



SITE INFORMATION

Closure Report
Blue Steel 21 Fed Com TB
Incident #: NAPP2414240102
Eddy County, New Mexico
Unit A Sec 28 T23S R29E
32.2797505°, -103.9840404°

Produced Water Release
Point of Release: Equipment Failure
Release Date: 05/19/2024
Volume Released: 120 barrels of Produced Water
Volume Recovered: 120 barrels of Produced Water

CARMONA RESOURCES



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

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



TABLE OF CONTENTS

1.0 SITE INFORMATION AND BACKGROUND

2.0 SITE CHARACTERIZATION AND GROUNDWATER

3.0 NMAC REGULATORY CRITERIA

4.0 LINER INSPECTION/SITE ASSESSMENT ACTIVITIES

5.0 CONCLUSIONS

FIGURES

FIGURE 1 OVERVIEW

FIGURE 2 TOPOGRAPHIC

FIGURE 3A-3B SAMPLE LOCATION/SECONDARY CONTAINMENT MAP

APPENDICES

APPENDIX A TABLE

APPENDIX B PHOTOS

APPENDIX C N.O.R./INITIAL C-141/SAMPLING NOTIFICATION/LINER
INSPECTION NOTIFICATION

APPENDIX D SITE CHARACTERIZATION AND GROUNDWATER

APPENDIX E LABORATORY REPORTS



July 18, 2024

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

Re: Closure Report
Blue Steel 21 Fed Com TB
Marathon Oil Corporation
Incident ID: NAPP2414240102
Site Location: Unit A, S28, T23S, R29E
(Lat 32.2797505°, Long -103.9840404°)
Eddy County, New Mexico

Mr. Bratcher:

On behalf of Marathon Oil Corporation (Marathon), Carmona Resources, LLC has prepared this letter to document site activities for the Blue Steel 21 Fed Com TB. The site is located at 32.2797505°, -103.9840404° within Unit A, S28, T23S, R29E, 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 May 19, 2024, caused by failure of a seal on a transfer pump. It resulted in the release of approximately one hundred and twenty (120) barrels of produced water inside the containment and zero-point-two-five barrels outside containment, and approximately one hundred and twenty (120) barrels of produced water were recovered within the lined facility. See Figure 3. The initial C-141 form is attached in Appendix B.

2.0 Site Characterization and Groundwater

The site is located within a medium karst area. Based on a review of the New Mexico Office of State Engineers and USGS databases, there is one known water sources are within a 0.50-mile radius of the location. The closest well is located approximately 0.10 miles northwest of the site in S28, T23S, R29E and was drilled in 2000. The well has a reported depth to groundwater of 18.0 feet below the ground surface (ft bgs). A copy of the associated point of diversion is attached in Appendix C.

3.0 NMAC Regulatory Criteria

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

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



4.0 Liner Inspection Activities/Site Assessment Activities

On July 11, 2024, Carmona Resources, LLC conducted liner inspection activities to assess the liner's integrity within the facility. Before performing the liner inspection, the NMOCD division office was notified via NMOCD web portal on July 9, 2024, per Subsection D of 19.15.29.12 NMAC. See Appendix C. Carmona Resources, LLC personnel inspected the liner visually and determined it to be intact with no integrity issues.

Refer to the Photolog.

Carmona Resources personnel were on site June 21, 2024 to collect confirmation samples. Before collecting composite confirmation samples, the NMOCD division office was notified via NMOCD web portal on June 17, 2024, per Subsection D of 19.15.29.12 NMAC. See Appendix C. A total of one (1) floor confirmation sample was collected (CS-1), and four (4) sidewall samples (SW-1 through SW-4) 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 confirmation sample locations are shown in Figure 3B.

All final confirmation samples were below the regulatory requirements for TPH, BTEX, and chloride. Refer to Table 1.

5.0 Conclusions

Based on the liner inspection throughout the facility and the analytical data, no further actions are required at the site. The final C-141 is attached, and COG 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

