:	Shalyn Rodriguez
Project Location:	CIMAREX - LEA CO, NEW MEXICO		

#### Sample ID: S - 3 (0-0.5') (H231211-08)

BTEX 8021B	mg	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2023	ND	2.11	106	2.00	4.61	
Toluene*	<0.050	0.050	03/17/2023	ND	2.18	109	2.00	5.66	
Ethylbenzene*	<0.050	0.050	03/17/2023	ND	2.14	107	2.00	6.29	
Total Xylenes*	<0.150	0.150	03/17/2023	ND	6.62	110	6.00	6.42	
Total BTEX	<0.300	0.300	03/17/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.4	% 71.5-13	4						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	03/20/2023	ND	416	104	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2023	ND	173	86.4	200	5.93	
DRO >C10-C28*	<10.0	10.0	03/17/2023	ND	191	95.6	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	03/17/2023	ND					
Surrogate: 1-Chlorooctane	74.5	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	86.3	% 49.1-14	8						

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

Received:	03/16/2023	Sampling Date:	03/16/2023
Reported:	03/20/2023	Sampling Type:	Soil
Project Name:	CUERVO FEDERAL #020H (06.18.2020)	Sampling Condition:	Cool & Intact
Project Number:	1244	Sample Received By:	Shalyn Rodriguez
Project Location:	CIMAREX - LEA CO, NEW MEXICO		

#### Sample ID: S - 3 (0.5'-1') (H231211-09)

BTEX 8021B	mg	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2023	ND	2.11	106	2.00	4.61	
Toluene*	<0.050	0.050	03/17/2023	ND	2.18	109	2.00	5.66	
Ethylbenzene*	<0.050	0.050	03/17/2023	ND	2.14	107	2.00	6.29	
Total Xylenes*	<0.150	0.150	03/17/2023	ND	6.62	110	6.00	6.42	
Total BTEX	<0.300	0.300	03/17/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	94.3	% 71.5-13	4						
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	03/20/2023	ND	416	104	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2023	ND	173	86.4	200	5.93	
DRO >C10-C28*	<10.0	10.0	03/17/2023	ND	191	95.6	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	03/17/2023	ND					
Surrogate: 1-Chlorooctane	83.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	94.5	% 49.1-14	8						

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

Received:	03/16/2023	Sampling Date:	03/16/2023
Reported:	03/20/2023	Sampling Type:	Soil
Project Name:	CUERVO FEDERAL #020H (06.18.2020)	Sampling Condition:	Cool & Intact
Project Number:	1244	Sample Received By:	Shalyn Rodriguez
Project Location:	CIMAREX - LEA CO, NEW MEXICO		

#### Sample ID: S - 3 (1.0'-1.5') (H231211-10)

BTEX 8021B	mg,	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2023	ND	2.11	106	2.00	4.61	
Toluene*	<0.050	0.050	03/17/2023	ND	2.18	109	2.00	5.66	
Ethylbenzene*	<0.050	0.050	03/17/2023	ND	2.14	107	2.00	6.29	
Total Xylenes*	<0.150	0.150	03/17/2023	ND	6.62	110	6.00	6.42	
Total BTEX	<0.300	0.300	03/17/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.4	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	03/20/2023	ND	416	104	400	3.77	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2023	ND	173	86.4	200	5.93	
DRO >C10-C28*	<10.0	10.0	03/17/2023	ND	191	95.6	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	03/17/2023	ND					
Surrogate: 1-Chlorooctane	95.3	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	107	% 49.1-14	8						

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

Received:	03/16/2023	Sampling Date:	03/16/2023
Reported:	03/20/2023	Sampling Type:	Soil
Project Name:	CUERVO FEDERAL #020H (06.18.2020)	Sampling Condition:	Cool & Intact
Project Number:	1244	Sample Received By:	Shalyn Rodriguez
Project Location:	CIMAREX - LEA CO, NEW MEXICO		

#### Sample ID: S - 3 (1.5'-2.0') (H231211-11)

BTEX 8021B	mg/	′kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2023	ND	2.11	106	2.00	4.61	
Toluene*	<0.050	0.050	03/17/2023	ND	2.18	109	2.00	5.66	
Ethylbenzene*	<0.050	0.050	03/17/2023	ND	2.14	107	2.00	6.29	
Total Xylenes*	<0.150	0.150	03/17/2023	ND	6.62	110	6.00	6.42	
Total BTEX	<0.300	0.300	03/17/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.1	% 71.5-13	4						
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	03/20/2023	ND	416	104	400	3.77	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2023	ND	173	86.4	200	5.93	
DRO >C10-C28*	<10.0	10.0	03/17/2023	ND	191	95.6	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	03/17/2023	ND					
Surrogate: 1-Chlorooctane	91.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	106 9	% 49.1-14	8						

