CARMONA RESOURCES

SITE INFORMATION

Work Plan
Shell Federal #2 SWD Disposal Line
Incident # NAPP2228544134
Eddy County, New Mexico
Unit A Sec 29 T20S R25E
32.551779°, -104.498698°

Produced Water Release
Point of Release: Corroded Disposal Line
Release Date: 10.04.22
Volume Released: 80 barrels of Produced Water
Volume Recovered: 0 barrels of Produced Water

CARMONA RESOURCES

Prepared for:
Fasken Oil and Ranch, Ltd
6101 Holiday Hill Road
Midland, TX 79707

Prepared by:
Carmona Resources, LLC
310 West Wall Street
Suite 415
Midland, Texas 79701

310 West Wall Street, Suite 415
Midland TX, 79701
432.813.1992

CARMONA RESOURCES

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CARMONA RESOURCES

November 22, 2022

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

Re: Work Plan
Shell Federal #2 SWD Disposal Line
Fasken Oil and Ranch, Ltd
Incident # NAPP2228544134
Site Location: Unit A, S29, T20S, R25E
(Lat 32.551779°, Long -104.498698°)
Eddy County, New Mexico

Mr. Bratcher:

On behalf of Fasken Oil and Ranch, Ltd. (Fasken), Carmona Resources, LLC has prepared this letter to document site activities for the Shell Federal #2 SWD Disposal Line. The site is located at 32.551779°, -104.498698° within Unit A, S29, T20S, R25E, in Eddy County, New Mexico (Figures 1 and 2).

1.0 Site information and Background

Based on the initial C-141 obtained from the New Mexico Oil Conservation Division (NMOCD), the release was discovered on October 4, 2022, due to a corroded disposal line. It resulted in the release of approximately eighty (80) barrels of produced water, and zero (0) barrels were recovered. Refer to Figure 3. The initial C-141 form is attached in Appendix C.

2.0 Site Characterization and Groundwater

The site is located within a high karst area. Based on a review of the New Mexico Office of State Engineers and USGS databases, there is one known water source within a 0.50-mile radius of the location. The well is located approximately 0.50 miles Northwest of the site in S20, T20S, R25E and was drilled in 2003. The well has a reported depth to groundwater of 218.03' below ground surface (ft bgs). A copy of the associated Point of Diversion Summary report is attached in Appendix D.

3.0 NMAC Regulatory Criteria

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

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

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- TPH: 1,000 mg/kg (GRO +DRO).
- Chloride: 10,000 mg/kg.

4.0 Site Assessment Activities

Initial Assessment

On October 24, 2022, Carmona Resources, LLC performed site assessment activities to evaluate soil impacts stemming from the release. A total of five (5) sample points and six (6) horizontal samples were advanced to depths ranging from the surface to 4' bgs inside and surrounding the release area to evaluate the vertical and horizontal extent. See Figure 3 for the sample locations. For chemical analysis, the soil samples were collected and placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins in Midland, Texas. The samples were analyzed for total petroleum hydrocarbons (TPH) by EPA method 8015, modified benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B, and chloride by EPA method 300.0. The laboratory reports, including analytical methods, results, and chain-of-custody documents, are attached in Appendix E.

Vertical Delineation

Vertical delineation was achieved for the areas of S-1, S-3, and S-5 and was below the regulatory limits for benzene, total BTEX, TPH, and chloride concentrations. However, the areas of S-2 and S-4 vertical delineation was not achieved due to chloride concentration ranging from 1,160 mg/kg to 2,450 mg/kg. Refer to Table 1.

Horizontal Delineation

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

5.0 Proposed Work Plan

Based on the analytical data and the detected chloride and TPH concentrations, Fasken proposes to remediate the areas shown in Figure 4 and highlighted (blue) in Table 1.

- The area of S-1 will be excavated to a depth of 1.5' below the surface and backfilled with clean material to grade.
- The areas of S-3 will be excavated to a depth of 3' below the surface and backfilled with clean material to grade.
- The areas of S-2, S-4, and S-5 will be excavated to a depth of 4' below the surface and backfilled with clean material to grade.
- An estimated 960 cubic yards will be removed and hauled to the nearest disposal based on the maximum depth.

- A variance is requested per 19.15.29.14. A NMAC, Five-point composite bottom floor hole, and sidewall samples will be collected every 400 square feet to represent the release area.

- Once the site activities and excavation are complete, the areas will be backfilled with clean material to surface grade. The remediation will be implemented 90 days after the work plan is approved.

- Impacted soil around oil and gas equipment, structures, or lines may not be removed during remediation activities due to safety concerns for the onsite personnel. However, Fasken will excavate the impacted soils to the maximum extent possible.

6.0 Conclusions

Upon completion, a final closure report describing the remediation activities will be presented to the New Mexico Oil Conservation Division (NMOCD). If you have any questions regarding this report or need additional information, don't hesitate to contact us at 432-813-1992.

Sincerely,
Carmona Resources, LLC

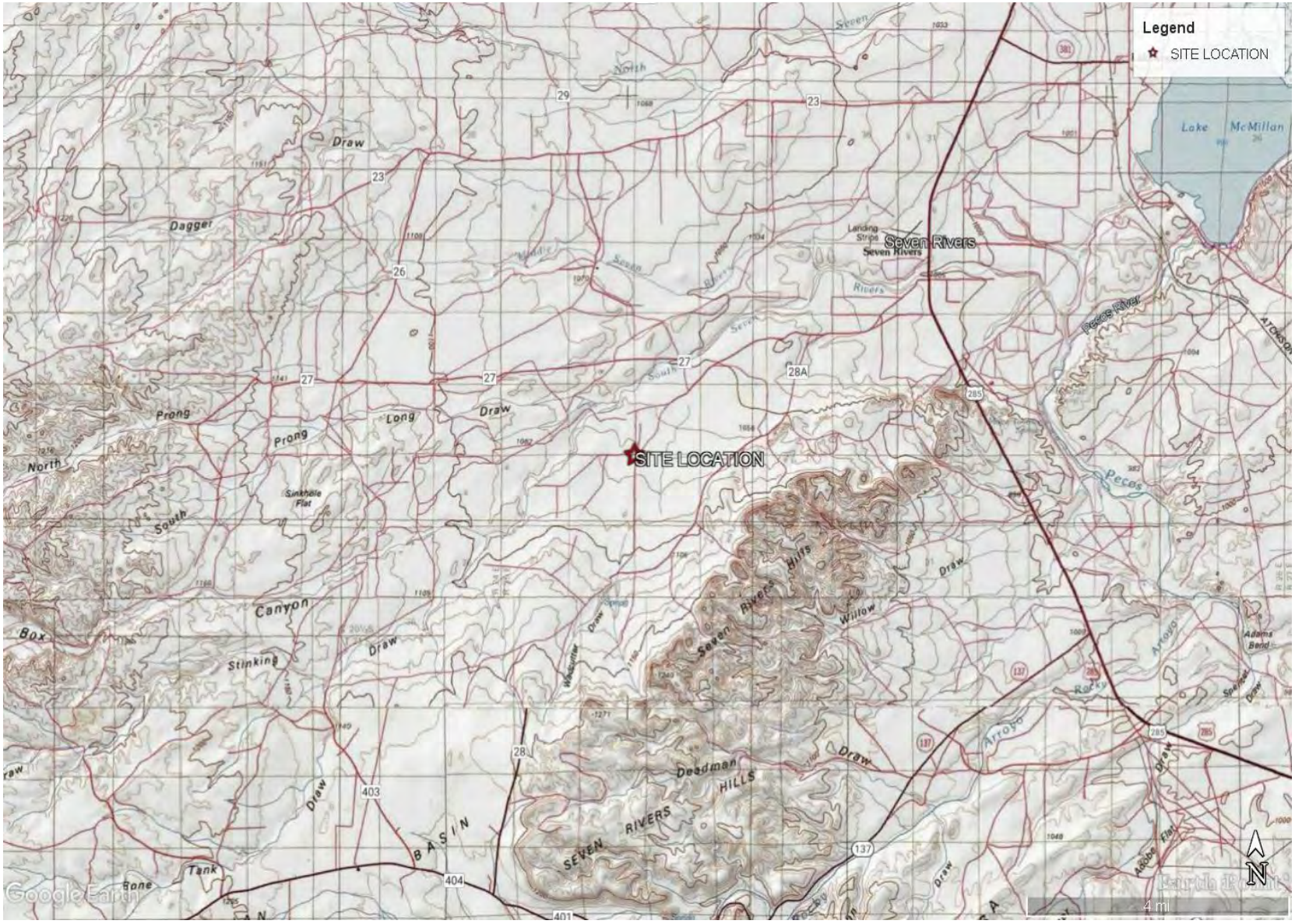
Mike Carmona
Environmental Manager

Conner Moehring
Sr. Project Manager

FIGURES

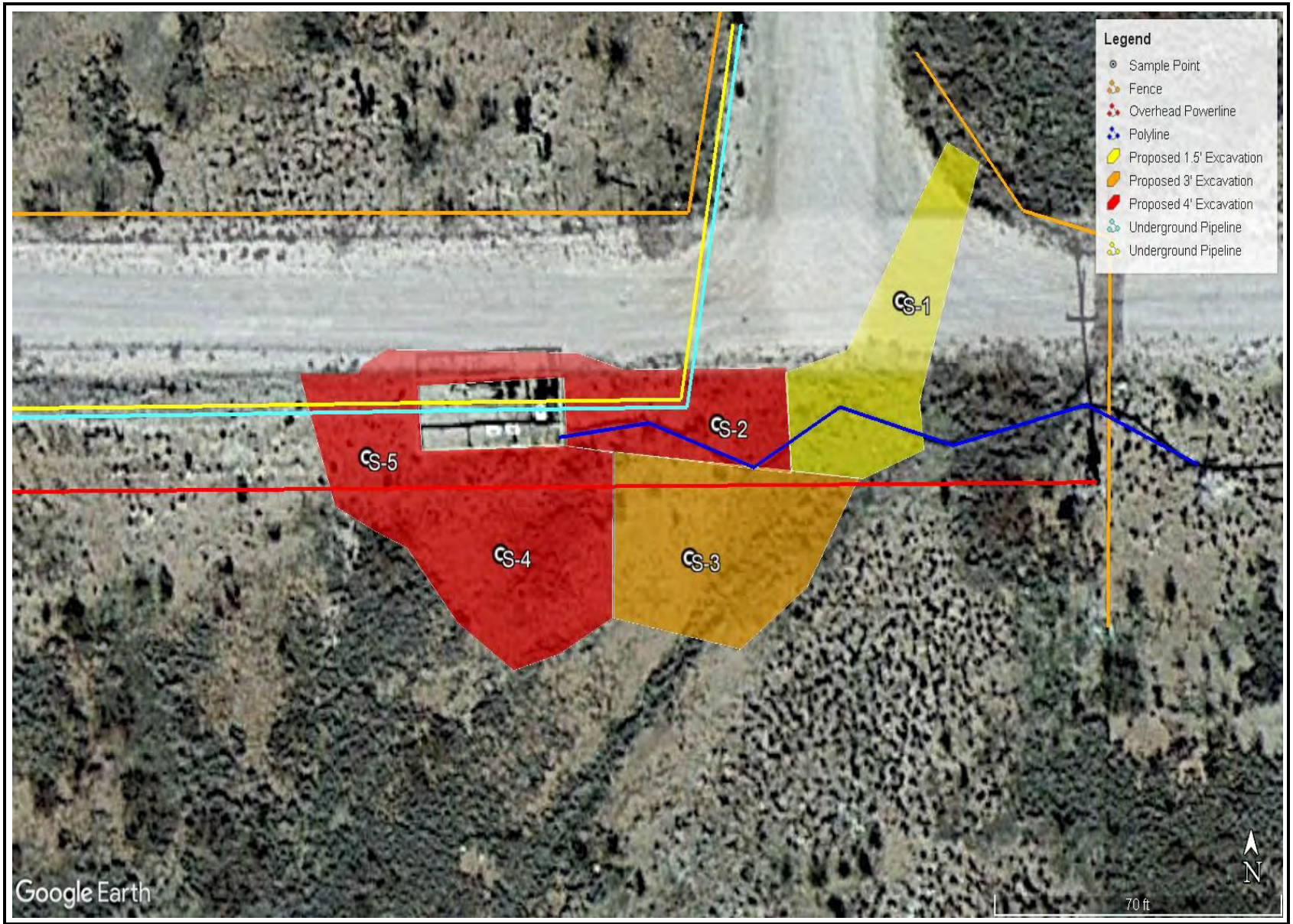
CARMONA RESOURCES

SITE OVERVIEW MAP FASKEN OIL AND RANCH SHELL FEDERAL #2 SWD DISPOSAL LINE EDDY COUNTY, NEW MEXICO 32.551779°, -104.498698°	CARMONA RESOURCES	FIGURE 1



TOPOGRAPHIC MAP FASKEN OIL AND RANCH SHELL FEDERAL #2 SWD DISPOSAL LINE EDDY COUNTY, NEW MEXICO 32.551779°, -104.498698°	CARMONA RESOURCES	FIGURE 2

SAMPLE LOCATION MAP FASKEN OIL AND RANCH SHELL FEDERAL #2 SWD DISPOSAL LINE EDDY COUNTY, NEW MEXICO 32.551779°, -104.498698°	CARMONA RESOURCES	FIGURE 3



PROPOSED EXCAVATION DEPTH MAP FASKEN OIL AND RANCH SHELL FEDERAL #2 SWD DISPOSAL LINE EDDY COUNTY, NEW MEXICO 32.551779°, -104.498698°	CARMONA RESOURCES	FIGURE 4

APPENDIX A

CARMONA RESOURCES

Table 1
Fasken Oil and Ranch
Shell Federal #2 SWD Disposal Line
Eddy County, New Mexico

Sample ID	Date	Depth (ft)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	Total						
S-1	10/24/2022	0-1	<49.8	91.2	<49.8	91.2	<0.201	<0.201	<0.201	<0.402	<0.402	**18,300**
	"	1.5	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	163
	"	2.0	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	120
S-2	10/24/2022	0-1	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**2,240**
	"	1.5	<49.9	<49.9	<49.9	<49.9	0.00275	<0.00199	<0.00199	<0.00398	0.00507	**2,270**
	"	2.0	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	**1,540**
	"	3.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	**1,150**
S-3	10/24/2022	0-1	<50.0	**315**	<50.0	**315**	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	**14,300**
	"	1.5	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**10,100**
	"	2.0	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	**3,310**
	"	3.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	160
S-4	10/24/2022	0-1	**170**	**2,610**	<50.0	**2,780**	<0.0992	<0.0992	0.106	0.439	0.545	**4,330**
	"	1.5	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**10,400**
	"	2.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	0.00340	0.00801	0.0114	**12,400**
	"	3.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	**8,490**
	"	4.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	182
S-5	10/24/2022	0-1	<49.9	<49.9	<49.9	<49.9	<0.00201	0.00256	<0.00201	<0.00402	<0.00402	**2,450**
	"	1.5	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	**2,150**
	"	2.0	<50.0	<50.0	<50.0	<50.0	0.00253	<0.00199	<0.00199	<0.00398	<0.00398	**1,600**
	"	3.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	**1,160**
H-1	10/24/2022	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<4.98
H-2	10/24/2022	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<4.96
H-3	10/24/2022	0-0.5	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<4.99
H-4	10/24/2022	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<4.97
H-5	10/24/2022	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	16.5
H-6	10/24/2022	0-0.5	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<4.18
Regulatory Criteria [A]			1,000 mg/kg			2,500 mg/kg	10 mg/kg	-	-	-	50 mg/kg	20,000 mg/kg

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

APPENDIX B

CARMONA RESOURCES

PHOTOGRAPHIC LOG

Fasken Oil and Ranch

Photograph No. 1

Facility: Shell Federal #2 SWD Disposal Line

County: Eddy County, New Mexico

Description:
View East, area of sample point (1).

Photograph No. 2

Facility: Shell Federal #2 SWD Disposal Line

County: Eddy County, New Mexico

Description:
View East, area of sample point (2).

Photograph No. 3

Facility: Shell Federal #2 SWD Disposal Line

County: Eddy County, New Mexico

Description:
View North, area of sample points (3-4).