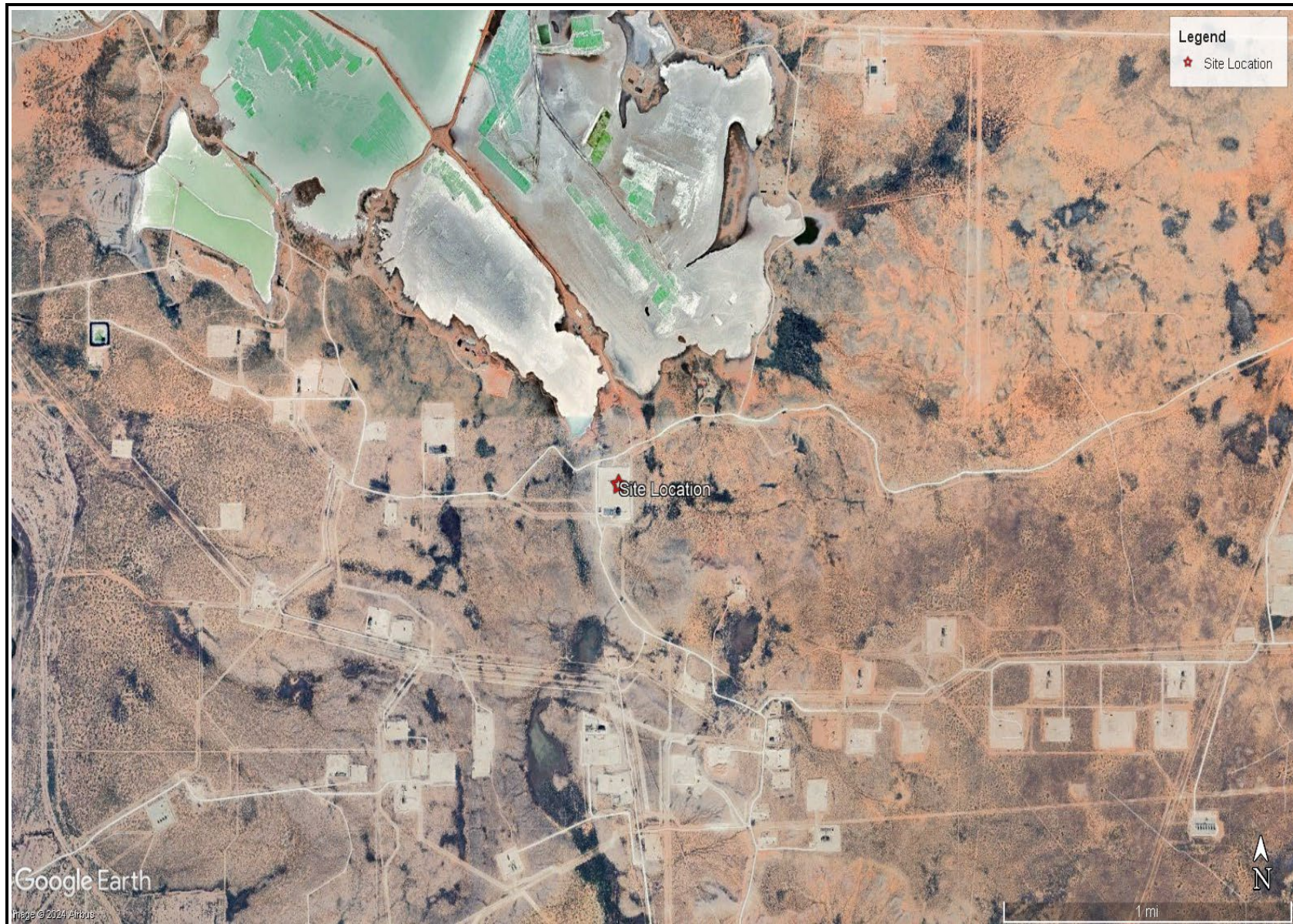
Clinton Merritt
Environmental Manager

Devin Dominguez
Sr. Project Manager

FIGURES

CARMONA RESOURCES

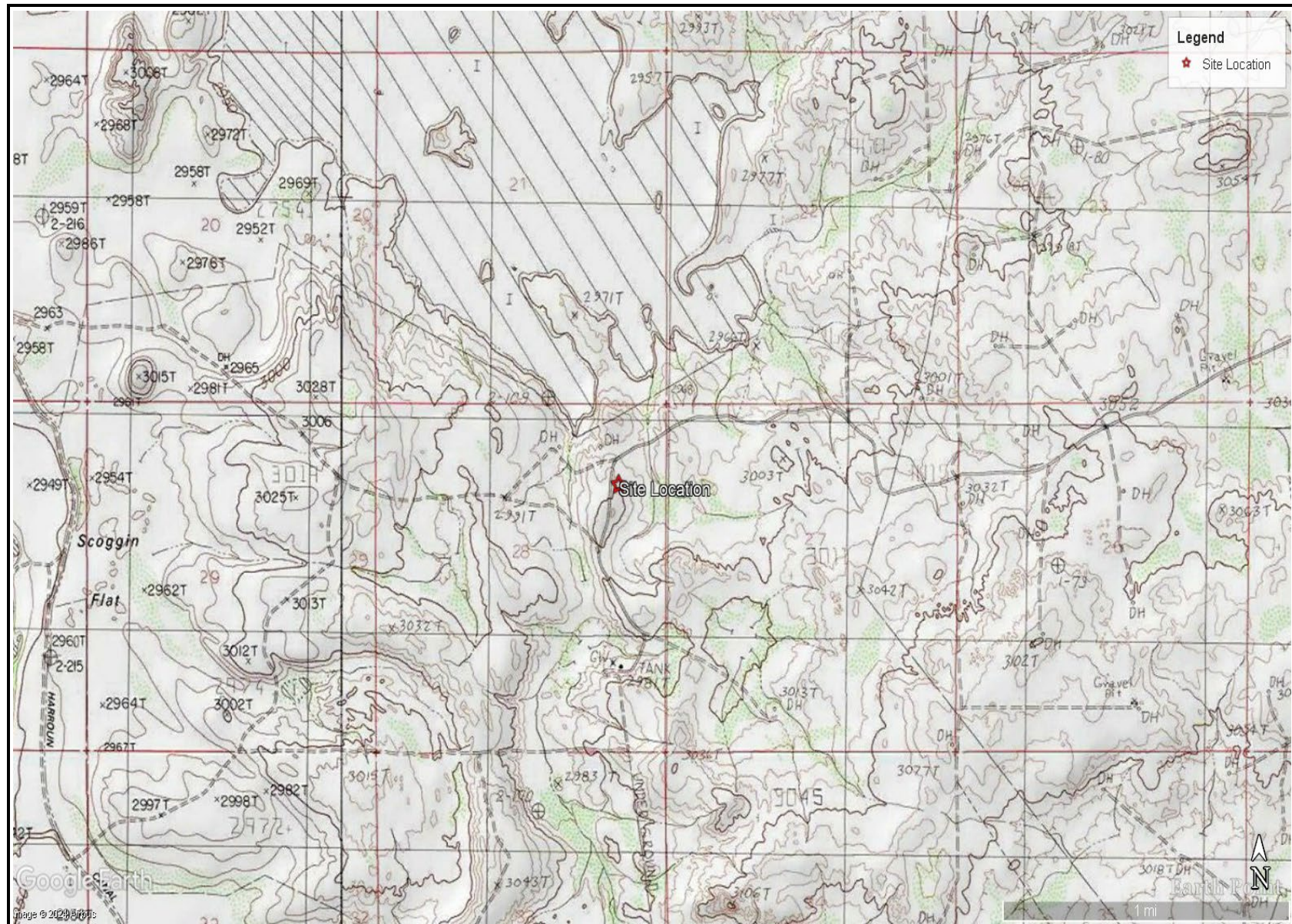




OVERVIEW MAP
MARATHON OIL CORPORATION
BLUE STEEL 21 FED COM TB
EDDY COUNTY, NEW MEXICO
32.2797505°, -103.9840404°



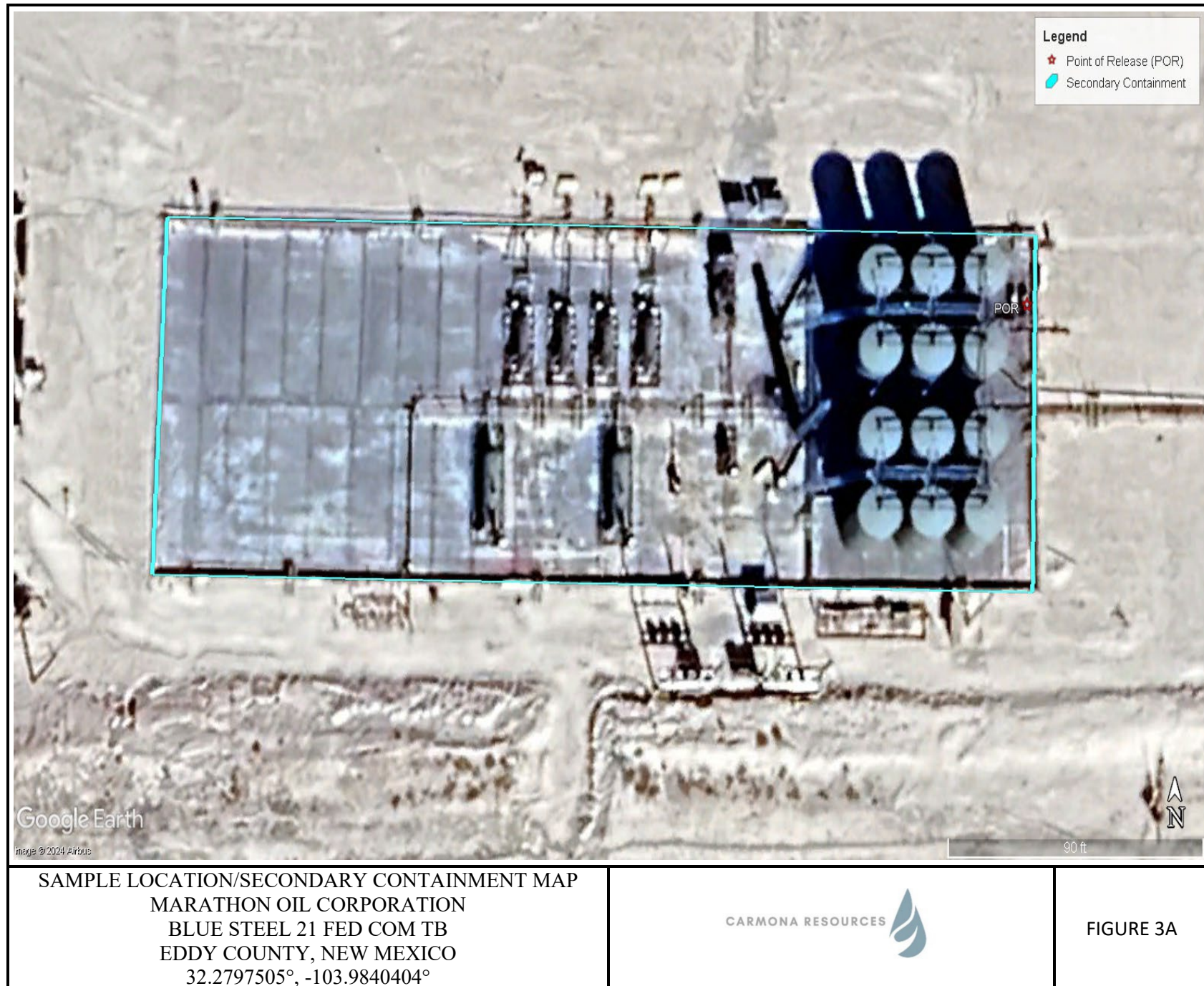
FIGURE 1

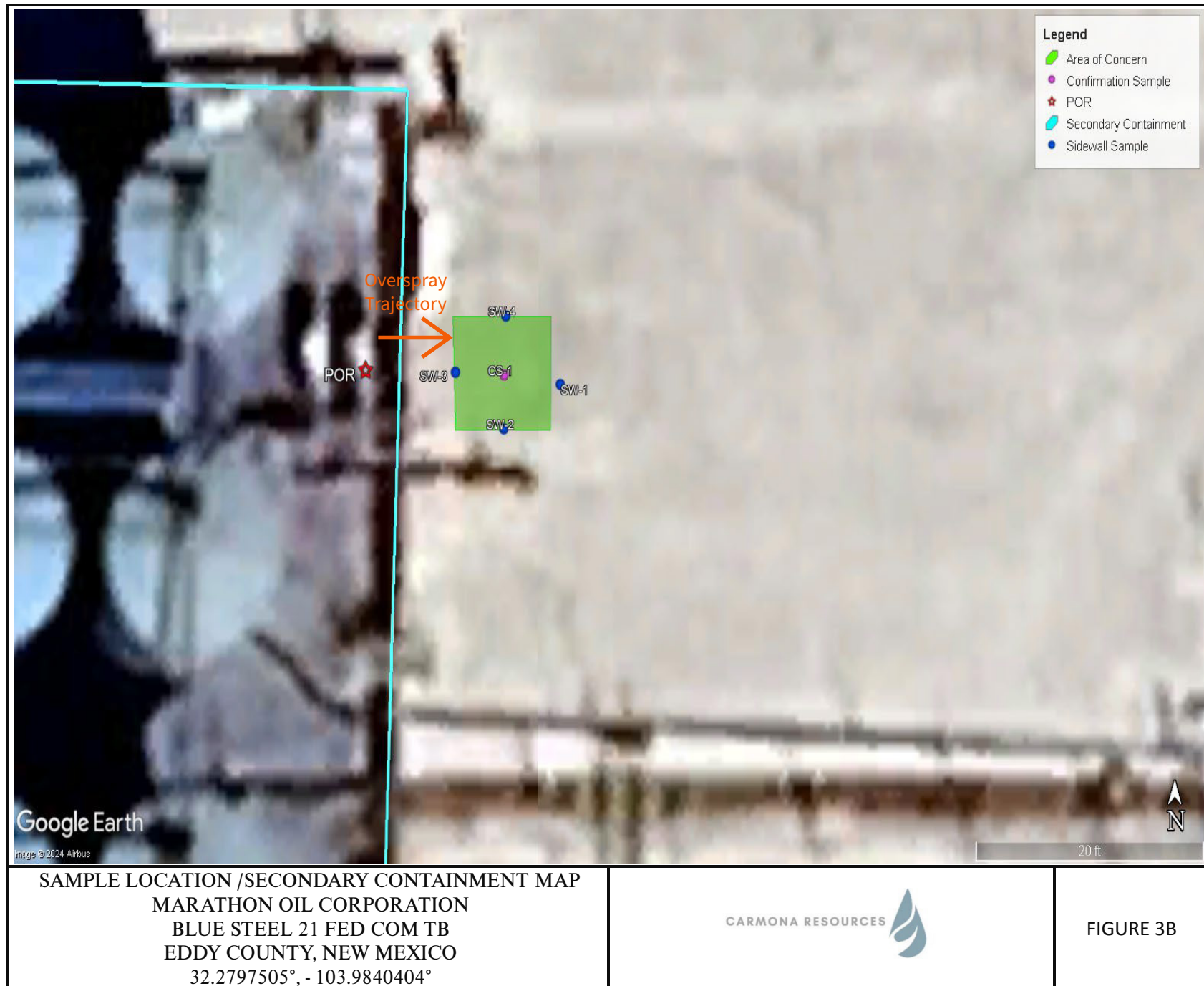


TOPOGRAPHIC MAP
 MARATHON OIL CORPORATION
 BLUE STEEL 21 FED COM TB
 EDDY COUNTY, NEW MEXICO
 32.2797505°, -103.9840404°



FIGURE 2





APPENDIX A

CARMONA RESOURCES



Table 1
Marathon Oil
Blue Steel 21 Fed Com TB
Eddy County, New Mexico

Sample ID	Date	Depth (ft)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	Total						
CS-1	6/21/2024	0-0.5	<49.7	<49.7	<49.7	<49.7	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	32.4
SW-1	6/21/2024	0-0.5	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	157
SW-2	6/21/2024	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	219
SW-3	6/21/2024	0-0.5	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	216
SW-4	6/21/2024	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	265
Regulatory Criteria^A						100 mg/kg	10 mg/kg				50 mg/kg	600 mg/kg

(-) Not Analyzed

^A – Table 1 - 19.15.29 NMAC

mg/kg - milligram per kilogram

TPH - Total Petroleum Hydrocarbons

ft - feet

(S) Sample Point

(H) Horizontal Sample

APPENDIX B

CARMONA RESOURCES



PHOTOGRAPHIC LOG

Marathon Oil Corporation

Photograph No. 1

Facility: Blue Steel 21 Fed Com TB

County: Eddy County, New Mexico

Description:

View Southeast, area of facility sign.



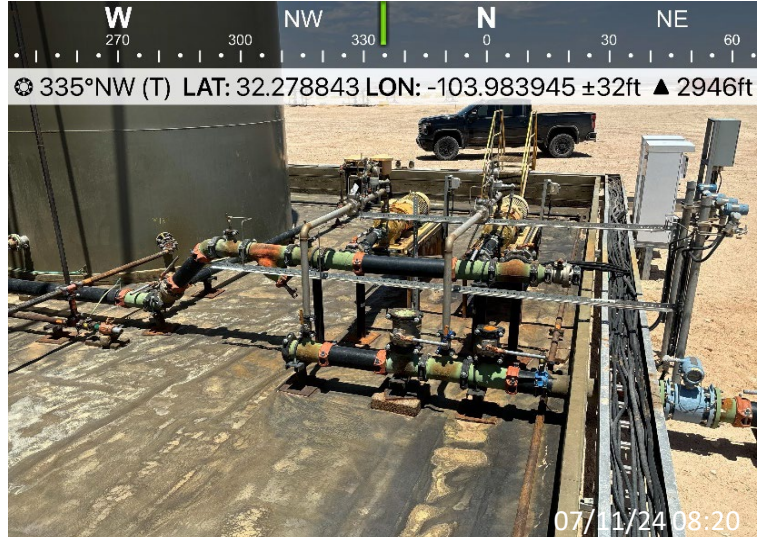
Photograph No. 2

Facility: Blue Steel 21 Fed Com TB

County: Eddy County, New Mexico

Description:

View Northwest area of lined facility.



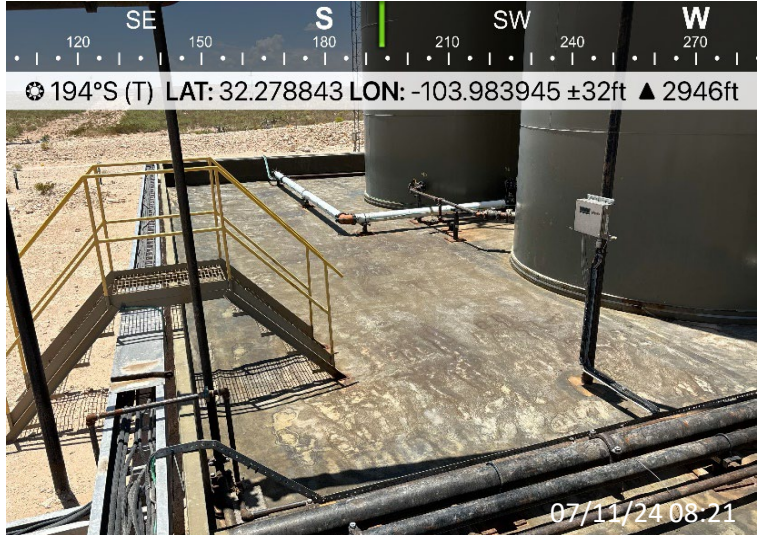
Photograph No. 3

Facility: Blue Steel 21 Fed Com TB

County: Eddy County, New Mexico

Description:

View South, area of lined facility.



PHOTOGRAPHIC LOG

Marathon Oil Corporation

Photograph No. 4

Facility: Blue Steel 21 Fed Com TB

County: Eddy County, New Mexico

Description:

View West, area of lined facility.



Photograph No. 5

Facility: Blue Steel 21 Fed Com TB

County: Eddy County, New Mexico

Description:

View West, area of lined facility.



Photograph No. 6

Facility: Blue Steel 21 Fed Com TB

County: Eddy County, New Mexico

Description:

View East, area of lined facility.



PHOTOGRAPHIC LOG

Marathon Oil Corporation

Photograph No. 7

Facility: Blue Steel 21 Fed Com TB

County: Eddy County, New Mexico

Description:

View West, area of lined facility.



Photograph No. 8

Facility: Blue Steel 21 Fed Com TB

