

MRO Spill Calculation Tool

Standing Liquid Inputs:

	Length (ft.)	Width (ft.) (Area for Displacement)	Avg. Liquid Depth (in.)	% Oil	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)
Rectangle Area #1	156	56	0.25		32.42	32.42	0.00
Rectangle Area #2	20	20	0.25		1.48	1.48	0.00
Rectangle Area #3					0.00	0.00	0.00
Rectangle Area #4					0.00	0.00	0.00
Rectangle Area #5					0.00	0.00	0.00
Rectangle Area #6					0.00	0.00	0.00
Vessel Displacement		2444	0.25		9.07	9.07	0.00
Vessel Displacement					0.00	0.00	0.00
Liquid Volume:					24.83	42.97	0.00

Saturated Soil Inputs:

Soil Type: **Gravel Loam**

	Length (ft.)	Width (ft.)	Avg. Saturated Depth (in.)	% Oil	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)
Rectangle Area #1	15	15	0.25		0.13	0.13	0.00
Rectangle Area #2					0.00	0.00	0.00
Rectangle Area #3					0.00	0.00	0.00
Rectangle Area #4					0.00	0.00	0.00
Rectangle Area #5					0.00	0.00	0.00
Rectangle Area #6					0.00	0.00	0.00
Rectangle Area #7					0.00	0.00	0.00
Rectangle Area #8					0.00	0.00	0.00
Saturated Volume					0.13	0.13	0.00

	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)
Total Spill Volume (bbls):	24.96	43.10	0.00
Total Spill Volume (gals):	1048.52	1810.29	0.00

Comments:

Color Key:

Required Input Cells	Supplemental Input Cells	No Input (Calculations)	No Input
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Ground/Vegetation Overspray

Cover Type	Microns	Approximate Depth (in)
Ground		
Dull Color	10	0.00003281
Dark Color	50	0.00016404

CARMONA RESOURCES



SITE INFORMATION

Work Plan

Southern Comfort 5 6 10 12
Eddy County, New Mexico
Incident ID: nAPP2329764387
Unit J Sec 25 T24S R28E
32.1876931°, -104.0373727°

Produced Water

Point of Release: Air eliminator on water line
Release Date: 10/21/23
Volume Released: 24.95 Barrels of Produced Water
Volume Recovered: 23.95 Barrels of Produced Water

CARMONA RESOURCES



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

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

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



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November 7, 2023

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

Re: Work Plan
Southern Comfort 5 6 10 12
Marathon Oil Corporation
Incident ID: nAPP2329764387
Site Location: Unit J, S25, T24S, R28E
(Lat 32.1876931°, Long -104.0373727°)
Eddy County, New Mexico

Mr. Bratcher:

On behalf of Marathon Oil Company, Carmona Resources, LLC has prepared this letter to document site activities for the Southern Comfort 5 6 10 12. The site is located at 32.1876931°, -104.0373727° within Unit J, S25, T24S, R28E, 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 21, 2023, caused by a failure of an air eliminator on a water line. The incident resulted in the release of twenty-four-point-nine-five (24.95) barrels of produced water, with twenty-three-point-nine-five (23.95) barrels 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 medium karst area. Based on a review of the New Mexico Office of State Engineers and USGS databases, no known water sources are within a 0.50-mile radius of the location. The nearest identified well is located approximately 0.52 miles northwest of the site in S25, T24S, R28E, and was drilled in 2017. The well has a reported depth to groundwater of 90' below ground surface (ft bgs). A copy of the associated Summary report is attached in Appendix D.

3.0 NMAC Regulatory Criteria

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

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

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432.813.1992



4.0 Site Assessment Activities

Initial Assessment

On November 3, 2023, Carmona Resources, LLC was onsite to perform an initial assessment to evaluate soil impacts stemming from the release. A total of five (5) sample points (S-1 through S-5) and seven (7) horizontal samples (H-1 through H-7) were advanced to depths ranging from the surface to 3' bgs inside and surrounding the release to assess 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 Laboratories in Midland, Texas. The samples were analyzed for total petroleum hydrocarbons (TPH) by EPA method 8015, modified benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B, and chloride by EPA method 300.0. The laboratory reports, including analytical methods, results, and chain-of-custody documents, are attached in Appendix E. See Table 1 for the analytical results.