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

Received:	03/16/2023	Sampling Date:	03/16/2023
Reported:	03/20/2023	Sampling Type:	Soil
Project Name:	CUERVO FEDERAL #020H (06.18.2020)	Sampling Condition:	Cool & Intact
Project Number:	1244	Sample Received By:	Shalyn Rodriguez
Project Location:	CIMAREX - LEA CO, NEW MEXICO		

#### Sample ID: H - 1 (0-0.5') (H231211-12)

BTEX 8021B	mg	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2023	ND	2.11	106	2.00	4.61	
Toluene*	<0.050	0.050	03/17/2023	ND	2.18	109	2.00	5.66	
Ethylbenzene*	<0.050	0.050	03/17/2023	ND	2.14	107	2.00	6.29	
Total Xylenes*	<0.150	0.150	03/17/2023	ND	6.62	110	6.00	6.42	
Total BTEX	<0.300	0.300	03/17/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.1	% 71.5-13	4						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	03/20/2023	ND	416	104	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2023	ND	173	86.4	200	5.93	
DRO >C10-C28*	<10.0	10.0	03/17/2023	ND	191	95.6	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	03/17/2023	ND					
Surrogate: 1-Chlorooctane	86.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	97.4	% 49.1-14	8						

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

Received:	03/16/2023	Sampling Date:	03/16/2023
Reported:	03/20/2023	Sampling Type:	Soil
Project Name:	CUERVO FEDERAL #020H (06.18.2020)	Sampling Condition:	Cool & Intact
Project Number:	1244	Sample Received By:	Shalyn Rodriguez
Project Location:	CIMAREX - LEA CO, NEW MEXICO		

#### Sample ID: H - 2 (0-0.5') (H231211-13)

BTEX 8021B	mg	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2023	ND	2.11	106	2.00	4.61	
Toluene*	<0.050	0.050	03/17/2023	ND	2.18	109	2.00	5.66	
Ethylbenzene*	<0.050	0.050	03/17/2023	ND	2.14	107	2.00	6.29	
Total Xylenes*	<0.150	0.150	03/17/2023	ND	6.62	110	6.00	6.42	
Total BTEX	<0.300	0.300	03/17/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.5	% 71.5-13	4						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	03/20/2023	ND	416	104	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2023	ND	173	86.4	200	5.93	
DRO >C10-C28*	<10.0	10.0	03/17/2023	ND	191	95.6	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	03/17/2023	ND					
Surrogate: 1-Chlorooctane	67.8	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	76.5	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/16/2023	Sampling Date:	03/16/2023
Reported:	03/20/2023	Sampling Type:	Soil
Project Name:	CUERVO FEDERAL #020H (06.18.2020)	Sampling Condition:	Cool & Intact
Project Number:	1244	Sample Received By:	Shalyn Rodriguez
Project Location:	CIMAREX - LEA CO, NEW MEXICO		

#### Sample ID: H - 3 (0-0.5') (H231211-14)

BTEX 8021B	mg	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2023	ND	2.11	106	2.00	4.61	
Toluene*	<0.050	0.050	03/17/2023	ND	2.18	109	2.00	5.66	
Ethylbenzene*	<0.050	0.050	03/17/2023	ND	2.14	107	2.00	6.29	
Total Xylenes*	<0.150	0.150	03/17/2023	ND	6.62	110	6.00	6.42	
Total BTEX	<0.300	0.300	03/17/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.2	% 71.5-13	4						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	03/20/2023	ND	400	100	400	3.92	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2023	ND	173	86.4	200	5.93	
DRO >C10-C28*	<10.0	10.0	03/17/2023	ND	191	95.6	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	03/17/2023	ND					
Surrogate: 1-Chlorooctane	83.9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	96.5	% 49.1-14	8						

#### Cardinal Laboratories

\*=Accredited Analyte

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Received:	03/16/2023	Sampling Date:	03/16/2023
Reported:	03/20/2023	Sampling Type:	Soil
Project Name:	CUERVO FEDERAL #020H (06.18.2020)	Sampling Condition:	Cool & Intact
Project Number:	1244	Sample Received By:	Shalyn Rodriguez
Project Location:	CIMAREX - LEA CO, NEW MEXICO		