County: Eddy County, New Mexico

Description:

View Northwest, area of lined facility.



Photograph No. 9

Facility: Blue Steel 21 Fed Com TB

County: Eddy County, New Mexico

Description:

View Southeast, area of lined facility.



PHOTOGRAPHIC LOG

Marathon Oil Corporation

Photograph No. 10

Facility: Blue Steel 21 Fed Com TB

County: Eddy County, New Mexico

Description:

View South, area of CS-1.



Photograph No. 11

Facility: Blue Steel 21 Fed Com TB

County: Eddy County, New Mexico

Description:

View Northwest, area of CS-1.



APPENDIX C

CARMONA RESOURCES



District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico

Energy, Minerals and Natural Resources

Oil Conservation Division

1220 S. St Francis Dr.

Santa Fe, NM 87505

QUESTIONS

Action 346282

QUESTIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 346282
	Action Type: [NOTIFY] Notification Of Release (NOR)

QUESTIONS

Location of Release Source	
Please answer all the questions in this group.	
Site Name	BLUE STEEL 21 FED COM TB
Date Release Discovered	05/19/2024
Surface Owner	Federal

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure Pump Produced Water Released: 240 BBL Recovered: 240 BBL Lost: 0 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 2

Action 346282

QUESTIONS (continued)

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 346282
	Action Type: [NOTIFY] Notification Of Release (NOR)

QUESTIONS

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

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

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

ACKNOWLEDGMENTS

Action 346282

ACKNOWLEDGMENTS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 346282
	Action Type: [NOTIFY] Notification Of Release (NOR)

ACKNOWLEDGMENTS

<input checked="" type="checkbox"/>	I acknowledge that I am authorized to submit notification of a release on behalf of my operator.
<input checked="" type="checkbox"/>	I acknowledge that upon submitting this application, I will be creating a new incident file (assigned to my operator) to track the notification(s) and corrective action(s) for a release, pursuant to NMAC 19.15.29.
<input checked="" type="checkbox"/>	I acknowledge that creating a new incident file will require my operator to file subsequent submission(s) of form "C-141, Application for administrative approval of a release notification and corrective action", pursuant to NMAC 19.15.29.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	I acknowledge the fact that 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.
<input checked="" type="checkbox"/>	I acknowledge the fact that, 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.