CARMONA RESOURCES

PHOTOGRAPHIC LOG

Fasken Oil and Ranch

Photograph No. 4

Facility: Shell Federal #2 SWD Disposal Line

County: Eddy County, New Mexico

Description:
View East, area of sample points (4-5).

CARMONA RESOURCES

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 150438

QUESTIONS

Operator: FASKEN OIL & RANCH LTD 6101 Holiday Hill Rd Midland, TX 79707	OGRID: 151416
	Action Number: 150438
	Action Type: [NOTIFY] Notification Of Release (NOR)

QUESTIONS

Location of Release Source *Please answer all of the questions in this group.*	
Site Name	Shell Federal 2 SWD Disposal Line
Date Release Discovered	10/04/2022
Surface Owner	Federal

Incident Details *Please answer all of 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
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: Corrosion | Other (Specify) | Produced Water | Released: 80 BBL | Recovered: 0 BBL | Lost: 80 BBL]
Is the concentration of dissolved chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*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)	Disposal line was corroded that goes to the Shell Federal 2 SWD.The spill happened 3.3 Northeast of SWD battery.

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QUESTIONS (continued)

Operator: FASKEN OIL & RANCH LTD 6101 Holiday Hill Rd Midland, TX 79707	OGRID: 151416
	Action Number: 150438
	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 19.15.29.7(A) NMAC	**Yes, major release.**
Reasons why this would be considered a submission for a notification of a major release	• Unauthorized release of a volume, excluding gases, of 25 barrels or more
If YES, was immediate notice given to the OCD, by whom	Addison Guelker
If YES, was immediate notice given to the OCD, to whom	ocd.enviro@state.nm.us and blm_nm_cfo_spill@blm.gov
If YES, was immediate notice given to the OCD, when	10/05/2022
If YES, was immediate notice given to the OCD, by what means (phone, email, etc.)	email
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	False
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	On a flowline so there were no berms to keep it from dissipating.
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please 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.	

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ACKNOWLEDGMENTS

Operator: FASKEN OIL & RANCH LTD 6101 Holiday Hill Rd Midland, TX 79707	OGRID: 151416
	Action Number: 150438
	Action Type: [NOTIFY] Notification Of Release (NOR)

ACKNOWLEDGMENTS

☑	I acknowledge that I am authorized to submit notification of a releases on behalf of my operator.
☑	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.
☑	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.
☑	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.
☑	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.
☑	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.

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CONDITIONS

Action 150438

CONDITIONS

Operator: FASKEN OIL & RANCH LTD 6101 Holiday Hill Rd Midland, TX 79707	OGRID: 151416
	Action Number: 150438
	Action Type: [NOTIFY] Notification Of Release (NOR)

CONDITIONS

Created By	Condition	Condition Date
along	When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.	10/12/2022

****** LIQUID SPILLS - VOLUME CALCULATIONS ******

Location of spill: Shell Fed #2 SWD Disposal Line **Date of Spill:** 4-Oct-2022

If the leak/spill is associated with production equipment, i.e. - wellhead, stuffing box, flowline, tank battery, production vessel, transfer pump, or storage tank **place an "X" here:** X

Input Data:

	OIL:	WATER:
If spill volumes from measurement, i.e. metering, tank volumes, etc. are known enter the volumes here:	0.0 BBL	0.0 BBL

If "known" spill volumes are given, input data for the following "Area Calculations" is optional. The above will override the calculated volumes.

Total Area Calculations

Total Surface Area	width		length		wet soil depth	oil (%)
Rectangle Area #1	30 ft	X	19 ft	X	6.00 in	0%
Rectangle Area #2	27 ft	X	39 0	X	6.00 in	0%
Rectangle Area #3	39 ft	X	4 ft	X	6.00 in	0%
Rectangle Area #4	39 ft	X	13 ft	X	6 in	0%
Rectangle Area #5	76 ft	X	54 ft	X	6 in	0%
Rectangle Area #6	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #7	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #8	0 ft	X	0 ft	X	0 in	0%

Standing Liquid Calculations

Standing Liquid Area	width		length		liquid depth	oil (%)
Rectangle Area #1	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #2	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #3	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #4	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #5	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #6	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #7	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #8	0 ft	X	0 ft	X	0 in	0%

okay

production system leak - DAILY PRODUCTION DATA REQUIRED

Average Daily Production: Oil 0 BBL Water 0 BBL 0 Gas (MCFD)

Total Hydrocarbon Content in gas: 0% (percentage)

Did leak occur before the separator?: YES N/A *(place an "X")*

H2S Content in Produced Gas: 0 PPM

H2S Content in Tank Vapors: 0 PPM

Amount of Free Liquid Recovered: 0 BBL okay

Percentage of Oil in Free Liquid Recovered: 0% (percentage)

Liquid holding factor *: 0.14 gal per gal

Use the following when the spill wets the grains of the soil.
* Sand = **0.08** gallon (gal.) liquid per gal. volume of soil.
* Gravelly (caliche) loam = **0.14** gal. liquid per gal. volume of soil.
* Sandy clay loam soil = **0.14** gal liquid per gal. volume of soil.
* Clay loam = **0.16** gal. liquid per gal. volume of soil.

Use the following when the liquid completely fills the pore space of the soil:
Occurs when the spill soaked soil is contained by barriers, natural (or not).
* Clay loam = **0.20** gal. liquid per gal. volume of soil.
* Gravelly (caliche) loam = **0.25** gal. liquid per gal. volume of soil.
* Sandy loam = **0.5** gal. liquid per gal. volume of soil.

Total Solid/Liquid Volume: 6,390 sq. ft. 3,195 cu. ft. cu. ft.

Total Free Liquid Volume: sq. ft. cu. ft. cu. ft.

Estimated Volumes Spilled

	H2O	OIL
Liquid in Soil:	79.7 BBL	0.0 BBL
Free Liquid:	0.0 BBL	0.0 BBL
Totals:	79.7 BBL	0.0 BBL
Total Liquid Spill Liquid:	79.7 BBL	0.00 BBL

Estimated Production Volumes Lost

	H2O	OIL
Estimated Production Spilled:	0.0 BBL	0.0 BBL

Estimated Surface Damage

Surface Area: 6,390 sq. ft.

Surface Area: .1467 acre

Recovered Volumes

Estimated oil recovered: BBL check - okay

Estimated water recovered: BBL check - okay

Estimated Weights, and Volumes

Saturated Soil =	357,840 lbs	3,195 cu. ft.	118 cu. yds.
Total Liquid =	80 BBL	3,346 gallon	27,837 lbs

Air Emission from flowline leaks:

Volume of oil spill:	-	BBL
Separator gas calculated:	-	MCF
Separator gas released:	-	MCF
Gas released from oil:	-	lb
H2S released:	-	lb
Total HC gas released:	-	lb
Total HC gas released:	-	MCF

Air Emission of Reporting Requirements:

	New Mexico	Texas
HC gas release reportable?	NO	NO
H2S release reportable?	NO	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

Operator: FASKEN OIL & RANCH LTD 6101 Holiday Hill Rd Midland, TX 79707	OGRID: 151416
	Action Number: 150448
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	10/13/2022

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Form C-141 State of New Mexico
Oil Conservation Division

Incident ID	NAPP2228544458
District RP	
Facility ID	
Application ID	

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

Printed Name: Addison Guelker Title: ENVIRONMENTAL TECH

Signature: Addison Guelker Date: 11/22/22

email: addisong@forl.com Telephone: (432) 288-5529

OCD Only

Received by: Jocelyn Harimon Date: 11/22/2022

Form C-141 State of New Mexico
Oil Conservation Division

Incident ID	NAPP2228544134
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

- ☑ Detailed description of proposed remediation technique
- ☑ Scaled sitemap with GPS coordinates showing delineation points
- ☑ Estimated volume of material to be remediated
- ☑ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☑ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Addison Guelker Title: Environmental Tech

Signature: Addison Guelker Date: 11/22/22

email: addisong@forl.com Telephone: (432) 6871777

OCD Only

Received by: Jocelyn Harimon Date: 11/22/2022

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: Date:

APPENDIX D

CARMONA RESOURCES

Nearest Water Well

Faskin Oil and Ranch

170' - Drilled 1960

206.07' - Drilled 1966

80' - Drilled 1966

212' - Drilled 2004

218.03' - Drilled 2003

Shell Federal

Legend

- 0.50 Mile Radius
- 0.50 Miles
- 0.61 Miles
- 0.81 Miles
- 1.31 Miles
- 1.36 Miles
- NMSEO Water Well
- Shell Federal
- USGS Water Well

N

4000 ft

HIGH KARST

Fasken Oil and Ranch

Legend

High

Shell Federal #2 SWD Disposal Line

Shell Federal #2 SWD Disposal Line

Google Earth

1 mi

N

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

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

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

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

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
RA 09978	RA	ED	3	1	2	29	20S	25E	546393	3601410*	735	350		
RA 10618	RA	ED	1	1	4	20	20S	25E	546389	3602414	976	342	212	130
RA 05038	RA	ED	1	1	4	20	20S	25E	546390	3602416*	977	314	228	86
RA 05227	RA	ED			1	21	20S	25E	547506	3602926*	1293	100	80	20
RA 04349	RA	ED	4	1	4	17	20S	25E	546587	3603827*	2170	231	170	61
RA 12699	RA	ED	4	4	1	22	20S	25E	549327	3602647	2448			
C 03245	C	ED	3	1	4	32	20S	25E	546395	3598990*	2801	253	100	153
RA 04502	RA	ED		2	2	25	20S	24E	543656	3601480*	3416	300	268	32
RA 10141	RA	ED	3	4	1	23	20S	25E	550815	3602617*	3858	245		

Average Depth to Water: **176 feet**
Minimum Depth: **80 feet**
Maximum Depth: **268 feet**

Record Count: 9

UTMNAD83 Radius Search (in meters):

Easting (X): 547065.12 **Northing (Y):** 3601709.7 **Radius:** 4000

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

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

Groundwater | New Mexico | GO

Click to hideNews Bulletins

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

Groundwater levels for New Mexico

Click to hide state-specific text

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 323328104301201

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

USGS 323328104301201 20S.25E.20.41114

Eddy County, New Mexico
Latitude 32°33'28", Longitude 104°30'12" NAD27
Land-surface elevation 3,502 feet above NAVD88
The depth of the well is 314.0 feet below land surface.
This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.
This well is completed in the Artesia Group (313ARTS) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu
1984-02-01		D	62610		3286.24	NGVD29	1	Z		
1984-02-01		D	62611		3287.82	NAVD88	1	Z		
1984-02-01		D	72019	214.18			1	Z		
1989-02-09		D	62610		3305.62	NGVD29	1	Z		
1989-02-09		D	62611		3307.20	NAVD88	1	Z		
1989-02-09		D	72019	194.80			1	Z		
1990-03-07		D	62610		3303.49	NGVD29	1	S		
1990-03-07		D	62611		3305.07	NAVD88	1	S		
1990-03-07		D	72019	196.93			1	S		
1992-02-06		D	62610		3302.77	NGVD29	1	Z		
1992-02-06		D	62611		3304.35	NAVD88	1	Z		
1992-02-06		D	72019	197.65			1	Z		

Date	Time	? Water-level date-time accuracy	? Parameter code		Water level, feet below land surface	Water level, feet above specific vertical datum		Referenced vertical datum	
1993-02-04		D	62610		3304.86	NGVD29	1	Z	
1993-02-04		D	62611		3306.44	NAVD88	1	Z	
1993-02-04		D	72019	195.56			1	Z	
1994-02-11		D	62610		3302.19	NGVD29	1	Z	
1994-02-11		D	62611		3303.77	NAVD88	1	Z	
1994-02-11		D	72019	198.23			1	Z	
1999-02-24		D	62610		3293.39	NGVD29	1	S	USGS
1999-02-24		D	62611		3294.97	NAVD88	1	S	USGS
1999-02-24		D	72019	207.03			1	S	USGS
2003-01-22		D	62610		3282.39	NGVD29	1	S	USGS
2003-01-22		D	62611		3283.97	NAVD88	1	S	USGS
2003-01-22		D	72019	218.03			1	S	USGS

Explanation

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

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

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

Page Contact Information: New Mexico Water Data Maintainer
Page Last Modified: 2022-10-27 10:59:41 EDT
0.3 0.25 nadww01

New Mexico Office of the State Engineer
Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Twn	Rng	X	Y
	RA 10618	1	1	4	20	20S	25E	546389	3602414

Driller License: 421 **Driller Company:** GLENN'S WATER WELL SERVICE

Driller Name: GLENN, CLARK A."CORKY" (LD)

Drill Start Date:	09/14/2004	**Drill Finish Date:**	09/14/2004	**Plug Date:**	
Log File Date:	09/20/2004	**PCW Rcv Date:**		**Source:**	Artesian
Pump Type:	SUBMER	**Pipe Discharge Size:**		**Estimated Yield:**	130 GPM
Casing Size:	6.63	**Depth Well:**	342 feet	**Depth Water:**	212 feet

Water Bearing Stratifications:	Top	Bottom	Description
	238	292	Limestone/Dolomite/Chalk
	298	342	Limestone/Dolomite/Chalk

Casing Perforations:	Top	Bottom
	236	312
	312	342

Meter Number:	8311	**Meter Make:**	BLANCETT
Meter Serial Number:	112211502	**Meter Multiplier:**	1.0000
Number of Dials:	6	**Meter Type:**	Diversion
Unit of Measure:	Barrels 42 gal.	**Return Flow Percent:**	
Usage Multiplier:		**Reading Frequency:**	

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
09/18/2004	2004	106888	A	RPT		0	
10/13/2004	2004	110043	A	RPT		0.968	
01/05/2005	2005	0	A	RPT		0	
02/10/2005	2005	7420	A	RPT		2.277	
07/14/2005	2005	43444	A	RPT		0	
09/12/2005	2005	53144	A	RPT		2.977	
10/29/2005	2005	141623	A	RPT		0	
12/04/2005	2005	147395	A	RPT		1.771	
05/11/2012	2012	0	A	RPT		0	
05/22/2012	2012	23038	A	RPT		2.969	
05/22/2012	2012	23038	A	RPT	intial reading for RA 11821	0	
06/02/2012	2012	46176	A	RPT	ending reading for RA 11821	2.982	

**YTD Meter Amounts:	Year	Amount
	2004	0.968
	2005	7.025
	2012	5.951

10/27/22 8:34 AM POINT OF DIVERSION SUMMARY

New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	RA 05227			1	21	20S	25E	547506	3602926*

Driller License:	408	**Driller Company:**	PRICE, TOMMY		
Driller Name:	PRICE, TOMMY				
Drill Start Date:	05/20/1966	**Drill Finish Date:**	06/05/1966	**Plug Date:**	
Log File Date:	07/18/1966	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:	6.63	**Depth Well:**	100 feet	**Depth Water:**	80 feet

Water Bearing Stratifications:	Top	Bottom	Description
	80	100	Limestone/Dolomite/Chalk

Casing Perforations:	Top	Bottom
	75	100

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

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

Groundwater | New Mexico | GO

Click to hideNews Bulletins

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

Groundwater levels for New Mexico

Click to hide state-specific text

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 323415104295601

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

USGS 323415104295601 20S.25E.17.42321

Eddy County, New Mexico
Latitude 32°34'15", Longitude 104°29'56" NAD27
Land-surface elevation 3,504 feet above NAVD88
The depth of the well is 231 feet below land surface.
This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu
1962-01-05		D	62610		3322.75	NGVD29	1	Z		
1962-01-05		D	62611		3324.32	NAVD88	1	Z		
1962-01-05		D	72019	179.68			1	Z		
1963-01-07		D	62610		3315.44	NGVD29	1	Z		
1963-01-07		D	62611		3317.01	NAVD88	1	Z		
1963-01-07		D	72019	186.99			1	Z		
1963-07-24		D	62610		3307.77	NGVD29	P	Z		
1963-07-24		D	62611		3309.34	NAVD88	P	Z		
1963-07-24		D	72019	194.66			P	Z		
1963-09-04		D	62610		3288.15	NGVD29	1	Z		
1963-09-04		D	62611		3289.72	NAVD88	1	Z		
1963-09-04		D	72019	214.28			1	Z		