Vertical Delineation

Vertical delineation was achieved for the areas of S-4 and S-5. The areas of S-1, S-2, and S-3 were not vertically delineated due to a dense, cemented geological formation ranging from 1-3' bgs in various release areas. Refer to Table 1.

Horizontal Delineation

All horizontal locations were below the regulatory limits for benzene, total BTEX, TPH, and chloride concentrations. Refer to Table 1.

Drilling Activities

On November 20, 2023, Carmona Resources, LLC returned to the site to vertically delineate the areas of S-1, S-2, and S-3. Three (3) environmental bores (BH-1 through BH-3) were advanced to depths ranging from the surface to 8' bgs inside the release area. See Figure 3 for the sample locations. See Appendix F for drill log documentation. 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 Laboratories in Midland, Texas. The samples were analyzed for total petroleum hydrocarbons (TPH) by EPA method 8015, modified benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B, and chloride by EPA method 300.0. The laboratory reports, including analytical methods, results, and chain-of-custody documents, are attached in Appendix E.

Vertical Delineation

All environmental bores were vertically delineated and below regulatory limits for benzene, total BTEX, TPH, and chloride concentrations. Refer to Table 1.

5.0 Proposed Work Plan

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

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- The area of S-5 will be excavated to a depth of 1.5' below the surface and backfilled with clean material to surface grade.
- The area of S-1 will be excavated to a depth of 2.0' below the surface and backfilled with clean material to surface grade.
- The areas of S-2 and S-3 will be excavated to a depth of 3.5' below the surface and backfilled with clean material to surface grade.
- An estimated 250 cubic yards will be removed and hauled to the nearest disposal based on the maximum depth.
- 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, Marathon will excavate the impacted soil 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, please contact us at 432-813-1992.