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 346282

CONDITIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 346282
	Action Type: [NOTIFY] Notification Of Release (NOR)

CONDITIONS

Created By	Condition	Condition Date
icastro	When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.	5/21/2024

OCD Permitting

Home Operator Data Action Status Action Search Results Action Status Item Details

[C-141] Initial C-141 (C-141-V-INITIAL) Application

Submission Information

Submission ID:	347385	Districts:	Artesia
Operator:	[372098] MARATHON OIL PERMIAN LLC	Counties:	Eddy
Description:	MARATHON OIL PERMIAN LLC [372098] , BLUE STEEL 21 FED COM TB , nAPP2414240102		
Status:	APPROVED		
Status Date:	05/23/2024		
References (2):	fAPP2126035874, nAPP2414240102		

Forms

Attachments: [Volume Calculation](#)

Questions

Prerequisites

Incident ID (n#)	nAPP2414240102
Incident Name	NAPP2414240102 BLUE STEEL 21 FED COM TB @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Received
Incident Facility	[fAPP2126035874] BLUE STEEL 21 FED COM TB

Location of Release Source

Please answer all the questions in this group.

Site Name	BLUE STEEL 21 FED COM TB
Date Release Discovered	05/19/2024
Surface Owner	Federal

Incident Details

Please answer all the questions in this group.

Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No

Nature and Volume of Release

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure Pump Produced Water Released: 240 BBL Recovered: 240 BBL Lost: 0 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there <div>additional details</div> for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Approximately 120 bbls contained inside lined secondary containment and approximately 0.25 bbls over spray This was caused due to a water transfer pump seal failure.

Nature and Volume of Release (continued)

Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a “gas only” report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. “Major release” determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.

With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.

Initial Response

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

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed the follow-up C-141 submission.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or f 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 shc 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 do operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Isaac Castro Email: icastro@marathonoil.com Date: 05/23/2024
--	--

Site Characterization

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Not answered.
What method was used to determine the depth to ground water	Not answered.
Did this release impact groundwater or surface water	Not answered.
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Not answered.
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Not answered.
An occupied permanent residence, school, hospital, institution, or church	Not answered.

A subsurface mine	Not answered.
An (non-karst) unstable area	Not answered.
Categorize the risk of this well / site being in a karst geology	Not answered.
A 100-year floodplain	Not answered.
Did the release impact areas not on an exploration, development, production, or storage site	Not answered.

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission No

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan, then it should consult with the division to determine if another remediation plan submission is required.

Acknowledgments

This submission type does not have acknowledgments, at this time.

Comments

No comments found for this submission.

Conditions

Summary: scott.rodgers (5/23/2024), None

Reasons

No reasons found for this submission.

Go Back

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

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

QUESTIONS

Action 349054

QUESTIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 349054
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2414240102
Incident Name	NAPP2414240102 BLUE STEEL 21 FED COM TB @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved
Incident Facility	[fAPP2126035874] BLUE STEEL 21 FED COM TB

Location of Release Source	
Site Name	BLUE STEEL 21 FED COM TB
Date Release Discovered	05/19/2024
Surface Owner	Federal

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	16
What is the estimated number of samples that will be gathered	5
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	06/21/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Clinton Merritt 432-813-9044
Please provide any information necessary for navigation to sampling site	From the intersection of CR 741 and CR 742, travel east on CR 742 for 1.81 miles. Turn south onto unmarked lease road and travel for 1.83 miles. Battery is on the south side of the lease road.

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 349054

CONDITIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 349054
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
icastro	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	6/17/2024

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

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

QUESTIONS

Action 360886

QUESTIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 360886
	Action Type: [NOTIFY] Notification Of Liner Inspection (C-141L)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2414240102
Incident Name	NAPP2414240102 BLUE STEEL 21 FED COM TB @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved
Incident Facility	[fAPP2126035874] BLUE STEEL 21 FED COM TB

Location of Release Source	
Site Name	BLUE STEEL 21 FED COM TB
Date Release Discovered	05/19/2024
Surface Owner	Federal

Liner Inspection Event Information	
Please answer all the questions in this group.	
What is the liner inspection surface area in square feet	33,056
Have all the impacted materials been removed from the liner	Yes
Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	07/11/2024
Time liner inspection will commence	08:00 AM
Please provide any information necessary for observers to liner inspection	Clinton Merritt 432-813-9044
Please provide any information necessary for navigation to liner inspection site	From the intersection of CR 741 and CR 742, travel east on CR 742 for 1.81 miles. Turn south onto unmarked lease road and travel for 1.83 miles. Battery is on the south side of the lease road.

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 360886

CONDITIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 360886
	Action Type: [NOTIFY] Notification Of Liner Inspection (C-141L)

CONDITIONS

Created By	Condition	Condition Date
cswansonsteege	Failure to notify the OCD of liner inspections including any changes in date/time per the requirements of 19.15.29.11.A(5)(a)(ii) NMAC, may result in the inspection not being accepted.	7/9/2024

APPENDIX D

CARMONA RESOURCES



Nearest water well

Marathon Oil Permian LLC

Legend



- 0.10 Miles
- 0.50 Mile Radius
- BLUE STEEL 21 FED COM TB (05.19.2024)
- NMSEO Water Well



Medium Karst

Marathon Oil Permian LLC

Legend

-  BLUE STEEL 21 FED COM TB (05.19.2024)
-  Medium


BLUE STEEL 21 FED COM TB (05.19.2024)





New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 02707	C	ED		2	28	23S	29E			595535	3571868*	140	40	18	22
C 01627	C	ED		1	4	4	28	23S	29E	595649	3570959*	938	170		
C 02721	CUB	ED		2	3	21	23S	29E		594915	3572879*	1239	150		
C 02797	CUB	ED		2	3	22	23S	29E		596540	3572895*	1322	200		
C 02613	CUB	ED		4	4	2	20	23S	29E	594203	3573176*	1947	400		
C 02720	CUB	ED		2	1	21	23S	29E		594911	3573690*	1947	150		
C 03057 EXPLORE	CUB	ED		4	1	1	21	23S	29E	594605	3573586*	1997	150		

Average Depth to Water: **18 feet**

Minimum Depth: **18 feet**

Maximum Depth: **18 feet**

Record Count: 7

UTM NAD83 Radius Search (in meters):

Easting (X): 595672

Northing (Y): 3571897

Radius: 2000

*UTM location was derived from PLSS - see Help

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

10/18/23 12:53 PM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER



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 02707			2	28	23S	29E	595535	3571868*
<hr/>									
Driller License: 1348		Driller Company:		TAYLOR WATER WELL SERVICE					
Driller Name:									
Drill Start Date: 06/09/2000		Drill Finish Date:		06/09/2000		Plug Date:			
Log File Date: 08/28/2000		PCW Rcv Date:				Source: Shallow			
Pump Type:		Pipe Discharge Size:				Estimated Yield: 700 GPM			
Casing Size: 2.38		Depth Well:		40 feet		Depth Water: 18 feet			
<hr/>									
Water Bearing Stratifications:				Top	Bottom	Description			
				36	78	Limestone/Dolomite/Chalk			
<hr/>									
Casing Perforations:				Top	Bottom				
				35	40				
<hr/>									

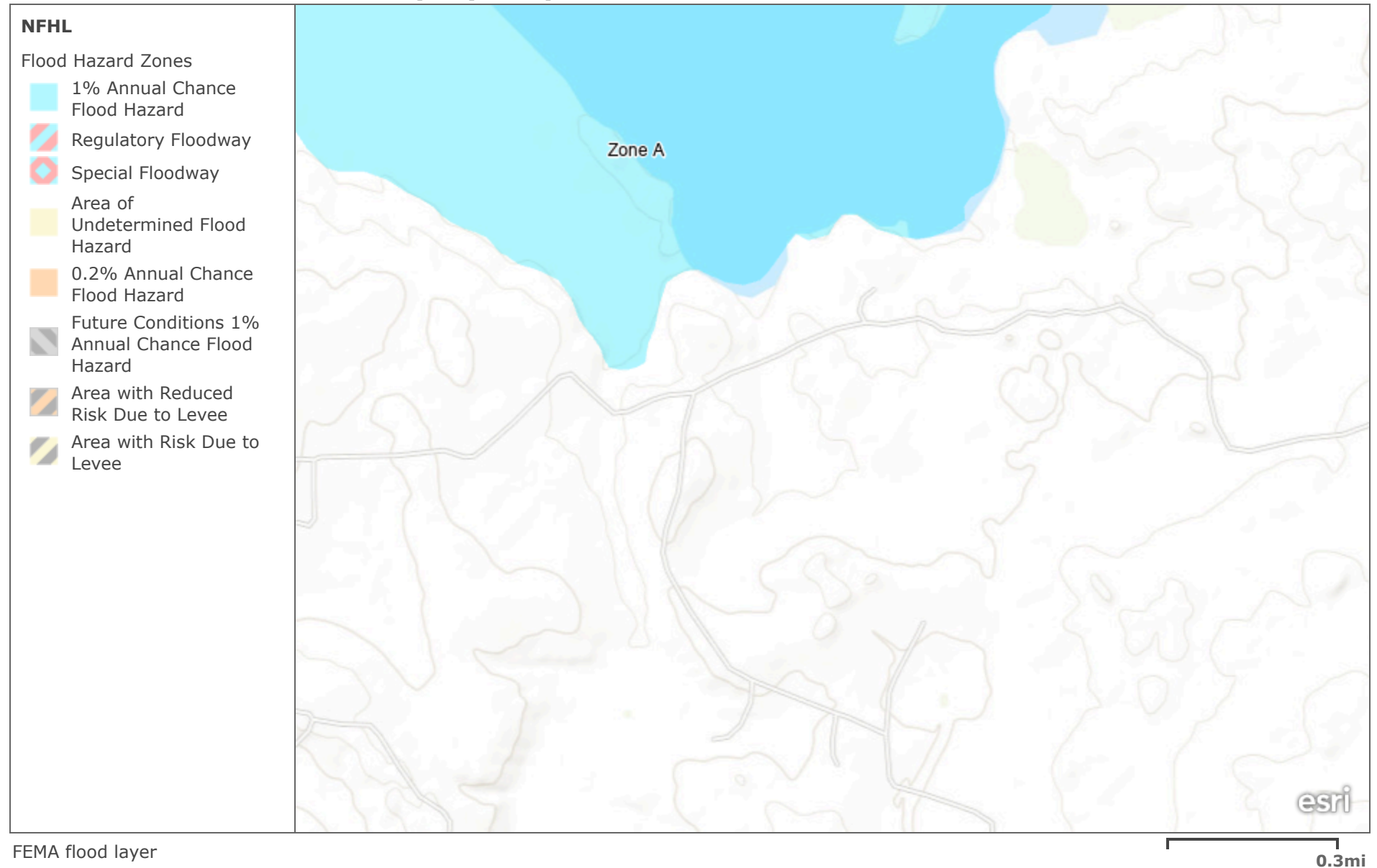
*UTM location was derived from PLSS - see Help