Date	Time	? Water-level date-time accuracy	? Parameter code		Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	
1963-10-02	D	62610		3288.43	NGVD29	1	Z	
1963-10-02	D	62611		3290.00	NAVD88	1	Z	
1963-10-02	D	72019	214.00			1	Z	
1963-11-20	D	62610		3295.25	NGVD29	P	Z	
1963-11-20	D	62611		3296.82	NAVD88	P	Z	
1963-11-20	D	72019	207.18			P	Z	
1964-01-06	D	62610		3305.15	NGVD29	P	Z	
1964-01-06	D	62611		3306.72	NAVD88	P	Z	
1964-01-06	D	72019	197.28			P	Z	
1965-01-13	D	62610		3295.75	NGVD29	P	Z	
1965-01-13	D	62611		3297.32	NAVD88	P	Z	
1965-01-13	D	72019	206.68			P	Z	
1966-01-27	D	62610		3296.36	NGVD29	1	Z	
1966-01-27	D	62611		3297.93	NAVD88	1	Z	
1966-01-27	D	72019	206.07			1	Z	

Explanation

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

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)

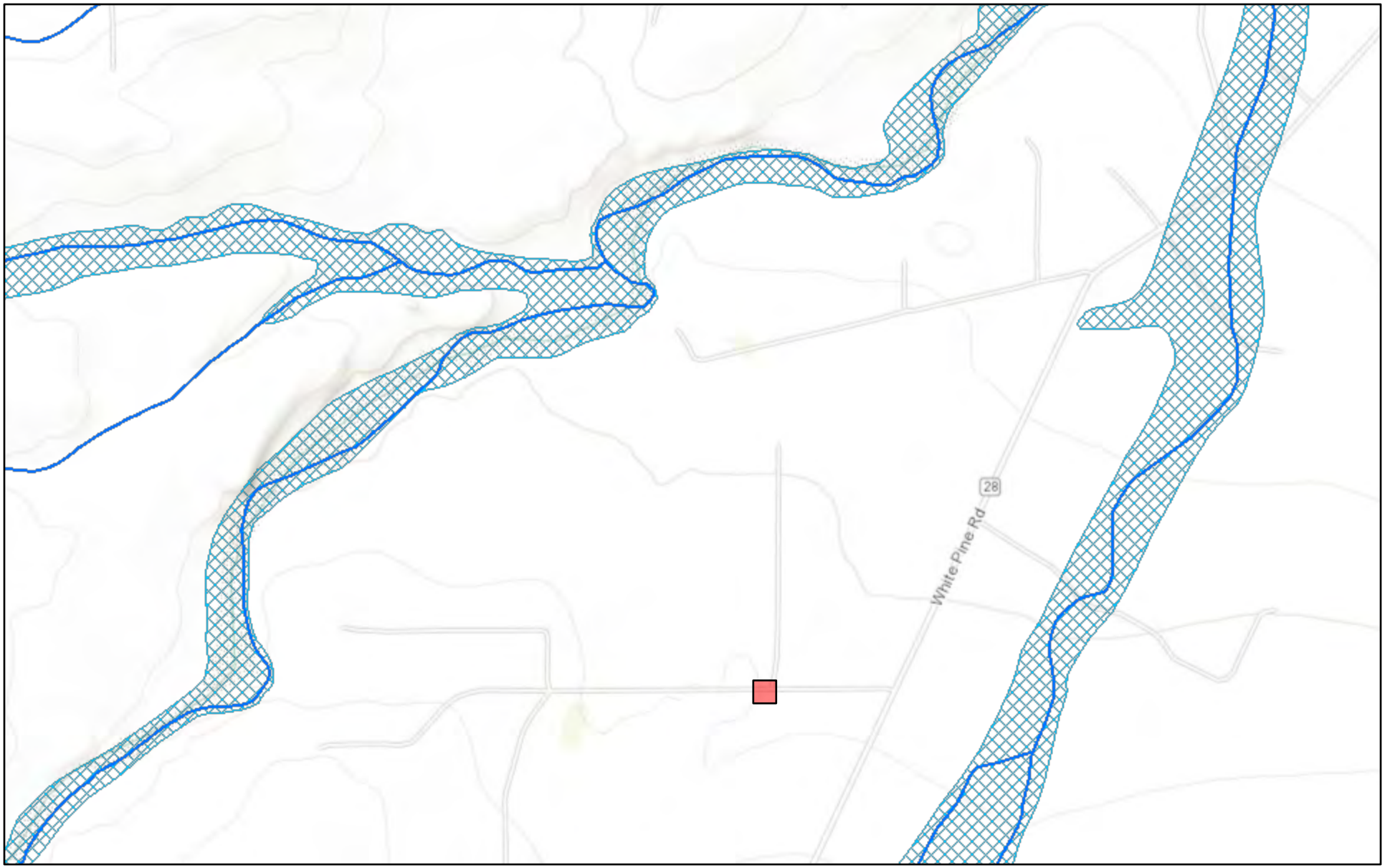
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	RA 04349	4	1	4	17	20S	25E	546587	3603827*

Driller License:	62	**Driller Company:**	BEATTY, J.R.		
Driller Name:	W.BEATTY				
Drill Start Date:	12/24/1960	**Drill Finish Date:**	12/27/1960	**Plug Date:**	
Log File Date:	01/11/1961	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:	7.00	**Depth Well:**	231 feet	**Depth Water:**	170 feet

Water Bearing Stratifications:	Top	Bottom	Description
	218	231	Sandstone/Gravel/Conglomerate

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

New Mexico NFHL Data



October 27, 2022

1:18,056

0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

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

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APPENDIX E

CARMONA RESOURCES

eurofins | Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 880-20700-1
Laboratory Sample Delivery Group: Eddy County, New Mexico
Client Project/Site: Shell Federal

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

Attn: Mike Carmona

JKramer

Authorized for release by:
10/31/2022 9:39:32 AM

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

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

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

Client: Carmona Resources
Project/Site: Shell Federal

Laboratory Job ID: 880-20700-1
SDG: Eddy County, New Mexico

Table of Contents

Definitions/Glossary

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20700-1
SDG: Eddy County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD 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
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20700-1
SDG: Eddy County, New Mexico

Job ID: 880-20700-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-20700-1

Receipt
The samples were received on 10/25/2022 9:36 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.1°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: H-1 (0-0.5') (880-20700-1), H-2 (0-0.5') (880-20700-2), H-3 (0-0.5') (880-20700-3), H-4 (0-0.5') (880-20700-4), H-5 (0-0.5') (880-20700-5) and H-6 (0-0.5') (880-20700-6).

GC VOA
Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-38061 and analytical batch 880-38058 was outside the upper control limits.

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-38061 and analytical batch 880-38058 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

GC Semi VOA
Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-37877 and analytical batch 880-37857 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCSD 880-37877/3-A) and (MB 880-37877/1-A). Evidence of matrix interferences is not obvious.

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

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

Client Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20700-1
SDG: Eddy County, New Mexico

Client Sample ID: H-1 (0-0.5')

Lab Sample ID: 880-20700-1
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/28/22 09:04	10/28/22 15:30	1
Toluene	<0.00200	U *-	0.00200		mg/Kg		10/28/22 09:04	10/28/22 15:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/28/22 09:04	10/28/22 15:30	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		10/28/22 09:04	10/28/22 15:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/22 09:04	10/28/22 15:30	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		10/28/22 09:04	10/28/22 15:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*10/28/22 09:04*	*10/28/22 15:30*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*10/28/22 09:04*	*10/28/22 15:30*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			10/30/22 22:15	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			10/27/22 09:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/26/22 08:35	10/26/22 19:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/26/22 08:35	10/26/22 19:03	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/26/22 08:35	10/26/22 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*10/26/22 08:35*	*10/26/22 19:03*	*1*
o-Terphenyl	*113*		*70 - 130*	*10/26/22 08:35*	*10/26/22 19:03*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.98	U	4.98		mg/Kg			10/27/22 22:15	1

Client Sample ID: H-2 (0-0.5')

Lab Sample ID: 880-20700-2
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/28/22 09:04	10/28/22 15:56	1
Toluene	<0.00200	U *-	0.00200		mg/Kg		10/28/22 09:04	10/28/22 15:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/28/22 09:04	10/28/22 15:56	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/28/22 09:04	10/28/22 15:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/22 09:04	10/28/22 15:56	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/28/22 09:04	10/28/22 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*10/28/22 09:04*	*10/28/22 15:56*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*10/28/22 09:04*	*10/28/22 15:56*	*1*

Client Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20700-1
SDG: Eddy County, New Mexico

Client Sample ID: H-2 (0-0.5')

Lab Sample ID: 880-20700-2
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/30/22 22:15	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			10/27/22 09:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/26/22 08:35	10/26/22 19:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/26/22 08:35	10/26/22 19:24	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/26/22 08:35	10/26/22 19:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*10/26/22 08:35*	*10/26/22 19:24*	*1*
o-Terphenyl	*97*		*70 - 130*	*10/26/22 08:35*	*10/26/22 19:24*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.96	U	4.96		mg/Kg			10/27/22 22:40	1

Client Sample ID: H-3 (0-0.5')

Lab Sample ID: 880-20700-3
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

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		10/28/22 09:04	10/28/22 17:51	1
Toluene	<0.00199	U *-	0.00199		mg/Kg		10/28/22 09:04	10/28/22 17:51	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/28/22 09:04	10/28/22 17:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/28/22 09:04	10/28/22 17:51	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/28/22 09:04	10/28/22 17:51	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/28/22 09:04	10/28/22 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*10/28/22 09:04*	*10/28/22 17:51*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*10/28/22 09:04*	*10/28/22 17:51*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/30/22 22:15	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			10/27/22 09:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/26/22 08:35	10/26/22 19:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/26/22 08:35	10/26/22 19:45	1

Client Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20700-1
SDG: Eddy County, New Mexico

Client Sample ID: H-3 (0-0.5')

Lab Sample ID: 880-20700-3
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/26/22 08:35	10/26/22 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*10/26/22 08:35*	*10/26/22 19:45*	*1*
o-Terphenyl	*96*		*70 - 130*	*10/26/22 08:35*	*10/26/22 19:45*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.99	U	4.99		mg/Kg			10/27/22 22:48	1

Client Sample ID: H-4 (0-0.5')

Lab Sample ID: 880-20700-4
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

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		10/28/22 09:04	10/28/22 18:17	1
Toluene	<0.00199	U *-	0.00199		mg/Kg		10/28/22 09:04	10/28/22 18:17	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/28/22 09:04	10/28/22 18:17	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/28/22 09:04	10/28/22 18:17	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/28/22 09:04	10/28/22 18:17	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/28/22 09:04	10/28/22 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*10/28/22 09:04*	*10/28/22 18:17*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*10/28/22 09:04*	*10/28/22 18:17*	*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			10/30/22 22:15	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			10/27/22 09:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/26/22 08:35	10/26/22 20:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/26/22 08:35	10/26/22 20:07	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/26/22 08:35	10/26/22 20:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*10/26/22 08:35*	*10/26/22 20:07*	*1*
o-Terphenyl	*104*		*70 - 130*	*10/26/22 08:35*	*10/26/22 20:07*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.97	U	4.97		mg/Kg			10/27/22 22:57	1

Client Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20700-1
SDG: Eddy County, New Mexico

Client Sample ID: H-5 (0-0.5')

Lab Sample ID: 880-20700-5
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

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		10/28/22 09:04	10/28/22 18:43	1
Toluene	<0.00201	U *-	0.00201		mg/Kg		10/28/22 09:04	10/28/22 18:43	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/28/22 09:04	10/28/22 18:43	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		10/28/22 09:04	10/28/22 18:43	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/28/22 09:04	10/28/22 18:43	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/28/22 09:04	10/28/22 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*10/28/22 09:04*	*10/28/22 18:43*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*10/28/22 09:04*	*10/28/22 18:43*	*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			10/30/22 22:15	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			10/27/22 09:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *+ *1	50.0		mg/Kg		10/26/22 11:21	10/27/22 02:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/26/22 11:21	10/27/22 02:29	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/26/22 11:21	10/27/22 02:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*10/26/22 11:21*	*10/27/22 02:29*	*1*
o-Terphenyl	*99*		*70 - 130*	*10/26/22 11:21*	*10/27/22 02:29*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**16.5**		5.03		mg/Kg			10/27/22 23:05	1

Client Sample ID: H-6 (0-0.5')

Lab Sample ID: 880-20700-6
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/28/22 09:04	10/28/22 19:09	1
Toluene	<0.00200	U *-	0.00200		mg/Kg		10/28/22 09:04	10/28/22 19:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/28/22 09:04	10/28/22 19:09	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/28/22 09:04	10/28/22 19:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/22 09:04	10/28/22 19:09	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/28/22 09:04	10/28/22 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*10/28/22 09:04*	*10/28/22 19:09*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*10/28/22 09:04*	*10/28/22 19:09*	*1*

Client Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20700-1
SDG: Eddy County, New Mexico

Client Sample ID: H-6 (0-0.5')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20700-6

Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/30/22 22:15	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			10/27/22 09:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *+ *1	49.9		mg/Kg		10/26/22 11:21	10/27/22 02:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/26/22 11:21	10/27/22 02:50	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/26/22 11:21	10/27/22 02:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*10/26/22 11:21*	*10/27/22 02:50*	*1*
o-Terphenyl	*117*		*70 - 130*	*10/26/22 11:21*	*10/27/22 02:50*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.18	U	4.18		mg/Kg			10/27/22 23:30	1

Surrogate Summary

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20700-1
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 (70-130)	DFBZ1 (70-130)
880-20623-A-84-G MS	Matrix Spike	99	93
880-20623-A-84-K MSD	Matrix Spike Duplicate	96	92
880-20700-1	H-1 (0-0.5')	101	91
880-20700-2	H-2 (0-0.5')	109	94
880-20700-3	H-3 (0-0.5')	113	90
880-20700-4	H-4 (0-0.5')	113	95
880-20700-5	H-5 (0-0.5')	111	91
880-20700-6	H-6 (0-0.5')	102	90
LCS 880-38061/1-A	Lab Control Sample	110	106
LCSD 880-38061/2-A	Lab Control Sample Dup	108	100
MB 880-38061/6-A	Method Blank	62 S1-	89

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-20700-1	H-1 (0-0.5')	103	113
880-20700-2	H-2 (0-0.5')	85	97
880-20700-3	H-3 (0-0.5')	84	96
880-20700-4	H-4 (0-0.5')	95	104
880-20700-5	H-5 (0-0.5')	87	99
880-20700-6	H-6 (0-0.5')	106	117
890-3271-A-4-C MS	Matrix Spike	77	81
890-3271-A-4-D MSD	Matrix Spike Duplicate	78	82
890-3276-A-21-B MS	Matrix Spike	82	84
890-3276-A-21-C MSD	Matrix Spike Duplicate	98	97
LCS 880-37854/2-A	Lab Control Sample	90	109
LCS 880-37877/2-A	Lab Control Sample	97	118
LCSD 880-37854/3-A	Lab Control Sample Dup	109	126
LCSD 880-37877/3-A	Lab Control Sample Dup	117	137 S1+
MB 880-37854/1-A	Method Blank	98	123
MB 880-37877/1-A	Method Blank	121	146 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20700-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38061/6-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38058 — **Prep Batch: 38061**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		10/28/22 09:04	10/28/22 11:36	1
Toluene	<0.00201	U	0.00201		mg/Kg		10/28/22 09:04	10/28/22 11:36	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/28/22 09:04	10/28/22 11:36	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		10/28/22 09:04	10/28/22 11:36	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/28/22 09:04	10/28/22 11:36	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/28/22 09:04	10/28/22 11:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*62*	*S1-*	*70 - 130*	*10/28/22 09:04*	*10/28/22 11:36*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*10/28/22 09:04*	*10/28/22 11:36*	*1*

Lab Sample ID: LCS 880-38061/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38058 — **Prep Batch: 38061**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.07369		mg/Kg		74	70 - 130		
Toluene			0.100	0.06319	*-	mg/Kg		63	70 - 130		
Ethylbenzene			0.100	0.07103		mg/Kg		71	70 - 130		
m-Xylene & p-Xylene			0.200	0.1424		mg/Kg		71	70 - 130		
o-Xylene			0.100	0.07141		mg/Kg		71	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 880-38061/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38058 — **Prep Batch: 38061**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08194		mg/Kg		82	70 - 130	11	35
Toluene			0.100	0.07901		mg/Kg		79	70 - 130	22	35
Ethylbenzene			0.100	0.07690		mg/Kg		77	70 - 130	8	35
m-Xylene & p-Xylene			0.200	0.1545		mg/Kg		77	70 - 130	8	35
o-Xylene			0.100	0.07852		mg/Kg		79	70 - 130	9	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 880-20623-A-84-G MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38058 — **Prep Batch: 38061**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.0998	0.07938		mg/Kg		80	70 - 130		
Toluene	<0.00199	U *-	0.0998	0.07727		mg/Kg		77	70 - 130		