Sincerely,

Carmona Resources, LLC

Clinton Merritt
Sr. Project Manager

Devin Dominguez
Sr. Project Manager

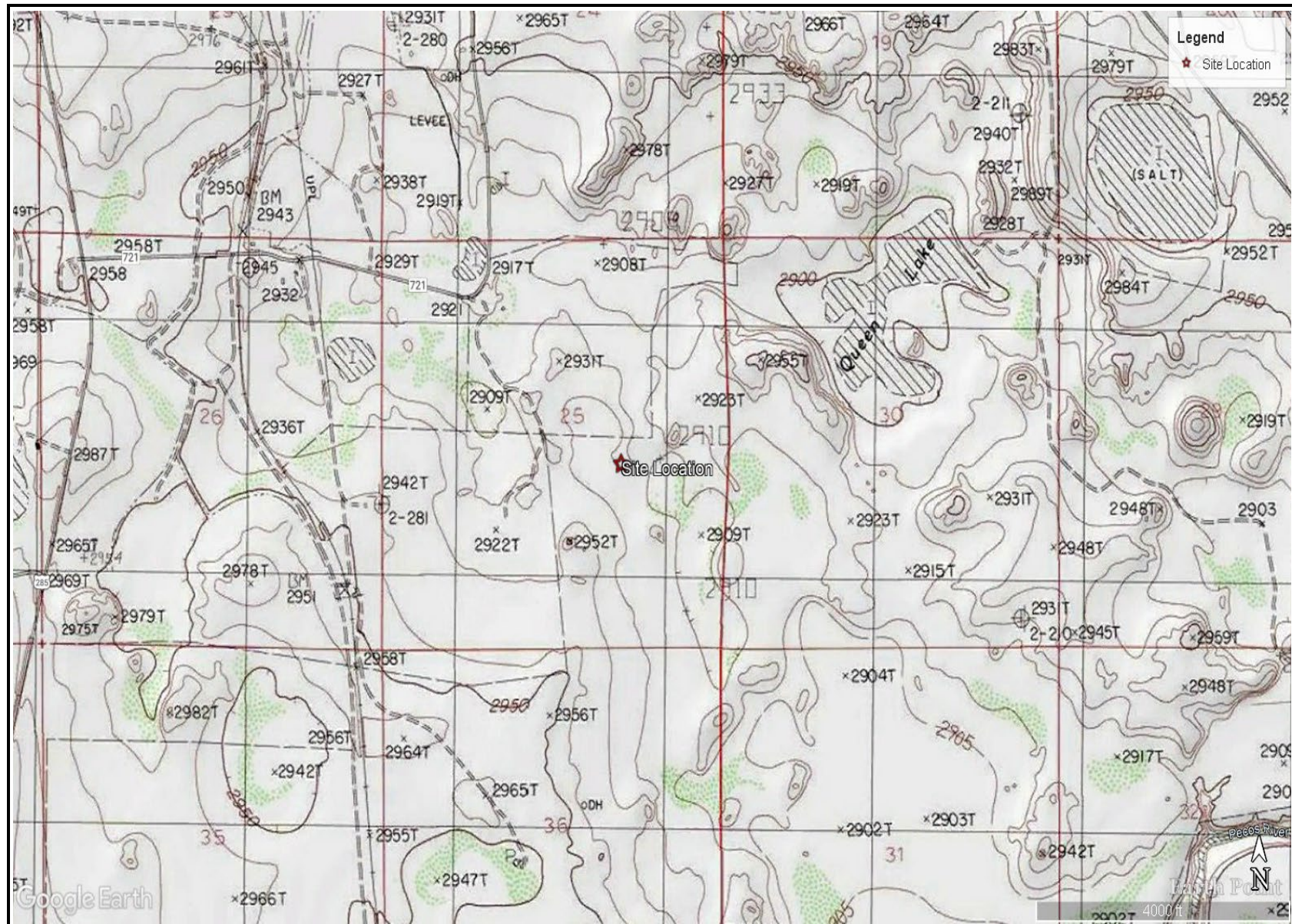
310 West Wall Street, Suite 500
Midland, Texas 79701
432.813.1992