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

10/18/23 12:53 PM

POINT OF DIVERSION SUMMARY

FEMA National Flood Hazard Layer (NFHL)



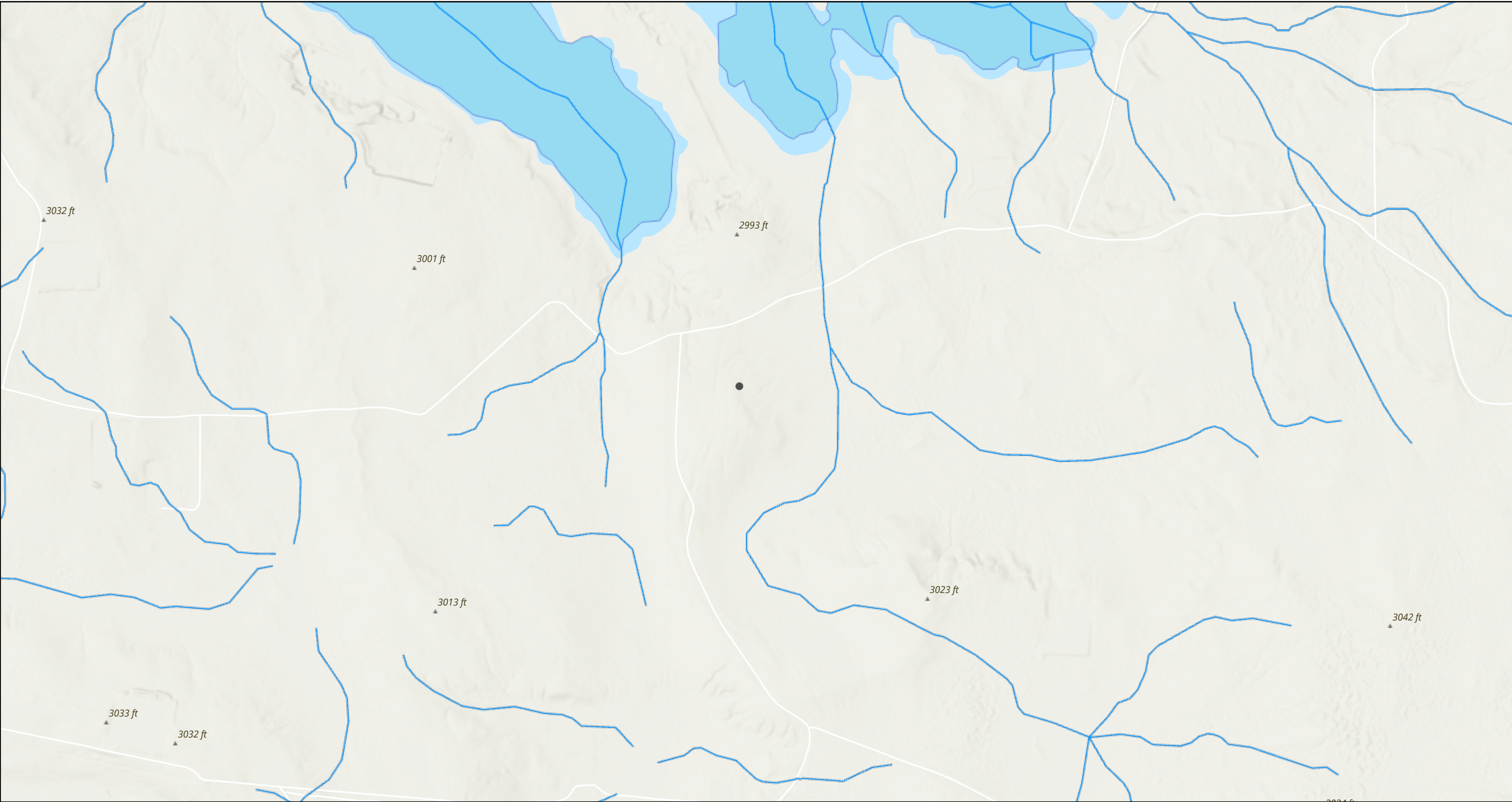
Bureau of Land Management, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA

FEMA National Flood Hazard Layer (NFHL)



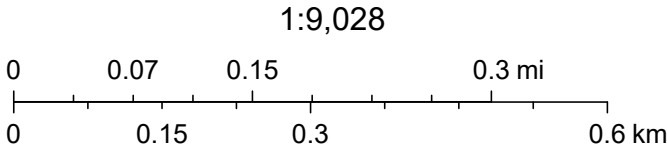
Maxar | Esri Community Maps Contributors, New Mexico State University, Texas Parks & Wildlife, © OpenStreetMap, Microsoft, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

BLUE STEEL 21 FED COM TB (05.19.2024)



5/23/2024, 9:51:06 AM

- OSW Water Bodys
- OSE Streams



Esri, NASA, NGA, USGS, FEMA, Esri Community Maps Contributors, New Mexico State University, Texas Parks & Wildlife, © OpenStreetMap, Microsoft, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

APPENDIX E

CARMONA RESOURCES





Environment Testing

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

ANALYTICAL REPORT

PREPARED FOR

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

Generated 7/17/2024 12:11:24 PM Revision 1

JOB DESCRIPTION

Blue Steel 21 FED COM TB
Eddy County, New Mexico

JOB NUMBER

880-45246-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



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

Generated
7/17/2024 12:11:24 PM
Revision 1

Client: Carmona Resources
Project/Site: Blue Steel 21 FED COM TB

Laboratory Job ID: 880-45246-1
SDG: Eddy County, New Mexico

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	10
QC Sample Results	11
QC Association Summary	15
Lab Chronicle	17
Certification Summary	19
Method Summary	20
Sample Summary	21
Chain of Custody	22
Receipt Checklists	23

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

Definitions/Glossary

Client: Carmona Resources
Project/Site: Blue Steel 21 FED COM TB

Job ID: 880-45246-1
SDG: Eddy County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

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

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: Blue Steel 21 FED COM TB

Job ID: 880-45246-1

Job ID: 880-45246-1

Eurofins Midland

Job Narrative
880-45246-1

REVISION

The report being provided is a revision of the original report sent on 6/28/2024. The report (revision 1) is being revised due to Per client email, requesting sample ID correction. CS-4 to CS-1.

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

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

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

Receipt

The samples were received on 6/25/2024 1:25 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.2°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: CS-1 (0-6") (880-45246-1), SW-1 (0-6") (880-45246-2), SW-2 (0-6") (880-45246-3), SW-3 (0-6") (880-45246-4) and SW-4 (0-6") (880-45246-5).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-84169 and analytical batch 880-84246 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Diesel Range Organics

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-84146 and analytical batch 880-84289 was outside the upper control limits.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-84146 and analytical batch 880-84289 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

HPLC/IC

Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-84172 and analytical batch 880-84226 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.