QC Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20700-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-20623-A-84-G MS
Matrix: Solid
Analysis Batch: 38058

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38061

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.0998	0.07442		mg/Kg		75	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1483		mg/Kg		74	70 - 130
o-Xylene	<0.00199	U	0.0998	0.07325		mg/Kg		73	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: 880-20623-A-84-K MSD
Matrix: Solid
Analysis Batch: 38058

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 38061

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0990	0.08035		mg/Kg		81	70 - 130	1	35
Toluene	<0.00199	U *-	0.0990	0.07748		mg/Kg		78	70 - 130	0	35
Ethylbenzene	<0.00199	U	0.0990	0.07532		mg/Kg		76	70 - 130	1	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1500		mg/Kg		76	70 - 130	1	35
o-Xylene	<0.00199	U	0.0990	0.07389		mg/Kg		75	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

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

Lab Sample ID: MB 880-37854/1-A
Matrix: Solid
Analysis Batch: 37857

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 37854

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		10/26/22 08:35	10/26/22 09:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/26/22 08:35	10/26/22 09:08	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/26/22 08:35	10/26/22 09:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*10/26/22 08:35*	*10/26/22 09:08*	*1*
o-Terphenyl	*123*		*70 - 130*	*10/26/22 08:35*	*10/26/22 09:08*	*1*

Lab Sample ID: LCS 880-37854/2-A
Matrix: Solid
Analysis Batch: 37857

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 37854

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	975.8		mg/Kg		98	70 - 130
Diesel Range Organics (Over C10-C28)	1000	840.0		mg/Kg		84	70 - 130

QC Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20700-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: LCS 880-37854/2-A
Matrix: Solid
Analysis Batch: 37857

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 37854

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	109		70 - 130

Lab Sample ID: LCSD 880-37854/3-A
Matrix: Solid
Analysis Batch: 37857

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 37854

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	800.4		mg/Kg		80	70 - 130	20	20
Diesel Range Organics (Over C10-C28)			1000	939.0		mg/Kg		94	70 - 130	11	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	126		70 - 130

Lab Sample ID: 890-3271-A-4-C MS
Matrix: Solid
Analysis Batch: 37857

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 37854

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	1099		mg/Kg		108	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	998	932.0		mg/Kg		92	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	77		70 - 130
o-Terphenyl	81		70 - 130

Lab Sample ID: 890-3271-A-4-D MSD
Matrix: Solid
Analysis Batch: 37857

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 37854

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	<49.8	U	998	1173		mg/Kg		115	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	<49.8	U	998	942.1		mg/Kg		93	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	78		70 - 130
o-Terphenyl	82		70 - 130

QC Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20700-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: MB 880-37877/1-A
Matrix: Solid
Analysis Batch: 37857

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 37877

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		10/26/22 11:21	10/26/22 20:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/26/22 11:21	10/26/22 20:49	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/26/22 11:21	10/26/22 20:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*121*		*70 - 130*	*10/26/22 11:21*	*10/26/22 20:49*	*1*
o-Terphenyl	*146*	*S1+*	*70 - 130*	*10/26/22 11:21*	*10/26/22 20:49*	*1*

Lab Sample ID: LCS 880-37877/2-A
Matrix: Solid
Analysis Batch: 37857

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 37877

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1077		mg/Kg		108	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1003		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*118*		*70 - 130*

Lab Sample ID: LCSD 880-37877/3-A
Matrix: Solid
Analysis Batch: 37857

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 37877

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1328	*+ *1	mg/Kg		133	70 - 130	21	20
Diesel Range Organics (Over C10-C28)			1000	1159		mg/Kg		116	70 - 130	14	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*117*		*70 - 130*
o-Terphenyl	*137*	*S1+*	*70 - 130*

Lab Sample ID: 890-3276-A-21-B MS
Matrix: Solid
Analysis Batch: 37857

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 37877

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *+ *1	998	1122		mg/Kg		110	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	998	938.0		mg/Kg		94	70 - 130		

QC Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20700-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 890-3276-A-21-B MS
Matrix: Solid
Analysis Batch: 37857

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 37877

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	82		70 - 130
o-Terphenyl	84		70 - 130

Lab Sample ID: 890-3276-A-21-C MSD
Matrix: Solid
Analysis Batch: 37857

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 37877

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	<49.8	U *+ *1	998	937.6		mg/Kg		91	70 - 130	18	20
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1117		mg/Kg		112	70 - 130	17	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	97		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-37837/1-A
Matrix: Solid
Analysis Batch: 38045

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			10/27/22 21:50	1

Lab Sample ID: LCS 880-37837/2-A
Matrix: Solid
Analysis Batch: 38045

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	252.5		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-37837/3-A
Matrix: Solid
Analysis Batch: 38045

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	255.1		mg/Kg		102	90 - 110	1	20

Lab Sample ID: 880-20700-1 MS
Matrix: Solid
Analysis Batch: 38045

Client Sample ID: H-1 (0-0.5')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	<4.98	U	249	246.5		mg/Kg		98	90 - 110

QC Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20700-1
SDG: Eddy County, New Mexico

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-20700-1 MSD
Matrix: Solid
Analysis Batch: 38045

Client Sample ID: H-1 (0-0.5')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	<4.98	U	249	247.6		mg/Kg		99	90 - 110	0	20

QC Association Summary

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20700-1
SDG: Eddy County, New Mexico

GC VOA

Analysis Batch: 38058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20700-1	H-1 (0-0.5')	Total/NA	Solid	8021B	38061
880-20700-2	H-2 (0-0.5')	Total/NA	Solid	8021B	38061
880-20700-3	H-3 (0-0.5')	Total/NA	Solid	8021B	38061
880-20700-4	H-4 (0-0.5')	Total/NA	Solid	8021B	38061
880-20700-5	H-5 (0-0.5')	Total/NA	Solid	8021B	38061
880-20700-6	H-6 (0-0.5')	Total/NA	Solid	8021B	38061
MB 880-38061/6-A	Method Blank	Total/NA	Solid	8021B	38061
LCS 880-38061/1-A	Lab Control Sample	Total/NA	Solid	8021B	38061
LCSD 880-38061/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38061
880-20623-A-84-G MS	Matrix Spike	Total/NA	Solid	8021B	38061
880-20623-A-84-K MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38061

Prep Batch: 38061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20700-1	H-1 (0-0.5')	Total/NA	Solid	5035	
880-20700-2	H-2 (0-0.5')	Total/NA	Solid	5035	
880-20700-3	H-3 (0-0.5')	Total/NA	Solid	5035	
880-20700-4	H-4 (0-0.5')	Total/NA	Solid	5035	
880-20700-5	H-5 (0-0.5')	Total/NA	Solid	5035	
880-20700-6	H-6 (0-0.5')	Total/NA	Solid	5035	
MB 880-38061/6-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38061/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38061/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-20623-A-84-G MS	Matrix Spike	Total/NA	Solid	5035	
880-20623-A-84-K MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 38196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20700-1	H-1 (0-0.5')	Total/NA	Solid	Total BTEX	
880-20700-2	H-2 (0-0.5')	Total/NA	Solid	Total BTEX	
880-20700-3	H-3 (0-0.5')	Total/NA	Solid	Total BTEX	
880-20700-4	H-4 (0-0.5')	Total/NA	Solid	Total BTEX	
880-20700-5	H-5 (0-0.5')	Total/NA	Solid	Total BTEX	
880-20700-6	H-6 (0-0.5')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 37854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20700-1	H-1 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-20700-2	H-2 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-20700-3	H-3 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-20700-4	H-4 (0-0.5')	Total/NA	Solid	8015NM Prep	
MB 880-37854/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-37854/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-37854/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3271-A-4-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3271-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20700-1
SDG: Eddy County, New Mexico

GC Semi VOA

Analysis Batch: 37857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20700-1	H-1 (0-0.5')	Total/NA	Solid	8015B NM	37854
880-20700-2	H-2 (0-0.5')	Total/NA	Solid	8015B NM	37854
880-20700-3	H-3 (0-0.5')	Total/NA	Solid	8015B NM	37854
880-20700-4	H-4 (0-0.5')	Total/NA	Solid	8015B NM	37854
880-20700-5	H-5 (0-0.5')	Total/NA	Solid	8015B NM	37877
880-20700-6	H-6 (0-0.5')	Total/NA	Solid	8015B NM	37877
MB 880-37854/1-A	Method Blank	Total/NA	Solid	8015B NM	37854
MB 880-37877/1-A	Method Blank	Total/NA	Solid	8015B NM	37877
LCS 880-37854/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	37854
LCS 880-37877/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	37877
LCSD 880-37854/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	37854
LCSD 880-37877/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	37877
890-3271-A-4-C MS	Matrix Spike	Total/NA	Solid	8015B NM	37854
890-3271-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	37854
890-3276-A-21-B MS	Matrix Spike	Total/NA	Solid	8015B NM	37877
890-3276-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	37877

Prep Batch: 37877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20700-5	H-5 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-20700-6	H-6 (0-0.5')	Total/NA	Solid	8015NM Prep	
MB 880-37877/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-37877/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-37877/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3276-A-21-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3276-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 37988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20700-1	H-1 (0-0.5')	Total/NA	Solid	8015 NM	
880-20700-2	H-2 (0-0.5')	Total/NA	Solid	8015 NM	
880-20700-3	H-3 (0-0.5')	Total/NA	Solid	8015 NM	
880-20700-4	H-4 (0-0.5')	Total/NA	Solid	8015 NM	
880-20700-5	H-5 (0-0.5')	Total/NA	Solid	8015 NM	
880-20700-6	H-6 (0-0.5')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 37837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20700-1	H-1 (0-0.5')	Soluble	Solid	DI Leach	
880-20700-2	H-2 (0-0.5')	Soluble	Solid	DI Leach	
880-20700-3	H-3 (0-0.5')	Soluble	Solid	DI Leach	
880-20700-4	H-4 (0-0.5')	Soluble	Solid	DI Leach	
880-20700-5	H-5 (0-0.5')	Soluble	Solid	DI Leach	
880-20700-6	H-6 (0-0.5')	Soluble	Solid	DI Leach	
MB 880-37837/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-37837/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-37837/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-20700-1 MS	H-1 (0-0.5')	Soluble	Solid	DI Leach	
880-20700-1 MSD	H-1 (0-0.5')	Soluble	Solid	DI Leach	

QC Association Summary

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20700-1
SDG: Eddy County, New Mexico

HPLC/IC

Analysis Batch: 38045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20700-1	H-1 (0-0.5')	Soluble	Solid	300.0	37837
880-20700-2	H-2 (0-0.5')	Soluble	Solid	300.0	37837
880-20700-3	H-3 (0-0.5')	Soluble	Solid	300.0	37837
880-20700-4	H-4 (0-0.5')	Soluble	Solid	300.0	37837
880-20700-5	H-5 (0-0.5')	Soluble	Solid	300.0	37837
880-20700-6	H-6 (0-0.5')	Soluble	Solid	300.0	37837
MB 880-37837/1-A	Method Blank	Soluble	Solid	300.0	37837
LCS 880-37837/2-A	Lab Control Sample	Soluble	Solid	300.0	37837
LCSD 880-37837/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	37837
880-20700-1 MS	H-1 (0-0.5')	Soluble	Solid	300.0	37837
880-20700-1 MSD	H-1 (0-0.5')	Soluble	Solid	300.0	37837

Lab Chronicle

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20700-1
SDG: Eddy County, New Mexico

Client Sample ID: H-1 (0-0.5')

Lab Sample ID: 880-20700-1

Date Collected: 10/24/22 00:00
Matrix: Solid
Date Received: 10/25/22 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	38061	10/28/22 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38058	10/28/22 15:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38196	10/30/22 22:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			37988	10/27/22 09:52	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37854	10/26/22 08:35	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37857	10/26/22 19:03	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	37837	10/25/22 16:10	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38045	10/27/22 22:15	CH	EET MID

Client Sample ID: H-2 (0-0.5')

Lab Sample ID: 880-20700-2

Date Collected: 10/24/22 00:00
Matrix: Solid
Date Received: 10/25/22 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	38061	10/28/22 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38058	10/28/22 15:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38196	10/30/22 22:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			37988	10/27/22 09:52	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	37854	10/26/22 08:35	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37857	10/26/22 19:24	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	37837	10/25/22 16:10	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38045	10/27/22 22:40	CH	EET MID

Client Sample ID: H-3 (0-0.5')

Lab Sample ID: 880-20700-3

Date Collected: 10/24/22 00:00
Matrix: Solid
Date Received: 10/25/22 09:36

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	38061	10/28/22 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38058	10/28/22 17:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38196	10/30/22 22:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			37988	10/27/22 09:52	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	37854	10/26/22 08:35	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37857	10/26/22 19:45	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	37837	10/25/22 16:10	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38045	10/27/22 22:48	CH	EET MID

Client Sample ID: H-4 (0-0.5')

Lab Sample ID: 880-20700-4

Date Collected: 10/24/22 00:00
Matrix: Solid
Date Received: 10/25/22 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	38061	10/28/22 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38058	10/28/22 18:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38196	10/30/22 22:15	SM	EET MID

Lab Chronicle

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20700-1
SDG: Eddy County, New Mexico

Client Sample ID: H-4 (0-0.5')

Lab Sample ID: 880-20700-4
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

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			37988	10/27/22 09:52	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37854	10/26/22 08:35	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37857	10/26/22 20:07	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	37837	10/25/22 16:10	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38045	10/27/22 22:57	CH	EET MID

Client Sample ID: H-5 (0-0.5')

Lab Sample ID: 880-20700-5
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

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	38061	10/28/22 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38058	10/28/22 18:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38196	10/30/22 22:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			37988	10/27/22 09:52	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	37877	10/26/22 11:21	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37857	10/27/22 02:29	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	37837	10/25/22 16:10	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38045	10/27/22 23:05	CH	EET MID

Client Sample ID: H-6 (0-0.5')

Lab Sample ID: 880-20700-6
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	38061	10/28/22 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38058	10/28/22 19:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38196	10/30/22 22:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			37988	10/27/22 09:52	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37877	10/26/22 11:21	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37857	10/27/22 02:50	SM	EET MID
Soluble	Leach	DI Leach			5.98 g	50 mL	37837	10/25/22 16:10	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38045	10/27/22 23:30	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: Shell Federal

Job ID: 880-20700-1
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	T104704400-22-24	06-30-23

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

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

Method Summary

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20700-1
SDG: Eddy County, New Mexico

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20700-1
SDG: Eddy County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-20700-1	H-1 (0-0.5')	Solid	10/24/22 00:00	10/25/22 09:36
880-20700-2	H-2 (0-0.5')	Solid	10/24/22 00:00	10/25/22 09:36
880-20700-3	H-3 (0-0.5')	Solid	10/24/22 00:00	10/25/22 09:36
880-20700-4	H-4 (0-0.5')	Solid	10/24/22 00:00	10/25/22 09:36
880-20700-5	H-5 (0-0.5')	Solid	10/24/22 00:00	10/25/22 09:36
880-20700-6	H-6 (0-0.5')	Solid	10/24/22 00:00	10/25/22 09:36

Work Order No: 20700

Page 1 of 1

Project Manager	Conner Moehring	Bill to (if different)	Grant Huckabay
Company Name	Carmona Resources	Company Name	Fasken Oil and Ranch
Address.	310 W Wall St Ste 415	Address	6101 Holiday Hill Road
City, State ZIP	Midland, TX 79701	City, State ZIP	Midland, Texas 79707
Phone	432-813-6823	Email	Granth@forl.com

Work Order Comments

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

State of Project:

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

Deliverables. EDD ☐ ADaPT ☐ Other:

Project Name	Shell Federal	Turn Around	
Project Number	1155	☑ Routine ☐ Rush	
Project Location	Eddy County, New Mexico	Due Date	
Sampler's Name.	CRM		
PO #:			

SAMPLE RECEIPT				
Temp Blank.	Yes No	Wet Ice	Yes No	
Received Intact:	Yes No	Thermometer ID		FB
Cooler Custody Seals	Yes No N/A	Correction Factor		-.3
Sample Custody Seals	Yes No N/A	Temperature Reading		0.4
Total Containers		Corrected Temperature		0.1