#### Sample ID: H - 4 (0-0.5') (H231211-15)

BTEX 8021B	mg	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2023	ND	2.11	106	2.00	4.61	
Toluene*	<0.050	0.050	03/17/2023	ND	2.18	109	2.00	5.66	
Ethylbenzene*	<0.050	0.050	03/17/2023	ND	2.14	107	2.00	6.29	
Total Xylenes*	<0.150	0.150	03/17/2023	ND	6.62	110	6.00	6.42	
Total BTEX	<0.300	0.300	03/17/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.4	% 71.5-13	4						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/20/2023	ND	400	100	400	3.92	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2023	ND	173	86.4	200	5.93	
DRO >C10-C28*	<10.0	10.0	03/17/2023	ND	191	95.6	200	9.93	
EXT DRO >C28-C36	<10.0	10.0	03/17/2023	ND					
Surrogate: 1-Chlorooctane	75.8	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	86.5	% 49.1-14	8						

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#### **Notes and Definitions**

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

#### Cardinal Laboratories

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WORN OTHER NO.			

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## Received by OCD: 5/1/2023 3:08:14 PM

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X	11	Comments:	S-3 (1.0-1.5)	S-3 (0.5'-1')	S-3 (0-0.5')	S-2 (1.0'-1.5")	S-2 (0.5'-1')	S-2 (0-0.5')	S-1 (1.5-2.0')	S-1 (1.0'-1.5')	S-1 (0.5'-1')	S-1 (0-0.5')	Sample Identification	Total Containers:	Sample Custody Seais:	Cooler Custody Seals:	Received Intact:	SAMPLE RECEIPT	PO #	Sampler's Name:	Project Location	Project Number:	Project Name:	Phone:	City, State ZIP:	Address:	Company Name:	Project Manager:	
10	/		-1.5')	-1")	).5")	-1.5')	i-1')	).5')	·2.0')	-1.5')	1-1")	).5")	tification		s: Yes	: Yes					Le		Cuervo	432-813-8988	Midland, TX 79701	310 W Wall St Ste 415	Carmona Resources	Ashton Thielke	
V	Relinquished		3/16/2023	3/16/2023	3/16/2023	3/16/2023	3/16/2023	3/16/2023	3/16/2023	3/16/2023	3/16/2023	3/16/2023	Date	(	No N/A	-	Yes No	Temp Blank:		GPJ/KB	Lea County, New Mexico	1244	Cuervo Federal #020H (06.18.2020)	88	79701	St Ste 415	esources	lke	
X	Retinquished by: (Signature)						~	~					Time	Corrected Temperature:	Temperature Reading:	Correction Factor:	Thermometer ID:	Yes No			Mexico	Pad	(06.18.2020)						
	(4		×	× ×	×	×	×	×	×	×	×	×	Soil	mperature:	Reading:	actor:	r ID:	Wet Ice		L	Due Date:	✓ Routine		ц.					
				-									Water	-0	,0	-0	EN	Yes			N	Rush	Turn Around	Email: laci.luig@coterra.com ashton.thielke@coterra.com	City, State ZIP	Address:	Compa	Bill to: (if different)	
			G	۰ ۵	G	G	G	G	G	G	G	G	Grab/ Comp	.dc	1,4,1	- 62		No			Normal	sh		a@coterra.	ate ZIP:	S:	Company Name:	f different)	
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	Date/Time		XXX	+	××	××	××	××	××	××	××	××	TPI	H 80'	-		( 802 RO +	DRO	) + I	IRO	)			on.thiel	idland, T	00 N Ma	Cimarex Energy	Laci Luig	
456			×	+	+		×	×	×	×	×	×		_	С	hlori	ide 4	500						ke@cotei	Midland, TX 79701	600 N Marienfield St, Suite 600	nergy		
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lod														-		•							ANALY						
pro	Re			-	-													)					ANALYSIS REQUEST						
We	Received by: (Signature)																						QUEST	Delive	Repo	State	Progr		
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																								A			RP D	lork Orc	
			╟	+		$\vdash$								NaO	Zn A	Na <sub>2</sub> S	NaH	H <sub>3</sub> P(	H <sub>2</sub> SI	HCL	Coo	Non		ADaPT 🗆	ST/UST		Program: UST/PST PRP rownfields RC	Work Order Comments	-
													Sample	H+Ascor	Zn Acetate+NaOH: Zn	Na2S2O3: NaSO3	NaHSO4: NABIS	H <sub>3</sub> PO <sub>4</sub> : HP	H <sub>2</sub> S0 <sub>4</sub> : H <sub>2</sub>	HCL: HC	Cool: Cool	None: NO	Preser	Other:	RRP		s RR	ments	rage
	Date/Time												Sample Comments	NaOH+Ascorbic Acid: SAPC	aOH: Zn	SO3	SIB		NaO	HNO	MeO.	DIW	Preservative Codes	er:		I			
	ime												ents	SAPC					NaOH: Na	HNO3: HN	MeOH: Me	DI Water: H <sub>2</sub> O	odes			1	Iperfund		
		L					L					L										-				1			1