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Blue Steel 21 FED COM TB

Job ID: 880-45246-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-45246-1

Date Collected: 06/21/24 00:00

Matrix: Solid

Date Received: 06/25/24 13:25

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		06/26/24 08:45	06/26/24 17:48	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/26/24 08:45	06/26/24 17:48	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/26/24 08:45	06/26/24 17:48	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/26/24 08:45	06/26/24 17:48	1
o-Xylene	<0.00199	U F1	0.00199		mg/Kg		06/26/24 08:45	06/26/24 17:48	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/26/24 08:45	06/26/24 17:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76		70 - 130	06/26/24 08:45	06/26/24 17:48	1
1,4-Difluorobenzene (Surr)	84		70 - 130	06/26/24 08:45	06/26/24 17:48	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			06/26/24 17:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			06/27/24 15:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		06/25/24 19:55	06/27/24 15:00	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		06/25/24 19:55	06/27/24 15:00	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/25/24 19:55	06/27/24 15:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		70 - 130	06/25/24 19:55	06/27/24 15:00	1
o-Terphenyl	79		70 - 130	06/25/24 19:55	06/27/24 15:00	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	32.4	F1	4.97		mg/Kg			06/27/24 00:31	1

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

Lab Sample ID: 880-45246-2

Date Collected: 06/21/24 00:00

Matrix: Solid

Date Received: 06/25/24 13:25

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		06/26/24 08:45	06/26/24 18:08	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/26/24 08:45	06/26/24 18:08	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/26/24 08:45	06/26/24 18:08	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/26/24 08:45	06/26/24 18:08	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/26/24 08:45	06/26/24 18:08	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/26/24 08:45	06/26/24 18:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	06/26/24 08:45	06/26/24 18:08	1
1,4-Difluorobenzene (Surr)	80		70 - 130	06/26/24 08:45	06/26/24 18:08	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Blue Steel 21 FED COM TB

Job ID: 880-45246-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-45246-2

Date Collected: 06/21/24 00:00

Matrix: Solid

Date Received: 06/25/24 13:25

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			06/26/24 18:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			06/27/24 15:20	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		06/25/24 19:55	06/27/24 15:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/25/24 19:55	06/27/24 15:20	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/25/24 19:55	06/27/24 15:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				06/25/24 19:55	06/27/24 15:20	1
o-Terphenyl	94		70 - 130				06/25/24 19:55	06/27/24 15:20	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	157		5.03		mg/Kg			06/27/24 00:49	1

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

Lab Sample ID: 880-45246-3

Date Collected: 06/21/24 00:00

Matrix: Solid

Date Received: 06/25/24 13:25

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		06/26/24 08:45	06/26/24 18:29	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/26/24 08:45	06/26/24 18:29	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/26/24 08:45	06/26/24 18:29	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		06/26/24 08:45	06/26/24 18:29	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/26/24 08:45	06/26/24 18:29	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		06/26/24 08:45	06/26/24 18:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130				06/26/24 08:45	06/26/24 18:29	1
1,4-Difluorobenzene (Surr)	87		70 - 130				06/26/24 08:45	06/26/24 18:29	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			06/26/24 18:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			06/27/24 16:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/25/24 19:55	06/27/24 16:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/25/24 19:55	06/27/24 16:02	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Blue Steel 21 FED COM TB

Job ID: 880-45246-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-45246-3

Date Collected: 06/21/24 00:00

Matrix: Solid

Date Received: 06/25/24 13:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/25/24 19:55	06/27/24 16:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				06/25/24 19:55	06/27/24 16:02	1
o-Terphenyl	99		70 - 130				06/25/24 19:55	06/27/24 16:02	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	219		4.96		mg/Kg			06/27/24 00:55	1

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

Lab Sample ID: 880-45246-4

Date Collected: 06/21/24 00:00

Matrix: Solid

Date Received: 06/25/24 13:25

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		06/26/24 08:45	06/26/24 18:50	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/26/24 08:45	06/26/24 18:50	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/26/24 08:45	06/26/24 18:50	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/26/24 08:45	06/26/24 18:50	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/26/24 08:45	06/26/24 18:50	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/26/24 08:45	06/26/24 18:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130				06/26/24 08:45	06/26/24 18:50	1
1,4-Difluorobenzene (Surr)	80		70 - 130				06/26/24 08:45	06/26/24 18:50	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			06/26/24 18:50	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			06/27/24 16:23	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		06/25/24 19:55	06/27/24 16:23	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/25/24 19:55	06/27/24 16:23	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/25/24 19:55	06/27/24 16:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				06/25/24 19:55	06/27/24 16:23	1
o-Terphenyl	96		70 - 130				06/25/24 19:55	06/27/24 16:23	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	216		5.02		mg/Kg			06/27/24 01:13	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Blue Steel 21 FED COM TB

Job ID: 880-45246-1
SDG: Eddy County, New Mexico

Client Sample ID: SW-4 (0-6")

Lab Sample ID: 880-45246-5

Date Collected: 06/21/24 00:00

Matrix: Solid

Date Received: 06/25/24 13:25

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		06/26/24 08:45	06/26/24 19:10	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/26/24 08:45	06/26/24 19:10	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/26/24 08:45	06/26/24 19:10	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		06/26/24 08:45	06/26/24 19:10	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/26/24 08:45	06/26/24 19:10	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		06/26/24 08:45	06/26/24 19:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	06/26/24 08:45	06/26/24 19:10	1
1,4-Difluorobenzene (Surr)	86		70 - 130	06/26/24 08:45	06/26/24 19:10	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			06/26/24 19:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			06/27/24 16:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/25/24 19:55	06/27/24 16:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/25/24 19:55	06/27/24 16:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/25/24 19:55	06/27/24 16:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	06/25/24 19:55	06/27/24 16:44	1
o-Terphenyl	99		70 - 130	06/25/24 19:55	06/27/24 16:44	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	265		4.98		mg/Kg			06/27/24 01:18	1

Eurofins Midland

Surrogate Summary

Client: Carmona Resources
Project/Site: Blue Steel 21 FED COM TB

Job ID: 880-45246-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
880-45246-1	CS-1 (0-6")	76	84
880-45246-1 MS	CS-1 (0-6")	88	104
880-45246-1 MSD	CS-1 (0-6")	103	101
880-45246-2	SW-1 (0-6")	96	80
880-45246-3	SW-2 (0-6")	87	87
880-45246-4	SW-3 (0-6")	87	80
880-45246-5	SW-4 (0-6")	89	86
LCS 880-84169/1-A	Lab Control Sample	81	103
LCSD 880-84169/2-A	Lab Control Sample Dup	102	96
MB 880-84169/5-A	Method Blank	71	93

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
880-45216-A-29-D MS	Matrix Spike	95	98
880-45216-A-29-E MSD	Matrix Spike Duplicate	94	96
880-45246-1	CS-1 (0-6")	77	79
880-45246-2	SW-1 (0-6")	88	94
880-45246-3	SW-2 (0-6")	92	99
880-45246-4	SW-3 (0-6")	89	96
880-45246-5	SW-4 (0-6")	92	99
LCS 880-84146/2-A	Lab Control Sample	128	126
LCSD 880-84146/3-A	Lab Control Sample Dup	117	123
MB 880-84146/1-A	Method Blank	136 S1+	150 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Blue Steel 21 FED COM TB

Job ID: 880-45246-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-84169/5-A
Matrix: Solid
Analysis Batch: 84246

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 84169

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/26/24 08:45	06/26/24 17:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/26/24 08:45	06/26/24 17:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/26/24 08:45	06/26/24 17:26	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/26/24 08:45	06/26/24 17:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/26/24 08:45	06/26/24 17:26	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/26/24 08:45	06/26/24 17:26	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	71		70 - 130				06/26/24 08:45	06/26/24 17:26	1
1,4-Difluorobenzene (Surr)	93		70 - 130				06/26/24 08:45	06/26/24 17:26	1

Lab Sample ID: LCS 880-84169/1-A
Matrix: Solid
Analysis Batch: 84246

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 84169

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08229		mg/Kg		82	70 - 130
Toluene	0.100	0.07645		mg/Kg		76	70 - 130
Ethylbenzene	0.100	0.08428		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	0.200	0.1535		mg/Kg		77	70 - 130
o-Xylene	0.100	0.07215		mg/Kg		72	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	81		70 - 130				
1,4-Difluorobenzene (Surr)	103		70 - 130				

Lab Sample ID: LCSD 880-84169/2-A
Matrix: Solid
Analysis Batch: 84246

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 84169

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.07917		mg/Kg		79	70 - 130	4	35
Toluene	0.100	0.07181		mg/Kg		72	70 - 130	6	35
Ethylbenzene	0.100	0.09634		mg/Kg		96	70 - 130	13	35
m-Xylene & p-Xylene	0.200	0.1750		mg/Kg		87	70 - 130	13	35
o-Xylene	0.100	0.08484		mg/Kg		85	70 - 130	16	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	102		70 - 130						
1,4-Difluorobenzene (Surr)	96		70 - 130						

Lab Sample ID: 880-45246-1 MS
Matrix: Solid
Analysis Batch: 84246

Client Sample ID: CS-1 (0-6")
Prep Type: Total/NA
Prep Batch: 84169

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.100	0.08252		mg/Kg		82	70 - 130
Toluene	<0.00199	U	0.100	0.07380		mg/Kg		74	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Blue Steel 21 FED COM TB

Job ID: 880-45246-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-45246-1 MS				Client Sample ID: CS-1 (0-6")			
Matrix: Solid				Prep Type: Total/NA			
Analysis Batch: 84246				Prep Batch: 84169			
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D %Rec %Rec Limits
Ethylbenzene	<0.00199	U	0.100	0.08162		mg/Kg	81 70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1426		mg/Kg	71 70 - 130
o-Xylene	<0.00199	U F1	0.100	0.06720	F1	mg/Kg	67 70 - 130
		MS MS					
Surrogate	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene (Surr)	88		70 - 130				
1,4-Difluorobenzene (Surr)	104		70 - 130				