Preservative Codes

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

Sample Identification	Date	Time	Soil	Water	Grab/ Comp	# of Cont	Parameters: BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 300.0	Sample Comments
H-1 (0-0 5')	10/24/2022		X		G	1	X	X	X	4oz jar
H-2 (0-0.5')	10/24/2022		X		G	1	X	X	X	
H-3 (0-0.5')	10/24/2022		X		G	1	X	X	X	
H-4 (0-0 5')	10/24/2022		X		G	1	X	X	X	
H-5 (0-0 5')	10/24/2022		X		G	1	X	X	X	
H-6 (0-0 5')	10/24/2022		X		G	1	X	X	X	

880-20700 Chain of Custody

Comments:

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
Commpany	10/25/22 936		

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-20700-1
SDG Number: Eddy County, New Mexico

Login Number: 20700
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 880-20701-1
Laboratory Sample Delivery Group: Eddy County, New Mexico
Client Project/Site: Shell Federal

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

Attn: Mike Carmona

JKramer

Authorized for release by:
10/31/2022 4:43:16 PM

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

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

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

Client: Carmona Resources
Project/Site: Shell Federal

Laboratory Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Table of Contents

Definitions/Glossary

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Job ID: 880-20701-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-20701-1

Receipt
The samples were received on 10/25/2022 9:36 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.1°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: S-1 (0-1') (880-20701-1), S-1 (1.5') (880-20701-2), S-1 (2') (880-20701-3), S-2 (0-1') (880-20701-4), S-2 (1.5') (880-20701-5), S-2 (2') (880-20701-6), S-2 (3') (880-20701-7), S-3 (0-1') (880-20701-8), S-3 (1.5') (880-20701-9), S-3 (2') (880-20701-10), S-3 (3') (880-20701-11), S-4 (0-1') (880-20701-12), S-4 (1.5') (880-20701-13), S-4 (2') (880-20701-14), S-4 (3') (880-20701-15), S-4 (4') (880-20701-16), S-5 (0-1') (880-20701-17), S-5 (1.5') (880-20701-18), S-5 (2') (880-20701-19) and S-5 (3') (880-20701-20).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-38029 and analytical batch 880-38173 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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

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

Client Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-20701-1
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.201	U	0.201		mg/Kg		10/27/22 15:04	10/30/22 16:09	100
Toluene	<0.201	U	0.201		mg/Kg		10/27/22 15:04	10/30/22 16:09	100
Ethylbenzene	<0.201	U	0.201		mg/Kg		10/27/22 15:04	10/30/22 16:09	100
m-Xylene & p-Xylene	<0.402	U	0.402		mg/Kg		10/27/22 15:04	10/30/22 16:09	100
o-Xylene	<0.201	U	0.201		mg/Kg		10/27/22 15:04	10/30/22 16:09	100
Xylenes, Total	<0.402	U	0.402		mg/Kg		10/27/22 15:04	10/30/22 16:09	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*70 - 130*	*10/27/22 15:04*	*10/30/22 16:09*	*100*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*10/27/22 15:04*	*10/30/22 16:09*	*100*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.402	U	0.402		mg/Kg			10/31/22 10:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**91.2**		49.8		mg/Kg			10/31/22 14:18	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		10/26/22 16:08	10/28/22 22:18	1
Diesel Range Organics (Over C10-C28)	**91.2**		49.8		mg/Kg		10/26/22 16:08	10/28/22 22:18	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/26/22 16:08	10/28/22 22:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*10/26/22 16:08*	*10/28/22 22:18*	*1*
o-Terphenyl	*106*		*70 - 130*	*10/26/22 16:08*	*10/28/22 22:18*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**18300**		248		mg/Kg			10/27/22 17:22	50

Client Sample ID: S-1 (1.5')

Lab Sample ID: 880-20701-2
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U F1 F2	0.00198		mg/Kg		10/27/22 15:04	10/30/22 13:05	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/27/22 15:04	10/30/22 13:05	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/27/22 15:04	10/30/22 13:05	1
m-Xylene & p-Xylene	<0.00396	U F1 F2	0.00396		mg/Kg		10/27/22 15:04	10/30/22 13:05	1
o-Xylene	<0.00198	U F2	0.00198		mg/Kg		10/27/22 15:04	10/30/22 13:05	1
Xylenes, Total	<0.00396	U F1 F2	0.00396		mg/Kg		10/27/22 15:04	10/30/22 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*	*10/27/22 15:04*	*10/30/22 13:05*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*10/27/22 15:04*	*10/30/22 13:05*	*1*

Client Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Client Sample ID: S-1 (1.5')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-2
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			10/31/22 10:07	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			10/31/22 14:18	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		10/26/22 16:08	10/28/22 23:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/26/22 16:08	10/28/22 23:22	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/26/22 16:08	10/28/22 23:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*10/26/22 16:08*	*10/28/22 23:22*	*1*
o-Terphenyl	*89*		*70 - 130*	*10/26/22 16:08*	*10/28/22 23:22*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**163**		4.99		mg/Kg			10/27/22 17:47	1

Client Sample ID: S-1 (2')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/27/22 15:04	10/30/22 13:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/27/22 15:04	10/30/22 13:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/27/22 15:04	10/30/22 13:26	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/27/22 15:04	10/30/22 13:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/27/22 15:04	10/30/22 13:26	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/27/22 15:04	10/30/22 13:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*10/27/22 15:04*	*10/30/22 13:26*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*10/27/22 15:04*	*10/30/22 13:26*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/31/22 10:07	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			10/31/22 14:18	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		10/26/22 16:08	10/28/22 23:44	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/26/22 16:08	10/28/22 23:44	1

Client Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Client Sample ID: S-1 (2')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/26/22 16:08	10/28/22 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*10/26/22 16:08*	*10/28/22 23:44*	*1*
o-Terphenyl	*111*		*70 - 130*	*10/26/22 16:08*	*10/28/22 23:44*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**120**		4.95		mg/Kg			10/27/22 17:56	1

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

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-4
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 13:46	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 13:46	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 13:46	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/27/22 15:04	10/30/22 13:46	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 13:46	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/27/22 15:04	10/30/22 13:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*10/27/22 15:04*	*10/30/22 13:46*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*10/27/22 15:04*	*10/30/22 13:46*	*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			10/31/22 10:07	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			10/31/22 14:18	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		10/26/22 16:08	10/29/22 00:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/26/22 16:08	10/29/22 00:05	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/26/22 16:08	10/29/22 00:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*10/26/22 16:08*	*10/29/22 00:05*	*1*
o-Terphenyl	*95*		*70 - 130*	*10/26/22 16:08*	*10/29/22 00:05*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2240**		50.5		mg/Kg			10/27/22 18:04	10

Client Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Client Sample ID: S-2 (1.5')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-5
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00275**		0.00199		mg/Kg		10/27/22 15:04	10/30/22 14:07	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 14:07	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 14:07	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/27/22 15:04	10/30/22 14:07	1
o-Xylene	**0.00232**		0.00199		mg/Kg		10/27/22 15:04	10/30/22 14:07	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/27/22 15:04	10/30/22 14:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*10/27/22 15:04*	*10/30/22 14:07*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*10/27/22 15:04*	*10/30/22 14:07*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00507**		0.00398		mg/Kg			10/31/22 10:07	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			10/31/22 14:18	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		10/26/22 16:08	10/29/22 00:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/26/22 16:08	10/29/22 00:26	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/26/22 16:08	10/29/22 00:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*10/26/22 16:08*	*10/29/22 00:26*	*1*
o-Terphenyl	*113*		*70 - 130*	*10/26/22 16:08*	*10/29/22 00:26*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2270**		50.0		mg/Kg			10/27/22 18:12	10

Client Sample ID: S-2 (2')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-6
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/27/22 15:04	10/30/22 14:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/27/22 15:04	10/30/22 14:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/27/22 15:04	10/30/22 14:27	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/27/22 15:04	10/30/22 14:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/27/22 15:04	10/30/22 14:27	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/27/22 15:04	10/30/22 14:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*10/27/22 15:04*	*10/30/22 14:27*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*10/27/22 15:04*	*10/30/22 14:27*	*1*

Client Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Client Sample ID: S-2 (2')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-6
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/31/22 10:07	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			10/31/22 14:18	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		10/26/22 16:08	10/29/22 00:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/26/22 16:08	10/29/22 00:48	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/26/22 16:08	10/29/22 00:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*10/26/22 16:08*	*10/29/22 00:48*	*1*
o-Terphenyl	*99*		*70 - 130*	*10/26/22 16:08*	*10/29/22 00:48*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1540**		24.9		mg/Kg			10/27/22 18:37	5

Client Sample ID: S-2 (3')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-7
Matrix: Solid

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		10/27/22 15:04	10/30/22 14:48	1
Toluene	<0.00201	U	0.00201		mg/Kg		10/27/22 15:04	10/30/22 14:48	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/27/22 15:04	10/30/22 14:48	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		10/27/22 15:04	10/30/22 14:48	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/27/22 15:04	10/30/22 14:48	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/27/22 15:04	10/30/22 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*10/27/22 15:04*	*10/30/22 14:48*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*10/27/22 15:04*	*10/30/22 14:48*	*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			10/31/22 10:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/31/22 14:18	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		10/26/22 16:08	10/29/22 01:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/26/22 16:08	10/29/22 01:10	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Client Sample ID: S-2 (3')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-7
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/26/22 16:08	10/29/22 01:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*10/26/22 16:08*	*10/29/22 01:10*	*1*
o-Terphenyl	*93*		*70 - 130*	*10/26/22 16:08*	*10/29/22 01:10*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1150**		24.8		mg/Kg			10/27/22 18:46	5

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

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-8
Matrix: Solid

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		10/27/22 15:04	10/30/22 15:08	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/27/22 15:04	10/30/22 15:08	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/27/22 15:04	10/30/22 15:08	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		10/27/22 15:04	10/30/22 15:08	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/27/22 15:04	10/30/22 15:08	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		10/27/22 15:04	10/30/22 15:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*10/27/22 15:04*	*10/30/22 15:08*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*10/27/22 15:04*	*10/30/22 15:08*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			10/31/22 10:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**315**		50.0		mg/Kg			10/31/22 14:18	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		10/26/22 16:08	10/29/22 01:31	1
Diesel Range Organics (Over C10-C28)	**315**		50.0		mg/Kg		10/26/22 16:08	10/29/22 01:31	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/26/22 16:08	10/29/22 01:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*10/26/22 16:08*	*10/29/22 01:31*	*1*
o-Terphenyl	*96*		*70 - 130*	*10/26/22 16:08*	*10/29/22 01:31*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14300**		101		mg/Kg			10/27/22 18:54	20

Client Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Client Sample ID: S-3 (1.5')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-9
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 15:28	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 15:28	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 15:28	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/27/22 15:04	10/30/22 15:28	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 15:28	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/27/22 15:04	10/30/22 15:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*10/27/22 15:04*	*10/30/22 15:28*	*1*
1,4-Difluorobenzene (Surr)	*119*		*70 - 130*	*10/27/22 15:04*	*10/30/22 15:28*	*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			10/31/22 10:07	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			10/31/22 14:18	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		10/26/22 16:08	10/29/22 01:53	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/26/22 16:08	10/29/22 01:53	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/26/22 16:08	10/29/22 01:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*10/26/22 16:08*	*10/29/22 01:53*	*1*
o-Terphenyl	*96*		*70 - 130*	*10/26/22 16:08*	*10/29/22 01:53*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10100**		100		mg/Kg			10/27/22 19:03	20

Client Sample ID: S-3 (2')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-10
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/27/22 15:04	10/30/22 15:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/27/22 15:04	10/30/22 15:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/27/22 15:04	10/30/22 15:49	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/27/22 15:04	10/30/22 15:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/27/22 15:04	10/30/22 15:49	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/27/22 15:04	10/30/22 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*10/27/22 15:04*	*10/30/22 15:49*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*10/27/22 15:04*	*10/30/22 15:49*	*1*

Client Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Client Sample ID: S-3 (2')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-10
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/31/22 10:07	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			10/31/22 14:18	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		10/26/22 16:08	10/29/22 02:15	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/26/22 16:08	10/29/22 02:15	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/26/22 16:08	10/29/22 02:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*10/26/22 16:08*	*10/29/22 02:15*	*1*
o-Terphenyl	*115*		*70 - 130*	*10/26/22 16:08*	*10/29/22 02:15*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3310**		25.0		mg/Kg			10/27/22 19:11	5

Client Sample ID: S-3 (3')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-11
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 17:59	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 17:59	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 17:59	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/27/22 15:04	10/30/22 17:59	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 17:59	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/27/22 15:04	10/30/22 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*10/27/22 15:04*	*10/30/22 17:59*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*10/27/22 15:04*	*10/30/22 17:59*	*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			10/31/22 10:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/31/22 14:18	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		10/26/22 16:08	10/29/22 02:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/26/22 16:08	10/29/22 02:59	1

Client Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Client Sample ID: S-3 (3')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-11
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/26/22 16:08	10/29/22 02:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*10/26/22 16:08*	*10/29/22 02:59*	*1*
o-Terphenyl	*110*		*70 - 130*	*10/26/22 16:08*	*10/29/22 02:59*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**160**		5.00		mg/Kg			10/27/22 19:19	1

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

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-12
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0992	U	0.0992		mg/Kg		10/27/22 15:04	10/30/22 21:03	50
Toluene	<0.0992	U	0.0992		mg/Kg		10/27/22 15:04	10/30/22 21:03	50
Ethylbenzene	**0.106**		0.0992		mg/Kg		10/27/22 15:04	10/30/22 21:03	50
m-Xylene & p-Xylene	<0.198	U	0.198		mg/Kg		10/27/22 15:04	10/30/22 21:03	50
o-Xylene	**0.439**		0.0992		mg/Kg		10/27/22 15:04	10/30/22 21:03	50
Xylenes, Total	**0.439**		0.198		mg/Kg		10/27/22 15:04	10/30/22 21:03	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*60*	*S1-*	*70 - 130*	*10/27/22 15:04*	*10/30/22 21:03*	*50*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*10/27/22 15:04*	*10/30/22 21:03*	*50*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.545**		0.198		mg/Kg			10/31/22 10:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**2780**		50.0		mg/Kg			10/31/22 14:18	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	**170**		50.0		mg/Kg		10/26/22 16:08	10/29/22 03:21	1
Diesel Range Organics (Over C10-C28)	**2610**		50.0		mg/Kg		10/26/22 16:08	10/29/22 03:21	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/26/22 16:08	10/29/22 03:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*10/26/22 16:08*	*10/29/22 03:21*	*1*
o-Terphenyl	*104*		*70 - 130*	*10/26/22 16:08*	*10/29/22 03:21*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4330**		99.6		mg/Kg			10/27/22 19:44	20

Client Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Client Sample ID: S-4 (1.5')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-13
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 18:19	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 18:19	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 18:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/27/22 15:04	10/30/22 18:19	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 18:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/27/22 15:04	10/30/22 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*10/27/22 15:04*	*10/30/22 18:19*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*10/27/22 15:04*	*10/30/22 18:19*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/31/22 10:07	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			10/31/22 14:18	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		10/26/22 16:08	10/29/22 03:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/26/22 16:08	10/29/22 03:43	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/26/22 16:08	10/29/22 03:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*10/26/22 16:08*	*10/29/22 03:43*	*1*
o-Terphenyl	*94*		*70 - 130*	*10/26/22 16:08*	*10/29/22 03:43*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10400**		101		mg/Kg			10/27/22 19:53	20

Client Sample ID: S-4 (2')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-14
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 18:40	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 18:40	1
Ethylbenzene	**0.00340**		0.00199		mg/Kg		10/27/22 15:04	10/30/22 18:40	1
m-Xylene & p-Xylene	**0.00801**		0.00398		mg/Kg		10/27/22 15:04	10/30/22 18:40	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 18:40	1
Xylenes, Total	**0.00801**		0.00398		mg/Kg		10/27/22 15:04	10/30/22 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*10/27/22 15:04*	*10/30/22 18:40*	*1*
1,4-Difluorobenzene (Surr)	*120*		*70 - 130*	*10/27/22 15:04*	*10/30/22 18:40*	*1*