# Chain of Custody

Work Order No:

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											- ago	
Project Manager:	Ashton Thielke				Bill to: (if different)		Laci Luig			Work (	Work Order Comments	
Company Name:	Carmona Resources	ources			Company Name		Cimarex Energy	nergy		Program: UST/PST PRP rownfields RC	Frownfields RC	perfund
Address:	310 W Wall St Ste 415	Ste 415			Address:		00 N Mari	enfield St	600 N Marienfield St, Suite 600	State of Project:		
City, State ZIP:	Midland, TX 79701	9701			City, State ZIP:	2	Midland, TX 79701	X 79701		Reporting:Level II Level III ST/UST RRP	ST/UST RRP	
Phone:	432-813-8988			Email:	Email: aci.luig@coterra.com ashton.thielke@coterra.com	rra.com ash	ton.thielk	e@coter	rra.com	Deliverables: EDD	ADaPT  Other:	
Project Name:	Cuervo Fe	Cuervo Federal #020H (06.18.2020)	06.18.2020)	Turn	Turn Around				ANALYSIS REQUEST	QUEST	Preservative Codes	ive Codes
Project Number:		1244		✓ Routine	Rush	Pres. Code					None: NO	DI Water: H <sub>2</sub> O
Project Location	Lea (	Lea County, New Mexico	lexico	Due Date:	Normal						Cool: Cool	MeOH: Me
Sampler's Name:		<b>GPJ/KB</b>					IRO)				HCL: HC	HNO3: HN
PO #:						rs	) + M				H <sub>2</sub> S0 <sub>4</sub> : H <sub>2</sub>	NaOH: Na
SAMPLE RECEIPT		Temp Blank:	Yes No	Wet Ice:	Yes No	ietei		600			H <sub>3</sub> PO <sub>4</sub> : HP	
Received Intact:		es No	Thermometer ID:			iram	802	de 45			NaHSO4: NABIS	
Cooler Custody Seals:	Y N	NO NIA	Correction Factor:	DI.	-0.02	Pa	-	lorio			Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>	
Sample Custody Seals		No) NIA	Temperature Reading:	ading:	0.4%			Ch			Zn Acetate+NaOH: Zn	H: Zn
Total Containers:		(	Corrected Temperature:	erature:	-0.ac	<u> </u>	801				NaOH+Ascorbic Acid: SAPC	Acid: SAPC
Sample Identification	ntification	Date	Time	Soil	Water Comp	p Cont	TPI				Sample Comments	omments
S-3 (1.5'-2.0')	5'-2.0')	3/16/2023		×	G	1	×	×				
H-1 (0-0.5')	-0.5')	3/16/2023		×	G	1	×	×				
H-2 (0-0.5')	-0.5')	3/16/2023		×	G	1	×	×				
H-3 (0-0.5')	-0.5')	3/16/2023		×	9	1	X X	×				
H-4 (0-0.5')	-0.5')	3/16/2023		×	G	1	××	×				
							-					
							-					
Comments:												
	V'A	Relinquished by: (Signature)	y:(Signature)			D	Date/Time		Rei	Received by: (Signature)		Date/Time
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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

Operator:	OGRID:
CIMAREX ENERGY CO. OF COLORADO	162683
6001 Deauville Blvd, Ste 300N	Action Number:
Midland, TX 79706	212316
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By Condition

We have received your closure report and final C-141 for Incident #NRM2017853957 CUERVO FEDERAL 20H, thank you. This closure is approved. 9/14/2023 rhamlet

CONDITIONS

Action 212316

Condition Date