Lab Sample ID: 880-45246-1 MSD				Client Sample ID: CS-1 (0-6")			
Matrix: Solid				Prep Type: Total/NA			
Analysis Batch: 84246				Prep Batch: 84169			
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D %Rec %Rec Limits RPD Limit
Benzene	<0.00199	U	0.0994	0.08551		mg/Kg	86 70 - 130 4 35
Toluene	<0.00199	U	0.0994	0.07984		mg/Kg	80 70 - 130 8 35
Ethylbenzene	<0.00199	U	0.0994	0.08029		mg/Kg	81 70 - 130 2 35
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1809		mg/Kg	91 70 - 130 24 35
o-Xylene	<0.00199	U F1	0.0994	0.08436		mg/Kg	85 70 - 130 23 35
		MSD MSD					
Surrogate	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene (Surr)	103		70 - 130				
1,4-Difluorobenzene (Surr)	101		70 - 130				

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

Lab Sample ID: MB 880-84146/1-A				Client Sample ID: Method Blank			
Matrix: Solid				Prep Type: Total/NA			
Analysis Batch: 84289				Prep Batch: 84146			
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	06/25/24 19:55	06/27/24 08:24 1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg	06/25/24 19:55	06/27/24 08:24 1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg	06/25/24 19:55	06/27/24 08:24 1
		MB MB					
Surrogate	%Recovery	Qualifier	Limits				
1-Chlorooctane	136	S1+	70 - 130				
o-Terphenyl	150	S1+	70 - 130				

Lab Sample ID: LCS 880-84146/2-A				Client Sample ID: Lab Control Sample			
Matrix: Solid				Prep Type: Total/NA			
Analysis Batch: 84289				Prep Batch: 84146			
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D %Rec %Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	987.2		mg/Kg	99 70 - 130
Diesel Range Organics (Over C10-C28)			1000	1035		mg/Kg	104 70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Blue Steel 21 FED COM TB

Job ID: 880-45246-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: LCS 880-84146/2-A
Matrix: Solid
Analysis Batch: 84289

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 84146

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	128		70 - 130
o-Terphenyl	126		70 - 130

Lab Sample ID: LCSD 880-84146/3-A
Matrix: Solid
Analysis Batch: 84289

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 84146

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	911.5		mg/Kg		91	70 - 130	8	20
Diesel Range Organics (Over C10-C28)			1000	953.2		mg/Kg		95	70 - 130	8	20
Surrogate	LCSD	LCSD									
	%Recovery	Qualifier	Limits								
1-Chlorooctane	117		70 - 130								
o-Terphenyl	123		70 - 130								

Lab Sample ID: 880-45216-A-29-D MS
Matrix: Solid
Analysis Batch: 84289

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 84146

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	995	954.5		mg/Kg		95	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.6	U F1	995	515.8	F1	mg/Kg		49	70 - 130		
Surrogate	MS	MS									
	%Recovery	Qualifier	Limits								
1-Chlorooctane	95		70 - 130								
o-Terphenyl	98		70 - 130								

Lab Sample ID: 880-45216-A-29-E MSD
Matrix: Solid
Analysis Batch: 84289

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 84146

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	995	947.2		mg/Kg		94	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.6	U F1	995	518.0	F1	mg/Kg		49	70 - 130	0	20
Surrogate	MSD	MSD									
	%Recovery	Qualifier	Limits								
1-Chlorooctane	94		70 - 130								
o-Terphenyl	96		70 - 130								

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Blue Steel 21 FED COM TB

Job ID: 880-45246-1
SDG: Eddy County, New Mexico

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-84172/1-A

Matrix: Solid

Analysis Batch: 84226

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			06/26/24 22:51	1

Lab Sample ID: LCS 880-84172/2-A

Matrix: Solid

Analysis Batch: 84226

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	257.5		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-84172/3-A

Matrix: Solid

Analysis Batch: 84226

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	258.0		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 880-45246-1 MS

Matrix: Solid

Analysis Batch: 84226

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

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	32.4	F1	249	316.9	F1	mg/Kg		114	90 - 110

Lab Sample ID: 880-45246-1 MSD

Matrix: Solid

Analysis Batch: 84226

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

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	32.4	F1	249	316.7	F1	mg/Kg		114	90 - 110	0	20

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Blue Steel 21 FED COM TB

Job ID: 880-45246-1
SDG: Eddy County, New Mexico

GC VOA

Prep Batch: 84169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45246-1	CS-1 (0-6")	Total/NA	Solid	5035	
880-45246-2	SW-1 (0-6")	Total/NA	Solid	5035	
880-45246-3	SW-2 (0-6")	Total/NA	Solid	5035	
880-45246-4	SW-3 (0-6")	Total/NA	Solid	5035	
880-45246-5	SW-4 (0-6")	Total/NA	Solid	5035	
MB 880-84169/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-84169/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-84169/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-45246-1 MS	CS-1 (0-6")	Total/NA	Solid	5035	
880-45246-1 MSD	CS-1 (0-6")	Total/NA	Solid	5035	

Analysis Batch: 84246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45246-1	CS-1 (0-6")	Total/NA	Solid	8021B	84169
880-45246-2	SW-1 (0-6")	Total/NA	Solid	8021B	84169
880-45246-3	SW-2 (0-6")	Total/NA	Solid	8021B	84169
880-45246-4	SW-3 (0-6")	Total/NA	Solid	8021B	84169
880-45246-5	SW-4 (0-6")	Total/NA	Solid	8021B	84169
MB 880-84169/5-A	Method Blank	Total/NA	Solid	8021B	84169
LCS 880-84169/1-A	Lab Control Sample	Total/NA	Solid	8021B	84169
LCSD 880-84169/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	84169
880-45246-1 MS	CS-1 (0-6")	Total/NA	Solid	8021B	84169
880-45246-1 MSD	CS-1 (0-6")	Total/NA	Solid	8021B	84169

Analysis Batch: 84346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45246-1	CS-1 (0-6")	Total/NA	Solid	Total BTEX	
880-45246-2	SW-1 (0-6")	Total/NA	Solid	Total BTEX	
880-45246-3	SW-2 (0-6")	Total/NA	Solid	Total BTEX	
880-45246-4	SW-3 (0-6")	Total/NA	Solid	Total BTEX	
880-45246-5	SW-4 (0-6")	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 84146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45246-1	CS-1 (0-6")	Total/NA	Solid	8015NM Prep	
880-45246-2	SW-1 (0-6")	Total/NA	Solid	8015NM Prep	
880-45246-3	SW-2 (0-6")	Total/NA	Solid	8015NM Prep	
880-45246-4	SW-3 (0-6")	Total/NA	Solid	8015NM Prep	
880-45246-5	SW-4 (0-6")	Total/NA	Solid	8015NM Prep	
MB 880-84146/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-84146/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-84146/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-45216-A-29-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-45216-A-29-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 84289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45246-1	CS-1 (0-6")	Total/NA	Solid	8015B NM	84146
880-45246-2	SW-1 (0-6")	Total/NA	Solid	8015B NM	84146

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Blue Steel 21 FED COM TB

Job ID: 880-45246-1
SDG: Eddy County, New Mexico

GC Semi VOA (Continued)

Analysis Batch: 84289 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45246-3	SW-2 (0-6")	Total/NA	Solid	8015B NM	84146
880-45246-4	SW-3 (0-6")	Total/NA	Solid	8015B NM	84146
880-45246-5	SW-4 (0-6")	Total/NA	Solid	8015B NM	84146
MB 880-84146/1-A	Method Blank	Total/NA	Solid	8015B NM	84146
LCS 880-84146/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	84146
LCSD 880-84146/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	84146
880-45216-A-29-D MS	Matrix Spike	Total/NA	Solid	8015B NM	84146
880-45216-A-29-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	84146

Analysis Batch: 84562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45246-1	CS-1 (0-6")	Total/NA	Solid	8015 NM	
880-45246-2	SW-1 (0-6")	Total/NA	Solid	8015 NM	
880-45246-3	SW-2 (0-6")	Total/NA	Solid	8015 NM	
880-45246-4	SW-3 (0-6")	Total/NA	Solid	8015 NM	
880-45246-5	SW-4 (0-6")	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 84172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45246-1	CS-1 (0-6")	Soluble	Solid	DI Leach	
880-45246-2	SW-1 (0-6")	Soluble	Solid	DI Leach	
880-45246-3	SW-2 (0-6")	Soluble	Solid	DI Leach	
880-45246-4	SW-3 (0-6")	Soluble	Solid	DI Leach	
880-45246-5	SW-4 (0-6")	Soluble	Solid	DI Leach	
MB 880-84172/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-84172/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-84172/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-45246-1 MS	CS-1 (0-6")	Soluble	Solid	DI Leach	
880-45246-1 MSD	CS-1 (0-6")	Soluble	Solid	DI Leach	