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Client Sample ID: S-4 (2')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-14
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0114**		0.00398		mg/Kg			10/31/22 10:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/31/22 14:18	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		10/26/22 16:08	10/29/22 04:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/26/22 16:08	10/29/22 04:05	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/26/22 16:08	10/29/22 04:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*10/26/22 16:08*	*10/29/22 04:05*	*1*
o-Terphenyl	*90*		*70 - 130*	*10/26/22 16:08*	*10/29/22 04:05*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12400**		250		mg/Kg			10/27/22 20:18	50

Client Sample ID: S-4 (3')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-15
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/27/22 15:04	10/30/22 19:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/27/22 15:04	10/30/22 19:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/27/22 15:04	10/30/22 19:00	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		10/27/22 15:04	10/30/22 19:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/27/22 15:04	10/30/22 19:00	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		10/27/22 15:04	10/30/22 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*10/27/22 15:04*	*10/30/22 19:00*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*10/27/22 15:04*	*10/30/22 19:00*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			10/31/22 10:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/31/22 14:18	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		10/26/22 16:08	10/29/22 04:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/26/22 16:08	10/29/22 04:27	1

Client Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Client Sample ID: S-4 (3')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-15
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/26/22 16:08	10/29/22 04:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*10/26/22 16:08*	*10/29/22 04:27*	*1*
o-Terphenyl	*93*		*70 - 130*	*10/26/22 16:08*	*10/29/22 04:27*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8490**		99.2		mg/Kg			10/27/22 20:26	20

Client Sample ID: S-4 (4')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-16
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/31/22 09:15	10/31/22 12:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/31/22 09:15	10/31/22 12:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/31/22 09:15	10/31/22 12:03	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		10/31/22 09:15	10/31/22 12:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/31/22 09:15	10/31/22 12:03	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		10/31/22 09:15	10/31/22 12:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*44*	*S1-*	*70 - 130*	*10/31/22 09:15*	*10/31/22 12:03*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*10/31/22 09:15*	*10/31/22 12:03*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			10/31/22 15:09	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			10/31/22 14:18	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		10/26/22 16:08	10/29/22 04:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/26/22 16:08	10/29/22 04:49	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/26/22 16:08	10/29/22 04:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*10/26/22 16:08*	*10/29/22 04:49*	*1*
o-Terphenyl	*91*		*70 - 130*	*10/26/22 16:08*	*10/29/22 04:49*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**182**		25.0		mg/Kg			10/27/22 20:35	5

Client Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

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

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-17
Matrix: Solid

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		10/27/22 15:04	10/30/22 19:41	1
Toluene	**0.00256**		0.00201		mg/Kg		10/27/22 15:04	10/30/22 19:41	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/27/22 15:04	10/30/22 19:41	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		10/27/22 15:04	10/30/22 19:41	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/27/22 15:04	10/30/22 19:41	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/27/22 15:04	10/30/22 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*10/27/22 15:04*	*10/30/22 19:41*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*10/27/22 15:04*	*10/30/22 19:41*	*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			10/31/22 10:07	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			10/31/22 14:18	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		10/26/22 16:08	10/29/22 05:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/26/22 16:08	10/29/22 05:11	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/26/22 16:08	10/29/22 05:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*10/26/22 16:08*	*10/29/22 05:11*	*1*
o-Terphenyl	*97*		*70 - 130*	*10/26/22 16:08*	*10/29/22 05:11*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2450**		49.9		mg/Kg			10/27/22 20:43	10

Client Sample ID: S-5 (1.5')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-18
Matrix: Solid

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		10/27/22 15:04	10/30/22 20:01	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/27/22 15:04	10/30/22 20:01	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/27/22 15:04	10/30/22 20:01	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		10/27/22 15:04	10/30/22 20:01	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/27/22 15:04	10/30/22 20:01	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		10/27/22 15:04	10/30/22 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*10/27/22 15:04*	*10/30/22 20:01*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*10/27/22 15:04*	*10/30/22 20:01*	*1*

Client Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Client Sample ID: S-5 (1.5')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-18
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			10/31/22 10:07	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			10/31/22 14:18	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		10/26/22 16:08	10/29/22 05:33	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/26/22 16:08	10/29/22 05:33	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/26/22 16:08	10/29/22 05:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*10/26/22 16:08*	*10/29/22 05:33*	*1*
o-Terphenyl	*87*		*70 - 130*	*10/26/22 16:08*	*10/29/22 05:33*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2150**		25.0		mg/Kg			10/27/22 20:51	5

Client Sample ID: S-5 (2')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-19
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00253**		0.00199		mg/Kg		10/27/22 15:04	10/30/22 20:22	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 20:22	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 20:22	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/27/22 15:04	10/30/22 20:22	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/27/22 15:04	10/30/22 20:22	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/27/22 15:04	10/30/22 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*10/27/22 15:04*	*10/30/22 20:22*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*10/27/22 15:04*	*10/30/22 20:22*	*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			10/31/22 10:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/31/22 14:18	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		10/26/22 16:08	10/29/22 05:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/26/22 16:08	10/29/22 05:54	1

Client Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Client Sample ID: S-5 (2')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-19
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/26/22 16:08	10/29/22 05:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*10/26/22 16:08*	*10/29/22 05:54*	*1*
o-Terphenyl	*96*		*70 - 130*	*10/26/22 16:08*	*10/29/22 05:54*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1600**		24.9		mg/Kg			10/27/22 21:00	5

Client Sample ID: S-5 (3')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-20
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/31/22 09:15	10/31/22 12:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/31/22 09:15	10/31/22 12:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/31/22 09:15	10/31/22 12:24	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/31/22 09:15	10/31/22 12:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/31/22 09:15	10/31/22 12:24	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/31/22 09:15	10/31/22 12:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*51*	*S1-*	*70 - 130*	*10/31/22 09:15*	*10/31/22 12:24*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*10/31/22 09:15*	*10/31/22 12:24*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/31/22 15:09	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			10/31/22 14:18	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		10/26/22 16:08	10/29/22 06:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/26/22 16:08	10/29/22 06:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/26/22 16:08	10/29/22 06:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*10/26/22 16:08*	*10/29/22 06:16*	*1*
o-Terphenyl	*95*		*70 - 130*	*10/26/22 16:08*	*10/29/22 06:16*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1160**		25.2		mg/Kg			10/27/22 21:08	5

Surrogate Summary

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
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 (70-130)	DFBZ1 (70-130)
880-20701-1	S-1 (0-1')	75	96
880-20701-2	S-1 (1.5')	86	96
880-20701-2 MS	S-1 (1.5')	138 S1+	104
880-20701-2 MSD	S-1 (1.5')	83	95
880-20701-3	S-1 (2')	90	99
880-20701-4	S-2 (0-1')	101	103
880-20701-5	S-2 (1.5')	102	113
880-20701-6	S-2 (2')	96	97
880-20701-7	S-2 (3')	98	96
880-20701-8	S-3 (0-1')	83	98
880-20701-9	S-3 (1.5')	119	119
880-20701-10	S-3 (2')	95	96
880-20701-11	S-3 (3')	113	92
880-20701-12	S-4 (0-1')	60 S1-	83
880-20701-13	S-4 (1.5')	93	97
880-20701-14	S-4 (2')	109	120
880-20701-15	S-4 (3')	78	93
880-20701-16	S-4 (4')	44 S1-	77
880-20701-17	S-5 (0-1')	98	113
880-20701-18	S-5 (1.5')	104	96
880-20701-19	S-5 (2')	105	108
880-20701-20	S-5 (3')	51 S1-	79
890-3303-A-2-B MS	Matrix Spike	105	102
890-3303-A-2-C MSD	Matrix Spike Duplicate	95	95
LCS 880-38029/1-A	Lab Control Sample	89	92
LCS 880-38223/1-A	Lab Control Sample	97	97
LCSD 880-38029/2-A	Lab Control Sample Dup	72	94
LCSD 880-38223/2-A	Lab Control Sample Dup	95	98
MB 880-38029/5-A	Method Blank	114	103
MB 880-38223/5-A	Method Blank	99	91

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 (70-130)	OTPH1 (70-130)
880-20701-1	S-1 (0-1')	110	106
880-20701-1 MS	S-1 (0-1')	114	91
880-20701-1 MSD	S-1 (0-1')	85	79
880-20701-2	S-1 (1.5')	90	89
880-20701-3	S-1 (2')	113	111
880-20701-4	S-2 (0-1')	98	95
880-20701-5	S-2 (1.5')	116	113
880-20701-6	S-2 (2')	101	99
880-20701-7	S-2 (3')	95	93

Surrogate Summary

Client: Carmona Resources
Job ID: 880-20701-1
Project/Site: Shell Federal
SDG: Eddy County, New Mexico

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)								
880-20701-8	S-3 (0-1')	99	96								
880-20701-9	S-3 (1.5')	97	96								
880-20701-10	S-3 (2')	120	115								
880-20701-11	S-3 (3')	114	110								
880-20701-12	S-4 (0-1')	105	104								
880-20701-13	S-4 (1.5')	95	94								
880-20701-14	S-4 (2')	91	90								
880-20701-15	S-4 (3')	95	93								
880-20701-16	S-4 (4')	91	91								
880-20701-17	S-5 (0-1')	96	97								
880-20701-18	S-5 (1.5')	86	87								
880-20701-19	S-5 (2')	94	96								
880-20701-20	S-5 (3')	92	95								
LCS 880-37942/2-A	Lab Control Sample	125	105								
LCSD 880-37942/3-A	Lab Control Sample Dup	124	102								
MB 880-37942/1-A	Method Blank	84	85								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38029/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38173 — **Prep Batch: 38029**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/27/22 15:04	10/30/22 12:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/27/22 15:04	10/30/22 12:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/27/22 15:04	10/30/22 12:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/27/22 15:04	10/30/22 12:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/27/22 15:04	10/30/22 12:37	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/27/22 15:04	10/30/22 12:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*10/27/22 15:04*	*10/30/22 12:37*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*10/27/22 15:04*	*10/30/22 12:37*	*1*

Lab Sample ID: LCS 880-38029/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38173 — **Prep Batch: 38029**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09535		mg/Kg		95	70 - 130		
Toluene			0.100	0.1090		mg/Kg		109	70 - 130		
Ethylbenzene			0.100	0.1032		mg/Kg		103	70 - 130		
m-Xylene & p-Xylene			0.200	0.2114		mg/Kg		106	70 - 130		
o-Xylene			0.100	0.1102		mg/Kg		110	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: LCSD 880-38029/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38173 — **Prep Batch: 38029**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1020		mg/Kg		102	70 - 130	7	35
Toluene			0.100	0.1051		mg/Kg		105	70 - 130	4	35
Ethylbenzene			0.100	0.09483		mg/Kg		95	70 - 130	8	35
m-Xylene & p-Xylene			0.200	0.1897		mg/Kg		95	70 - 130	11	35
o-Xylene			0.100	0.09633		mg/Kg		96	70 - 130	13	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*72*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: 880-20701-2 MS — **Client Sample ID: S-1 (1.5')**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38173 — **Prep Batch: 38029**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00198	U F1 F2	0.100	0.01510	F1	mg/Kg		15	70 - 130		
Toluene	<0.00198	U	0.100	0.09894		mg/Kg		99	70 - 130		

QC Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-20701-2 MS
Matrix: Solid
Analysis Batch: 38173

Client Sample ID: S-1 (1.5')
Prep Type: Total/NA
Prep Batch: 38029

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00198	U	0.100	0.07238		mg/Kg		72	70 - 130
m-Xylene & p-Xylene	<0.00396	U F1 F2	0.200	0.1920		mg/Kg		96	70 - 130
o-Xylene	<0.00198	U F2	0.100	0.1035		mg/Kg		103	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*138*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 880-20701-2 MSD
Matrix: Solid
Analysis Batch: 38173

Client Sample ID: S-1 (1.5')
Prep Type: Total/NA
Prep Batch: 38029

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U F1 F2	0.0990	0.07780	F2	mg/Kg		79	70 - 130	135	35
Toluene	<0.00198	U	0.0990	0.08744		mg/Kg		88	70 - 130	12	35
Ethylbenzene	<0.00198	U	0.0990	0.07170		mg/Kg		72	70 - 130	1	35
m-Xylene & p-Xylene	<0.00396	U F1 F2	0.198	0.1330	F1 F2	mg/Kg		67	70 - 130	36	35
o-Xylene	<0.00198	U F2	0.0990	0.07051	F2	mg/Kg		71	70 - 130	38	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: MB 880-38223/5-A
Matrix: Solid
Analysis Batch: 38211

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38223

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/31/22 09:15	10/31/22 11:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/31/22 09:15	10/31/22 11:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/31/22 09:15	10/31/22 11:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/31/22 09:15	10/31/22 11:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/31/22 09:15	10/31/22 11:00	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/31/22 09:15	10/31/22 11:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*10/31/22 09:15*	*10/31/22 11:00*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*10/31/22 09:15*	*10/31/22 11:00*	*1*

Lab Sample ID: LCS 880-38223/1-A
Matrix: Solid
Analysis Batch: 38211

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38223

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08506		mg/Kg		85	70 - 130
Toluene	0.100	0.09233		mg/Kg		92	70 - 130
Ethylbenzene	0.100	0.09305		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	0.200	0.1814		mg/Kg		91	70 - 130

QC Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: LCS 880-38223/1-A
Matrix: Solid
Analysis Batch: 38211

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38223

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.1022		mg/Kg		102	70 - 130		

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

Lab Sample ID: LCSD 880-38223/2-A
Matrix: Solid
Analysis Batch: 38211

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38223

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09133		mg/Kg		91	70 - 130	7	35
Toluene			0.100	0.09725		mg/Kg		97	70 - 130	5	35
Ethylbenzene			0.100	0.09938		mg/Kg		99	70 - 130	7	35
m-Xylene & p-Xylene			0.200	0.1886		mg/Kg		94	70 - 130	4	35
o-Xylene			0.100	0.1064		mg/Kg		106	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 890-3303-A-2-B MS
Matrix: Solid
Analysis Batch: 38211

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38223

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.0990	0.08354		mg/Kg		83	70 - 130		
Toluene	<0.00200	U	0.0990	0.08996		mg/Kg		91	70 - 130		
Ethylbenzene	<0.00200	U	0.0990	0.09006		mg/Kg		91	70 - 130		
m-Xylene & p-Xylene	<0.00399	U	0.198	0.1808		mg/Kg		91	70 - 130		
o-Xylene	<0.00200	U	0.0990	0.1013		mg/Kg		102	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 890-3303-A-2-C MSD
Matrix: Solid
Analysis Batch: 38211

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 38223

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.07830		mg/Kg		77	70 - 130	6	35
Toluene	<0.00200	U	0.100	0.08671		mg/Kg		87	70 - 130	4	35
Ethylbenzene	<0.00200	U	0.100	0.07853		mg/Kg		78	70 - 130	14	35
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1517		mg/Kg		76	70 - 130	18	35
o-Xylene	<0.00200	U	0.100	0.08529		mg/Kg		85	70 - 130	17	35

QC Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 890-3303-A-2-C MSD
Matrix: Solid
Analysis Batch: 38211

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 38223

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

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

Lab Sample ID: MB 880-37942/1-A
Matrix: Solid
Analysis Batch: 38052

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 37942

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		10/26/22 16:08	10/28/22 21:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/26/22 16:08	10/28/22 21:13	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/26/22 16:08	10/28/22 21:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130	10/26/22 16:08	10/28/22 21:13	1
o-Terphenyl	85		70 - 130	10/26/22 16:08	10/28/22 21:13	1

Lab Sample ID: LCS 880-37942/2-A
Matrix: Solid
Analysis Batch: 38052

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 37942

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	850.0		mg/Kg		85	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	938.7		mg/Kg		94	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	125		70 - 130
o-Terphenyl	105		70 - 130

Lab Sample ID: LCSD 880-37942/3-A
Matrix: Solid
Analysis Batch: 38052

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 37942

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	821.4		mg/Kg		82	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	922.0		mg/Kg		92	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	124		70 - 130
o-Terphenyl	102		70 - 130

QC Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-20701-1 MS — **Client Sample ID: S-1 (0-1')**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38052 — **Prep Batch: 37942**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	743.9		mg/Kg		75	70 - 130
Diesel Range Organics (Over C10-C28)	91.2		998	974.1		mg/Kg		88	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*114*		*70 - 130*
o-Terphenyl	*91*		*70 - 130*

Lab Sample ID: 880-20701-1 MSD — **Client Sample ID: S-1 (0-1')**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38052 — **Prep Batch: 37942**

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	<49.8	U	998	771.9		mg/Kg		77	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	91.2		998	861.1		mg/Kg		77	70 - 130	12	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*85*		*70 - 130*
o-Terphenyl	*79*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-37801/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38044

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/27/22 16:57	1

Lab Sample ID: LCS 880-37801/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38044

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	254.8		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-37801/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38044

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	255.1		mg/Kg		102	90 - 110	0	20

QC Sample Results

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-20701-1 MS
Matrix: Solid
Analysis Batch: 38044

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	18300		12400	29820		mg/Kg		93	90 - 110		

Lab Sample ID: 880-20701-1 MSD
Matrix: Solid
Analysis Batch: 38044

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	18300		12400	31110		mg/Kg		103	90 - 110	4	20

Lab Sample ID: 880-20701-11 MS
Matrix: Solid
Analysis Batch: 38044

Client Sample ID: S-3 (3')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	160		250	402.2		mg/Kg		97	90 - 110		

Lab Sample ID: 880-20701-11 MSD
Matrix: Solid
Analysis Batch: 38044

Client Sample ID: S-3 (3')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	160		250	402.9		mg/Kg		97	90 - 110	0	20

QC Association Summary

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

GC VOA

Prep Batch: 38029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20701-1	S-1 (0-1')	Total/NA	Solid	5035	
880-20701-2	S-1 (1.5')	Total/NA	Solid	5035	
880-20701-3	S-1 (2')	Total/NA	Solid	5035	
880-20701-4	S-2 (0-1')	Total/NA	Solid	5035	
880-20701-5	S-2 (1.5')	Total/NA	Solid	5035	
880-20701-6	S-2 (2')	Total/NA	Solid	5035	
880-20701-7	S-2 (3')	Total/NA	Solid	5035	
880-20701-8	S-3 (0-1')	Total/NA	Solid	5035	
880-20701-9	S-3 (1.5')	Total/NA	Solid	5035	
880-20701-10	S-3 (2')	Total/NA	Solid	5035	
880-20701-11	S-3 (3')	Total/NA	Solid	5035	
880-20701-12	S-4 (0-1')	Total/NA	Solid	5035	
880-20701-13	S-4 (1.5')	Total/NA	Solid	5035	
880-20701-14	S-4 (2')	Total/NA	Solid	5035	
880-20701-15	S-4 (3')	Total/NA	Solid	5035	
880-20701-17	S-5 (0-1')	Total/NA	Solid	5035	
880-20701-18	S-5 (1.5')	Total/NA	Solid	5035	
880-20701-19	S-5 (2')	Total/NA	Solid	5035	
MB 880-38029/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38029/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38029/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-20701-2 MS	S-1 (1.5')	Total/NA	Solid	5035	
880-20701-2 MSD	S-1 (1.5')	Total/NA	Solid	5035	

Analysis Batch: 38173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20701-1	S-1 (0-1')	Total/NA	Solid	8021B	38029
880-20701-2	S-1 (1.5')	Total/NA	Solid	8021B	38029
880-20701-3	S-1 (2')	Total/NA	Solid	8021B	38029
880-20701-4	S-2 (0-1')	Total/NA	Solid	8021B	38029
880-20701-5	S-2 (1.5')	Total/NA	Solid	8021B	38029
880-20701-6	S-2 (2')	Total/NA	Solid	8021B	38029
880-20701-7	S-2 (3')	Total/NA	Solid	8021B	38029
880-20701-8	S-3 (0-1')	Total/NA	Solid	8021B	38029
880-20701-9	S-3 (1.5')	Total/NA	Solid	8021B	38029
880-20701-10	S-3 (2')	Total/NA	Solid	8021B	38029
880-20701-11	S-3 (3')	Total/NA	Solid	8021B	38029
880-20701-12	S-4 (0-1')	Total/NA	Solid	8021B	38029
880-20701-13	S-4 (1.5')	Total/NA	Solid	8021B	38029
880-20701-14	S-4 (2')	Total/NA	Solid	8021B	38029
880-20701-15	S-4 (3')	Total/NA	Solid	8021B	38029
880-20701-17	S-5 (0-1')	Total/NA	Solid	8021B	38029
880-20701-18	S-5 (1.5')	Total/NA	Solid	8021B	38029
880-20701-19	S-5 (2')	Total/NA	Solid	8021B	38029
MB 880-38029/5-A	Method Blank	Total/NA	Solid	8021B	38029
LCS 880-38029/1-A	Lab Control Sample	Total/NA	Solid	8021B	38029
LCSD 880-38029/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38029
880-20701-2 MS	S-1 (1.5')	Total/NA	Solid	8021B	38029
880-20701-2 MSD	S-1 (1.5')	Total/NA	Solid	8021B	38029

QC Association Summary

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

GC VOA

Analysis Batch: 38211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20701-16	S-4 (4')	Total/NA	Solid	8021B	38223
880-20701-20	S-5 (3')	Total/NA	Solid	8021B	38223
MB 880-38223/5-A	Method Blank	Total/NA	Solid	8021B	38223
LCS 880-38223/1-A	Lab Control Sample	Total/NA	Solid	8021B	38223
LCSD 880-38223/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38223
890-3303-A-2-B MS	Matrix Spike	Total/NA	Solid	8021B	38223
890-3303-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38223

Prep Batch: 38223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20701-16	S-4 (4')	Total/NA	Solid	5035	
880-20701-20	S-5 (3')	Total/NA	Solid	5035	
MB 880-38223/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38223/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38223/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3303-A-2-B MS	Matrix Spike	Total/NA	Solid	5035	
890-3303-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 38246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20701-1	S-1 (0-1')	Total/NA	Solid	Total BTEX	
880-20701-2	S-1 (1.5')	Total/NA	Solid	Total BTEX	
880-20701-3	S-1 (2')	Total/NA	Solid	Total BTEX	
880-20701-4	S-2 (0-1')	Total/NA	Solid	Total BTEX	
880-20701-5	S-2 (1.5')	Total/NA	Solid	Total BTEX	
880-20701-6	S-2 (2')	Total/NA	Solid	Total BTEX	
880-20701-7	S-2 (3')	Total/NA	Solid	Total BTEX	
880-20701-8	S-3 (0-1')	Total/NA	Solid	Total BTEX	
880-20701-9	S-3 (1.5')	Total/NA	Solid	Total BTEX	
880-20701-10	S-3 (2')	Total/NA	Solid	Total BTEX	
880-20701-11	S-3 (3')	Total/NA	Solid	Total BTEX	
880-20701-12	S-4 (0-1')	Total/NA	Solid	Total BTEX	
880-20701-13	S-4 (1.5')	Total/NA	Solid	Total BTEX	
880-20701-14	S-4 (2')	Total/NA	Solid	Total BTEX	
880-20701-15	S-4 (3')	Total/NA	Solid	Total BTEX	
880-20701-16	S-4 (4')	Total/NA	Solid	Total BTEX	
880-20701-17	S-5 (0-1')	Total/NA	Solid	Total BTEX	
880-20701-18	S-5 (1.5')	Total/NA	Solid	Total BTEX	
880-20701-19	S-5 (2')	Total/NA	Solid	Total BTEX	
880-20701-20	S-5 (3')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 37942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20701-1	S-1 (0-1')	Total/NA	Solid	8015NM Prep	
880-20701-2	S-1 (1.5')	Total/NA	Solid	8015NM Prep	
880-20701-3	S-1 (2')	Total/NA	Solid	8015NM Prep	
880-20701-4	S-2 (0-1')	Total/NA	Solid	8015NM Prep	
880-20701-5	S-2 (1.5')	Total/NA	Solid	8015NM Prep	
880-20701-6	S-2 (2')	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

GC Semi VOA (Continued)

Prep Batch: 37942 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20701-7	S-2 (3')	Total/NA	Solid	8015NM Prep	
880-20701-8	S-3 (0-1')	Total/NA	Solid	8015NM Prep	
880-20701-9	S-3 (1.5')	Total/NA	Solid	8015NM Prep	
880-20701-10	S-3 (2')	Total/NA	Solid	8015NM Prep	
880-20701-11	S-3 (3')	Total/NA	Solid	8015NM Prep	
880-20701-12	S-4 (0-1')	Total/NA	Solid	8015NM Prep	
880-20701-13	S-4 (1.5')	Total/NA	Solid	8015NM Prep	
880-20701-14	S-4 (2')	Total/NA	Solid	8015NM Prep	
880-20701-15	S-4 (3')	Total/NA	Solid	8015NM Prep	
880-20701-16	S-4 (4')	Total/NA	Solid	8015NM Prep	
880-20701-17	S-5 (0-1')	Total/NA	Solid	8015NM Prep	
880-20701-18	S-5 (1.5')	Total/NA	Solid	8015NM Prep	
880-20701-19	S-5 (2')	Total/NA	Solid	8015NM Prep	
880-20701-20	S-5 (3')	Total/NA	Solid	8015NM Prep	
MB 880-37942/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-37942/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-37942/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-20701-1 MS	S-1 (0-1')	Total/NA	Solid	8015NM Prep	
880-20701-1 MSD	S-1 (0-1')	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20701-1	S-1 (0-1')	Total/NA	Solid	8015B NM	37942
880-20701-2	S-1 (1.5')	Total/NA	Solid	8015B NM	37942
880-20701-3	S-1 (2')	Total/NA	Solid	8015B NM	37942
880-20701-4	S-2 (0-1')	Total/NA	Solid	8015B NM	37942
880-20701-5	S-2 (1.5')	Total/NA	Solid	8015B NM	37942
880-20701-6	S-2 (2')	Total/NA	Solid	8015B NM	37942
880-20701-7	S-2 (3')	Total/NA	Solid	8015B NM	37942
880-20701-8	S-3 (0-1')	Total/NA	Solid	8015B NM	37942
880-20701-9	S-3 (1.5')	Total/NA	Solid	8015B NM	37942
880-20701-10	S-3 (2')	Total/NA	Solid	8015B NM	37942
880-20701-11	S-3 (3')	Total/NA	Solid	8015B NM	37942
880-20701-12	S-4 (0-1')	Total/NA	Solid	8015B NM	37942
880-20701-13	S-4 (1.5')	Total/NA	Solid	8015B NM	37942
880-20701-14	S-4 (2')	Total/NA	Solid	8015B NM	37942
880-20701-15	S-4 (3')	Total/NA	Solid	8015B NM	37942
880-20701-16	S-4 (4')	Total/NA	Solid	8015B NM	37942
880-20701-17	S-5 (0-1')	Total/NA	Solid	8015B NM	37942
880-20701-18	S-5 (1.5')	Total/NA	Solid	8015B NM	37942
880-20701-19	S-5 (2')	Total/NA	Solid	8015B NM	37942
880-20701-20	S-5 (3')	Total/NA	Solid	8015B NM	37942
MB 880-37942/1-A	Method Blank	Total/NA	Solid	8015B NM	37942
LCS 880-37942/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	37942
LCSD 880-37942/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	37942
880-20701-1 MS	S-1 (0-1')	Total/NA	Solid	8015B NM	37942
880-20701-1 MSD	S-1 (0-1')	Total/NA	Solid	8015B NM	37942

Analysis Batch: 38294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20701-1	S-1 (0-1')	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

GC Semi VOA (Continued)

Analysis Batch: 38294 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20701-2	S-1 (1.5')	Total/NA	Solid	8015 NM	
880-20701-3	S-1 (2')	Total/NA	Solid	8015 NM	
880-20701-4	S-2 (0-1')	Total/NA	Solid	8015 NM	
880-20701-5	S-2 (1.5')	Total/NA	Solid	8015 NM	
880-20701-6	S-2 (2')	Total/NA	Solid	8015 NM	
880-20701-7	S-2 (3')	Total/NA	Solid	8015 NM	
880-20701-8	S-3 (0-1')	Total/NA	Solid	8015 NM	
880-20701-9	S-3 (1.5')	Total/NA	Solid	8015 NM	
880-20701-10	S-3 (2')	Total/NA	Solid	8015 NM	
880-20701-11	S-3 (3')	Total/NA	Solid	8015 NM	
880-20701-12	S-4 (0-1')	Total/NA	Solid	8015 NM	
880-20701-13	S-4 (1.5')	Total/NA	Solid	8015 NM	
880-20701-14	S-4 (2')	Total/NA	Solid	8015 NM	
880-20701-15	S-4 (3')	Total/NA	Solid	8015 NM	
880-20701-16	S-4 (4')	Total/NA	Solid	8015 NM	
880-20701-17	S-5 (0-1')	Total/NA	Solid	8015 NM	
880-20701-18	S-5 (1.5')	Total/NA	Solid	8015 NM	
880-20701-19	S-5 (2')	Total/NA	Solid	8015 NM	
880-20701-20	S-5 (3')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 37801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20701-1	S-1 (0-1')	Soluble	Solid	DI Leach	
880-20701-2	S-1 (1.5')	Soluble	Solid	DI Leach	
880-20701-3	S-1 (2')	Soluble	Solid	DI Leach	
880-20701-4	S-2 (0-1')	Soluble	Solid	DI Leach	
880-20701-5	S-2 (1.5')	Soluble	Solid	DI Leach	
880-20701-6	S-2 (2')	Soluble	Solid	DI Leach	
880-20701-7	S-2 (3')	Soluble	Solid	DI Leach	
880-20701-8	S-3 (0-1')	Soluble	Solid	DI Leach	
880-20701-9	S-3 (1.5')	Soluble	Solid	DI Leach	
880-20701-10	S-3 (2')	Soluble	Solid	DI Leach	
880-20701-11	S-3 (3')	Soluble	Solid	DI Leach	
880-20701-12	S-4 (0-1')	Soluble	Solid	DI Leach	
880-20701-13	S-4 (1.5')	Soluble	Solid	DI Leach	
880-20701-14	S-4 (2')	Soluble	Solid	DI Leach	
880-20701-15	S-4 (3')	Soluble	Solid	DI Leach	
880-20701-16	S-4 (4')	Soluble	Solid	DI Leach	
880-20701-17	S-5 (0-1')	Soluble	Solid	DI Leach	
880-20701-18	S-5 (1.5')	Soluble	Solid	DI Leach	
880-20701-19	S-5 (2')	Soluble	Solid	DI Leach	
880-20701-20	S-5 (3')	Soluble	Solid	DI Leach	
MB 880-37801/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-37801/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-37801/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-20701-1 MS	S-1 (0-1')	Soluble	Solid	DI Leach	
880-20701-1 MSD	S-1 (0-1')	Soluble	Solid	DI Leach	
880-20701-11 MS	S-3 (3')	Soluble	Solid	DI Leach	
880-20701-11 MSD	S-3 (3')	Soluble	Solid	DI Leach	

QC Association Summary

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

HPLC/IC

Analysis Batch: 38044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20701-1	S-1 (0-1')	Soluble	Solid	300.0	37801
880-20701-2	S-1 (1.5')	Soluble	Solid	300.0	37801
880-20701-3	S-1 (2')	Soluble	Solid	300.0	37801
880-20701-4	S-2 (0-1')	Soluble	Solid	300.0	37801
880-20701-5	S-2 (1.5')	Soluble	Solid	300.0	37801
880-20701-6	S-2 (2')	Soluble	Solid	300.0	37801
880-20701-7	S-2 (3')	Soluble	Solid	300.0	37801
880-20701-8	S-3 (0-1')	Soluble	Solid	300.0	37801
880-20701-9	S-3 (1.5')	Soluble	Solid	300.0	37801
880-20701-10	S-3 (2')	Soluble	Solid	300.0	37801
880-20701-11	S-3 (3')	Soluble	Solid	300.0	37801
880-20701-12	S-4 (0-1')	Soluble	Solid	300.0	37801
880-20701-13	S-4 (1.5')	Soluble	Solid	300.0	37801
880-20701-14	S-4 (2')	Soluble	Solid	300.0	37801
880-20701-15	S-4 (3')	Soluble	Solid	300.0	37801
880-20701-16	S-4 (4')	Soluble	Solid	300.0	37801
880-20701-17	S-5 (0-1')	Soluble	Solid	300.0	37801
880-20701-18	S-5 (1.5')	Soluble	Solid	300.0	37801
880-20701-19	S-5 (2')	Soluble	Solid	300.0	37801
880-20701-20	S-5 (3')	Soluble	Solid	300.0	37801
MB 880-37801/1-A	Method Blank	Soluble	Solid	300.0	37801
LCS 880-37801/2-A	Lab Control Sample	Soluble	Solid	300.0	37801
LCSD 880-37801/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	37801
880-20701-1 MS	S-1 (0-1')	Soluble	Solid	300.0	37801
880-20701-1 MSD	S-1 (0-1')	Soluble	Solid	300.0	37801
880-20701-11 MS	S-3 (3')	Soluble	Solid	300.0	37801
880-20701-11 MSD	S-3 (3')	Soluble	Solid	300.0	37801