Analysis Batch: 84226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45246-1	CS-1 (0-6")	Soluble	Solid	300.0	84172
880-45246-2	SW-1 (0-6")	Soluble	Solid	300.0	84172
880-45246-3	SW-2 (0-6")	Soluble	Solid	300.0	84172
880-45246-4	SW-3 (0-6")	Soluble	Solid	300.0	84172
880-45246-5	SW-4 (0-6")	Soluble	Solid	300.0	84172
MB 880-84172/1-A	Method Blank	Soluble	Solid	300.0	84172
LCS 880-84172/2-A	Lab Control Sample	Soluble	Solid	300.0	84172
LCSD 880-84172/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	84172
880-45246-1 MS	CS-1 (0-6")	Soluble	Solid	300.0	84172
880-45246-1 MSD	CS-1 (0-6")	Soluble	Solid	300.0	84172

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Blue Steel 21 FED COM TB

Job ID: 880-45246-1
SDG: Eddy County, New Mexico

Client Sample ID: CS-1 (0-6")
Date Collected: 06/21/24 00:00
Date Received: 06/25/24 13:25

Lab Sample ID: 880-45246-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	84169	06/26/24 08:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84246	06/26/24 17:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84346	06/26/24 17:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			84562	06/27/24 15:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	84146	06/25/24 19:55	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/27/24 15:00	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	84172	06/26/24 09:02	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84226	06/27/24 00:31	CH	EET MID

Client Sample ID: SW-1 (0-6")
Date Collected: 06/21/24 00:00
Date Received: 06/25/24 13:25

Lab Sample ID: 880-45246-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	84169	06/26/24 08:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84246	06/26/24 18:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84346	06/26/24 18:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			84562	06/27/24 15:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	84146	06/25/24 19:55	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/27/24 15:20	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	84172	06/26/24 09:02	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84226	06/27/24 00:49	CH	EET MID

Client Sample ID: SW-2 (0-6")
Date Collected: 06/21/24 00:00
Date Received: 06/25/24 13:25

Lab Sample ID: 880-45246-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	84169	06/26/24 08:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84246	06/26/24 18:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84346	06/26/24 18:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			84562	06/27/24 16:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	84146	06/25/24 19:55	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/27/24 16:02	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	84172	06/26/24 09:02	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84226	06/27/24 00:55	CH	EET MID

Client Sample ID: SW-3 (0-6")
Date Collected: 06/21/24 00:00
Date Received: 06/25/24 13:25

Lab Sample ID: 880-45246-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	84169	06/26/24 08:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84246	06/26/24 18:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84346	06/26/24 18:50	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Blue Steel 21 FED COM TB

Job ID: 880-45246-1
SDG: Eddy County, New Mexico

Client Sample ID: SW-3 (0-6")
Date Collected: 06/21/24 00:00
Date Received: 06/25/24 13:25

Lab Sample ID: 880-45246-4
Matrix: Solid

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			84562	06/27/24 16:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	84146	06/25/24 19:55	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/27/24 16:23	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	84172	06/26/24 09:02	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84226	06/27/24 01:13	CH	EET MID

Client Sample ID: SW-4 (0-6")
Date Collected: 06/21/24 00:00
Date Received: 06/25/24 13:25

Lab Sample ID: 880-45246-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	84169	06/26/24 08:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84246	06/26/24 19:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84346	06/26/24 19:10	SM	EET MID
Total/NA	Analysis	8015 NM		1			84562	06/27/24 16:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	84146	06/25/24 19:55	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/27/24 16:44	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	84172	06/26/24 09:02	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84226	06/27/24 01:18	CH	EET MID

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

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Blue Steel 21 FED COM TB

Job ID: 880-45246-1
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	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Carmona Resources
Project/Site: Blue Steel 21 FED COM TB

Job ID: 880-45246-1
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	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:
ASTM = ASTM International
EPA = US Environmental Protection Agency
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

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

Sample Summary

Client: Carmona Resources
Project/Site: Blue Steel 21 FED COM TB

Job ID: 880-45246-1
SDG: Eddy County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-45246-1	CS-1 (0-6")	Solid	06/21/24 00:00	06/25/24 13:25
880-45246-2	SW-1 (0-6")	Solid	06/21/24 00:00	06/25/24 13:25
880-45246-3	SW-2 (0-6")	Solid	06/21/24 00:00	06/25/24 13:25
880-45246-4	SW-3 (0-6")	Solid	06/21/24 00:00	06/25/24 13:25
880-45246-5	SW-4 (0-6")	Solid	06/21/24 00:00	06/25/24 13:25

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



W

880-45246 Chain of Custody

Page 1 of 1

Chain of Custody

Project Manager:	Clinton Merritt	Bill to: (if different)	Isaac Castro
Company Name:	Carmona Resources	Company Name:	Marathon Oil Corporation
Address:	310 W Wall St Ste 500	Address:	990 Town and Country Blvd
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Houston, TX 77024
Phone:		Email:	icastro@marathonoil.com

[illegible]

Comments: Email results to Mike Carmona mcarmona@carmonaresources.com, Conner Moehring cmoehring@carmonaresources.com, Clint Meritt MerittC@carmonaresources.com

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
			6/15/04 12:25

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-45246-1
SDG Number: Eddy County, New Mexico

Login Number: 45246
List Number: 1
Creator: Vasquez, Julisa

List Source: Eurofins Midland

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

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

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

QUESTIONS

Action 365152

QUESTIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID:	372098
	Action Number:	365152
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2414240102
Incident Name	NAPP2414240102 BLUE STEEL 21 FED COM TB @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received
Incident Facility	[fAPP2126035874] BLUE STEEL 21 FED COM TB

Location of Release Source	
Please answer all the questions in this group.	
Site Name	BLUE STEEL 21 FED COM TB
Date Release Discovered	05/19/2024
Surface Owner	Federal

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure Pump Produced Water Released: 121 BBL Recovered: 120 BBL Lost: 1 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Approximately 120 bbls contained inside lined secondary containment and approximately 0.25 bbls over sprayed onto the pad. This was caused due to a water transfer pump seal failure.

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 2

Action 365152

QUESTIONS (continued)

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID:	372098
	Action Number:	365152
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

Initial Response

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

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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

I hereby agree and sign off to the above statement	Name: Isaac Castro Email: icastro@marathonoil.com Date: 07/18/2024
--	--

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

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

QUESTIONS, Page 3

Action 365152

QUESTIONS (continued)

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 365152
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site Characterization	
<i>Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Less than or equal 25 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1000 (ft.) and ½ (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1000 (ft.) and ½ (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Medium
A 100-year floodplain	Between 1000 (ft.) and ½ (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	265
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0.1
GRO+DRO (EPA SW-846 Method 8015M)	0.1
BTEX (EPA SW-846 Method 8021B or 8260B)	0.1
Benzene (EPA SW-846 Method 8021B or 8260B)	0.1
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
On what estimated date will the remediation commence	06/21/2024
On what date will (or did) the final sampling or liner inspection occur	06/21/2024
On what date will (or was) the remediation complete(d)	06/21/2024
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	0
What is the estimated volume (in cubic yards) that will be remediated	0
<i>These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.</i>	
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 4

Action 365152

QUESTIONS (continued)

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID:	372098
	Action Number:	365152
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS**Remediation Plan (continued)**

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:

(Select all answers below that apply.)

(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	No
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	Yes
Other Non-listed Remedial Process. Please specify	The 0.25 barrels of produced water that escaped containment will be left in place due to the sample results being below the most stringent standards for chlorides, TPH, Benzene and BTEX.

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

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

I hereby agree and sign off to the above statement	Name: Isaac Castro Email: icastro@marathonoil.com Date: 07/18/2024
--	--

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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

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

QUESTIONS, Page 5

Action 365152

QUESTIONS (continued)

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID:
	372098
	Action Number:
	365152
Action Type:	
[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 6

Action 365152

QUESTIONS (continued)

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID:
	372098
	Action Number:
	365152
Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	349054
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	06/21/2024
What was the (estimated) number of samples that were to be gathered	5
What was the sampling surface area in square feet	16

Remediation Closure Request

Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.

Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	0
What was the total volume (cubic yards) remediated	0
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	0
What was the total volume (in cubic yards) reclaimed	0
Summarize any additional remediation activities not included by answers (above)	Approximately 120 bbls contained inside lined secondary containment and approximately 0.25 bbls over sprayed onto the pad. This was caused due to a water transfer pump seal failure. Samples collected from outside the secondary containment tested below the most stringent thresholds. No further action is required on pad.

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

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

I hereby agree and sign off to the above statement	Name: Isaac Castro Email: icastro@marathonoil.com Date: 07/18/2024
--	--

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

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

QUESTIONS, Page 7

Action 365152

QUESTIONS (continued)

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 365152
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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 365152

CONDITIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID:
	372098
	Action Number:
	365152
Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

CONDITIONS

Created By	Condition	Condition Date
scott.rodgers	A reclamation report will not be accepted until reclamation of the release area, including areas reasonably needed for production or drilling activities, is complete and meet the requirements of 19.15.29.13 NMAC. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable.	8/6/2024
scott.rodgers	The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	8/6/2024