Lab Chronicle

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-20701-1
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

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	38029	10/27/22 15:04	MNR	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	38173	10/30/22 16:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38246	10/31/22 10:07	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38294	10/31/22 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	37942	10/26/22 16:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38052	10/28/22 22:18	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	37801	10/25/22 11:06	CH	EET MID
Soluble	Analysis	300.0		50	50 mL	50 mL	38044	10/27/22 17:22	CH	EET MID

Client Sample ID: S-1 (1.5')

Lab Sample ID: 880-20701-2
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	38029	10/27/22 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38173	10/30/22 13:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38246	10/31/22 10:07	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38294	10/31/22 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	37942	10/26/22 16:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38052	10/28/22 23:22	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	37801	10/25/22 11:06	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38044	10/27/22 17:47	CH	EET MID

Client Sample ID: S-1 (2')

Lab Sample ID: 880-20701-3
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	38029	10/27/22 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38173	10/30/22 13:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38246	10/31/22 10:07	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38294	10/31/22 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	37942	10/26/22 16:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38052	10/28/22 23:44	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	37801	10/25/22 11:06	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38044	10/27/22 17:56	CH	EET MID

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

Lab Sample ID: 880-20701-4
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	38029	10/27/22 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38173	10/30/22 13:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38246	10/31/22 10:07	AJ	EET MID

Lab Chronicle

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-20701-4
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

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			38294	10/31/22 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37942	10/26/22 16:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38052	10/29/22 00:05	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	37801	10/25/22 11:06	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	38044	10/27/22 18:04	CH	EET MID

Client Sample ID: S-2 (1.5')

Lab Sample ID: 880-20701-5
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

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	38029	10/27/22 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38173	10/30/22 14:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38246	10/31/22 10:07	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38294	10/31/22 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37942	10/26/22 16:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38052	10/29/22 00:26	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	37801	10/25/22 11:06	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	38044	10/27/22 18:12	CH	EET MID

Client Sample ID: S-2 (2')

Lab Sample ID: 880-20701-6
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	38029	10/27/22 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38173	10/30/22 14:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38246	10/31/22 10:07	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38294	10/31/22 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	37942	10/26/22 16:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38052	10/29/22 00:48	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	37801	10/25/22 11:06	CH	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	38044	10/27/22 18:37	CH	EET MID

Client Sample ID: S-2 (3')

Lab Sample ID: 880-20701-7
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

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	38029	10/27/22 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38173	10/30/22 14:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38246	10/31/22 10:07	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38294	10/31/22 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	37942	10/26/22 16:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38052	10/29/22 01:10	AJ	EET MID

Lab Chronicle

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Client Sample ID: S-2 (3')

Lab Sample ID: 880-20701-7
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	37801	10/25/22 11:06	CH	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	38044	10/27/22 18:46	CH	EET MID

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

Lab Sample ID: 880-20701-8
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	38029	10/27/22 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38173	10/30/22 15:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38246	10/31/22 10:07	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38294	10/31/22 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37942	10/26/22 16:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38052	10/29/22 01:31	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	37801	10/25/22 11:06	CH	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	38044	10/27/22 18:54	CH	EET MID

Client Sample ID: S-3 (1.5')

Lab Sample ID: 880-20701-9
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	38029	10/27/22 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38173	10/30/22 15:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38246	10/31/22 10:07	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38294	10/31/22 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	37942	10/26/22 16:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38052	10/29/22 01:53	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	37801	10/25/22 11:06	CH	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	38044	10/27/22 19:03	CH	EET MID

Client Sample ID: S-3 (2')

Lab Sample ID: 880-20701-10
Matrix: Solid
Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	38029	10/27/22 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38173	10/30/22 15:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38246	10/31/22 10:07	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38294	10/31/22 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37942	10/26/22 16:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38052	10/29/22 02:15	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	37801	10/25/22 11:06	CH	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	38044	10/27/22 19:11	CH	EET MID

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Client Sample ID: S-3 (3')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-11
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	38029	10/27/22 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38173	10/30/22 17:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38246	10/31/22 10:07	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38294	10/31/22 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37942	10/26/22 16:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38052	10/29/22 02:59	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	37801	10/25/22 11:06	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38044	10/27/22 19:19	CH	EET MID

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

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-12
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	38029	10/27/22 15:04	MNR	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	38173	10/30/22 21:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38246	10/31/22 10:07	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38294	10/31/22 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37942	10/26/22 16:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38052	10/29/22 03:21	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	37801	10/25/22 11:06	CH	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	38044	10/27/22 19:44	CH	EET MID

Client Sample ID: S-4 (1.5')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-13
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	38029	10/27/22 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38173	10/30/22 18:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38246	10/31/22 10:07	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38294	10/31/22 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37942	10/26/22 16:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38052	10/29/22 03:43	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	37801	10/25/22 11:06	CH	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	38044	10/27/22 19:53	CH	EET MID

Client Sample ID: S-4 (2')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-14
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			5.03 g	5 mL	38029	10/27/22 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38173	10/30/22 18:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38246	10/31/22 10:07	AJ	EET MID

Lab Chronicle

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Client Sample ID: S-4 (2')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-14
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			38294	10/31/22 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37942	10/26/22 16:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38052	10/29/22 04:05	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	37801	10/25/22 11:06	CH	EET MID
Soluble	Analysis	300.0		50	50 mL	50 mL	38044	10/27/22 20:18	CH	EET MID

Client Sample ID: S-4 (3')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-15
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			4.99 g	5 mL	38029	10/27/22 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38173	10/30/22 19:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38246	10/31/22 10:07	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38294	10/31/22 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	37942	10/26/22 16:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38052	10/29/22 04:27	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	37801	10/25/22 11:06	CH	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	38044	10/27/22 20:26	CH	EET MID

Client Sample ID: S-4 (4')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-16
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			4.99 g	5 mL	38223	10/31/22 09:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38211	10/31/22 12:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38246	10/31/22 15:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38294	10/31/22 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37942	10/26/22 16:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38052	10/29/22 04:49	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	37801	10/25/22 11:06	CH	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	38044	10/27/22 20:35	CH	EET MID

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

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-17
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	38029	10/27/22 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38173	10/30/22 19:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38246	10/31/22 10:07	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38294	10/31/22 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37942	10/26/22 16:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38052	10/29/22 05:11	AJ	EET MID

Lab Chronicle

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

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

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	37801	10/25/22 11:06	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	38044	10/27/22 20:43	CH	EET MID

Client Sample ID: S-5 (1.5')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-18
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			5.05 g	5 mL	38029	10/27/22 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38173	10/30/22 20:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38246	10/31/22 10:07	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38294	10/31/22 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	37942	10/26/22 16:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38052	10/29/22 05:33	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	37801	10/25/22 11:06	CH	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	38044	10/27/22 20:51	CH	EET MID

Client Sample ID: S-5 (2')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-19
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			5.03 g	5 mL	38029	10/27/22 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38173	10/30/22 20:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38246	10/31/22 10:07	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38294	10/31/22 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37942	10/26/22 16:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38052	10/29/22 05:54	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	37801	10/25/22 11:06	CH	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	38044	10/27/22 21:00	CH	EET MID

Client Sample ID: S-5 (3')

Date Collected: 10/24/22 00:00
Date Received: 10/25/22 09:36

Lab Sample ID: 880-20701-20
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			5.01 g	5 mL	38223	10/31/22 09:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38211	10/31/22 12:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38246	10/31/22 15:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38294	10/31/22 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37942	10/26/22 16:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38052	10/29/22 06:16	AJ	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	37801	10/25/22 11:06	CH	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	38044	10/27/22 21:08	CH	EET MID

Lab Chronicle

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

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: Shell Federal

Job ID: 880-20701-1
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	T104704400-22-24	06-30-23

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

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

Method Summary

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Carmona Resources
Project/Site: Shell Federal

Job ID: 880-20701-1
SDG: Eddy County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-20701-1	S-1 (0-1')	Solid	10/24/22 00:00	10/25/22 09:36
880-20701-2	S-1 (1.5')	Solid	10/24/22 00:00	10/25/22 09:36
880-20701-3	S-1 (2')	Solid	10/24/22 00:00	10/25/22 09:36
880-20701-4	S-2 (0-1')	Solid	10/24/22 00:00	10/25/22 09:36
880-20701-5	S-2 (1.5')	Solid	10/24/22 00:00	10/25/22 09:36
880-20701-6	S-2 (2')	Solid	10/24/22 00:00	10/25/22 09:36
880-20701-7	S-2 (3')	Solid	10/24/22 00:00	10/25/22 09:36
880-20701-8	S-3 (0-1')	Solid	10/24/22 00:00	10/25/22 09:36
880-20701-9	S-3 (1.5')	Solid	10/24/22 00:00	10/25/22 09:36
880-20701-10	S-3 (2')	Solid	10/24/22 00:00	10/25/22 09:36
880-20701-11	S-3 (3')	Solid	10/24/22 00:00	10/25/22 09:36
880-20701-12	S-4 (0-1')	Solid	10/24/22 00:00	10/25/22 09:36
880-20701-13	S-4 (1.5')	Solid	10/24/22 00:00	10/25/22 09:36
880-20701-14	S-4 (2')	Solid	10/24/22 00:00	10/25/22 09:36
880-20701-15	S-4 (3')	Solid	10/24/22 00:00	10/25/22 09:36
880-20701-16	S-4 (4')	Solid	10/24/22 00:00	10/25/22 09:36
880-20701-17	S-5 (0-1')	Solid	10/24/22 00:00	10/25/22 09:36
880-20701-18	S-5 (1.5')	Solid	10/24/22 00:00	10/25/22 09:36
880-20701-19	S-5 (2')	Solid	10/24/22 00:00	10/25/22 09:36
880-20701-20	S-5 (3')	Solid	10/24/22 00:00	10/25/22 09:36

Work Order No: 20701

Page 1 of 2

Project Manager	Conner Moehring	Bill to (if different)	Grant Huckabay
Company Name	Carmona Resources	Company Name	Fasken Oil and Ranch
Address.	310 W Wall St Ste 415	Address.	6101 Holiday Hill Road
City, State ZIP	Midland, TX 79701	City, State ZIP	Midland, Texas 79707
Phone	432-813-6823	Email	Granth@forl.com

Work Order Comments

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

State of Project:

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

Deliverables. EDD ☐ ADaPT ☐ Other

Project Name	Shell Federal	Turn Around	
Project Number	1155	☑ Routine ☐ Rush	
Project Location	Eddy County, New Mexico	Due Date	
Sampler's Name	CRM		
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice	Yes No	
Received Intact:	Yes No	Thermometer ID	IR2	
Cooler Custody Seals	Yes No N/A	Correction Factor	-.3	
Sample Custody Seals	Yes No N/A	Temperature Reading	0.4	
Total Containers		Corrected Temperature	0.1	

ANALYSIS REQUEST

Preservative Codes

None NO DI Water H_2O

Cool Cool MeOH Me

HCL HC HNO_3 HN

H_2S0_4 H_2 NaOH Na

H_3PO_4. HP

$NaHSO_4$ NABIS

$Na_2S_2O_3$ $NaSO_3$

Zn Acetate+NaOH Zn

NaOH+Ascorbic Acid SAPC

Sample Identification	Date	Time	Soil	Water	Grab/ Comp	# of Cont	Parameters: BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 300.0	Sample Comments
S-1 (0-1')	10/24/2022		X		G	1	X	X	X	4oz jar
S-1 (1.5')	10/24/2022		X		G	1	X	X	X	
S-1 (2')	10/24/2022		X		G	1	X	X	X	
S-2 (0-1')	10/24/2022		X		G	1	X	X	X	
S-2 (1.5')	10/24/2022		X		G	1	X	X	X	
S-2 (2')	10/24/2022		X		G	1	X	X	X	
S-2 (3')	10/24/2022		X		G	1	X	X	X	
S-3 (0-1')	10/24/2022		X		G	1	X	X	X	
S-3 (1 5')	10/24/2022		X		G	1	X	X	X	
S-3 (2')	10/24/2022		X		G	1	X	X	X	

880-20701 Chain of Custody

Comments:

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
Conner Moehring	10/25/22 9 36		

Work Order No: 20701

Page 2 of 2

Project Manager	Conner Moehring	Bill to (if different)	Grant Huckabay
Company Name	Carmona Resources	Company Name	Fasken Oil and Ranch
Address.	310 W Wall St Ste 415	Address	6101 Holiday Hill Road
City, State ZIP	Midland, TX 79701	City, State ZIP	Midland, Texas 79707
Phone	432-813-6823	Email	Granth@forl.com

Work Order Comments

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

State of Project:

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

Deliverables EDD ☐ ADaPT ☐ Other:

Project Name	Shell Federal	Turn Around	
Project Number	1155	☑ Routine ☐ Rush	
Project Location	Eddy County, New Mexico	Due Date	
Sampler's Name.	CRM		
PO #:			

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

Preservative Codes

None NO DI Water H_2O

Cool Cool MeOH Me

HCL HC HNO_3 HN

H_2S0_4 H_2 NaOH Na

H_3PO_4 HP

$NaHSO_4$ NABIS

$Na_2S_2O_3$ $NaSO_3$

Zn Acetate+NaOH Zn

NaOH+Ascorbic Acid SAPC

Sample Identification	Date	Time	Soil	Water	Grab/ Comp	# of Cont	Pres. Code	BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 300.0	Sample Comments
S-3 (3')	10/24/2022		X		G	1		X	X	X	
S-4 (0-1')	10/24/2022		X		G	1		X	X	X	
S-4 (1 5')	10/24/2022		X		G	1		X	X	X	
S-4 (2')	10/24/2022		X		G	1		X	X	X	
S-4 (3')	10/24/2022		X		G	1		X	X	X	
S-4 (4')	10/24/2022		X		G	1		X	X	X	
S-5 (0-1')	10/24/2022		X		G	1		X	X	X	
S-5 (1 5')	10/24/2022		X		G	1		X	X	X	
S-5 (2')	10/24/2022		X		G	1		X	X	X	
S-5 (3')	10/24/2022		X		G	1		X	X	X	

Loc 880
20701

Comments:

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
Conner Moehring	10/25/22 936		

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-20701-1
SDG Number: Eddy County, New Mexico

Login Number: 20701
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2228544134
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

- ☑ Detailed description of proposed remediation technique
- ☑ Scaled sitemap with GPS coordinates showing delineation points
- ☑ Estimated volume of material to be remediated
- ☑ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☑ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Addison Guelker Title: Environmental Tech

Signature: [signature] Date: 11/22/22

email: addisong@forl.com Telephone: (432) 6871777

OCD Only

Received by: Jocelyn Harimon Date: 11/22/2022

☐ Approved ☒ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: Robert Hamlet Date: 2/20/2023

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

COMMENTS

Action 160967

COMMENTS

Operator: FASKEN OIL & RANCH LTD 6101 Holiday Hill Rd Midland, TX 79707	OGRID: 151416
	Action Number: 160967
	Action Type: [C-141] Release Corrective Action (C-141)

COMMENTS

Created By	Comment	Comment Date
jharimon	No Initial C-141 submitted	11/22/2022

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CONDITIONS

Action 160967

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Operator: FASKEN OIL & RANCH LTD 6101 Holiday Hill Rd Midland, TX 79707	OGRID: 151416
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CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is Conditionally Approved. This release is in a high karst area and will need to be remediated to the strictest closure criteria of <50' depth to groundwater from Table 1 of the spill rule. Samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Confirmation samples should be collected every 200 ft2. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. The variance for confirmation samples every 400 ft2 is approved. All off pad areas must contain a minimum of 4 feet non-waste containing uncontaminated, earthen material with chloride concentrations less than 600 mg/kg and less than 100 mg/kg for TPH. The work will need to occur in 90 days after the work plan has been approved.	2/20/2023