FIGURES

CARMONA RESOURCES



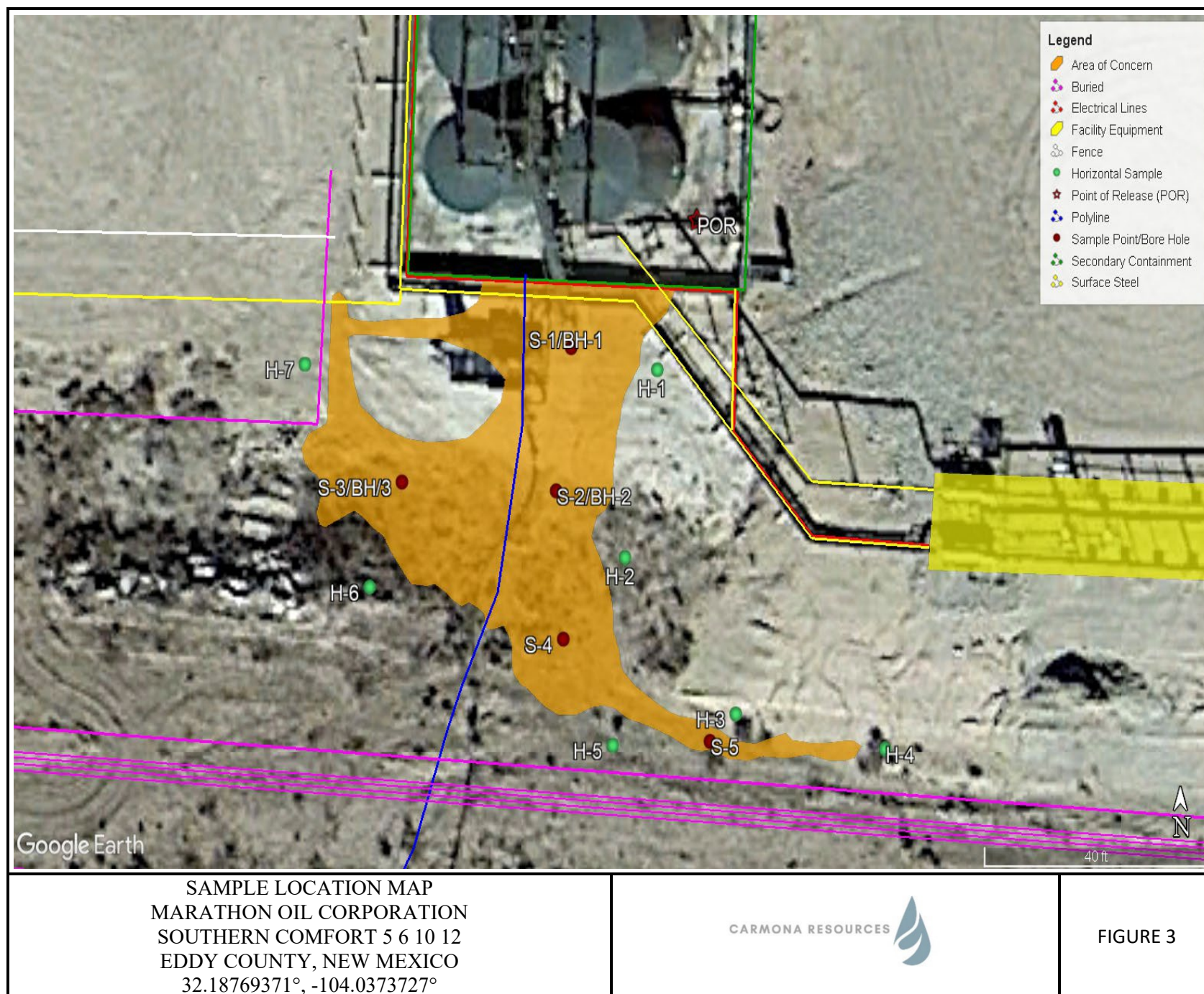


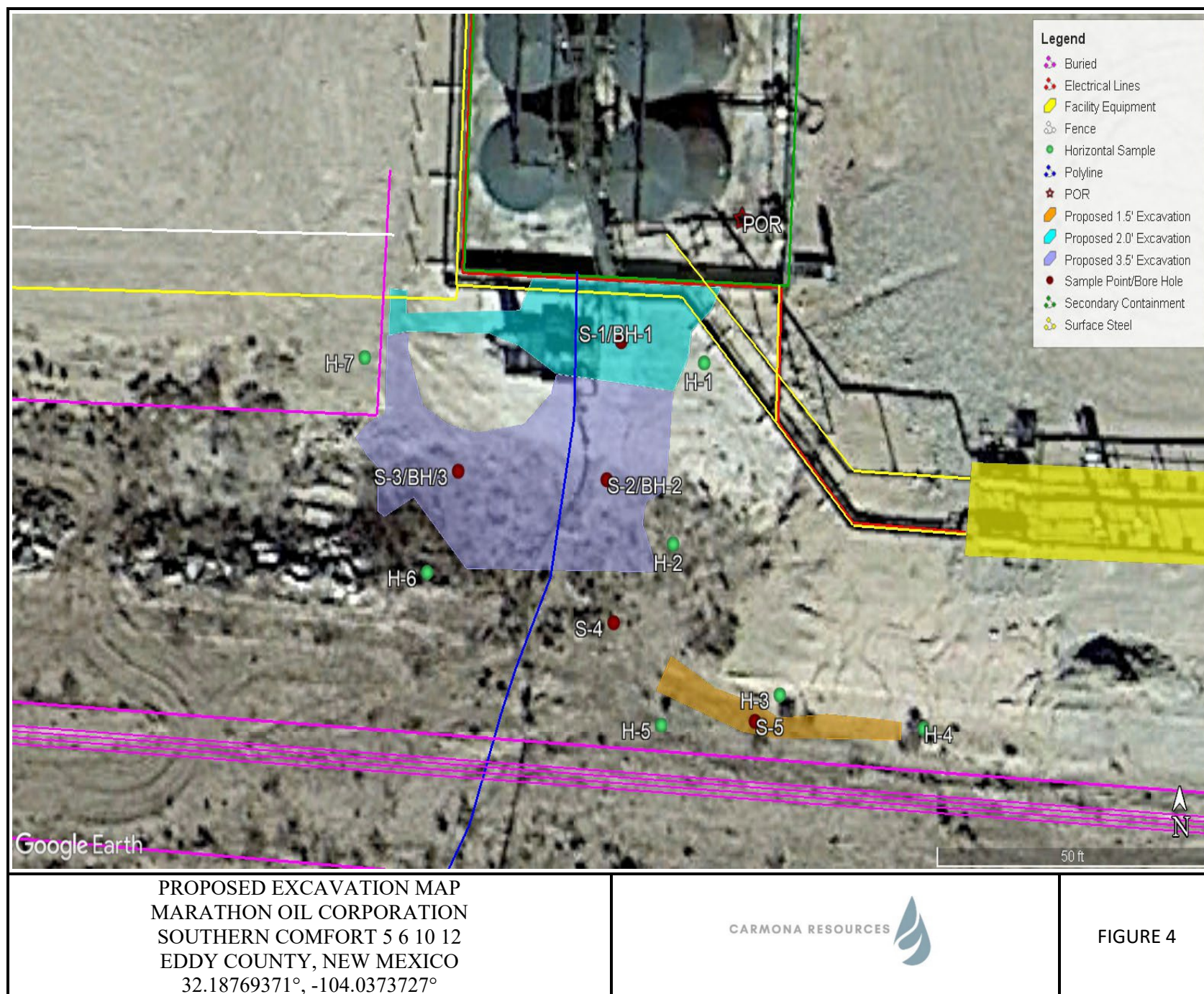


TOPOGRAPHIC MAP
MARATHON OIL CORPORATION
SOUTHERN COMFORT 5 6 10 12
EDDY COUNTY, NEW MEXICO
32.18769371°, -104.0373727°



FIGURE 2





APPENDIX A

CARMONA RESOURCES



Table 1
Marathon Oil Co.
Southern Comfort 5, 6, 10, 12 (10.21.2023)
Eddy County, New Mexico

Sample ID	Date	Depth (ft)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	Total						
S-1	11/3/2023	0-1	<50.3	<50.3	<50.3	<50.3	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	1,840
BH-1	11/20/2023	0-1	<49.7	59.3	<49.7	59.3	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	2,140
	"	1.5	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	769
	"	2.0	<49.7	<49.7	<49.7	<49.7	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	48.9
	"	3.0	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	17.2
	"	4.0	<50.3	<50.3	<50.3	<50.3	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	14.2
	"	5.0	<50.5	<50.5	<50.5	<50.5	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	18.5
S-2	11/3/2023	0-1	<50.3	<50.3	<50.3	<50.3	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,930
	"	1.5	<49.7	<49.7	<49.7	<49.7	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,700
	"	2.0	<49.6	<49.6	<49.6	<49.6	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	1,660
	"	3.0	<50.4	<50.4	<50.4	<50.4	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	610
BH-2	11/20/2023	0-1	<50.3	<50.3	<50.3	<50.3	<0.00199	0.00237	<0.00199	0.00704	0.00941	2,120
	"	1.5	<50.1	<50.1	<50.1	<50.1	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	1,650
	"	2.0	<50.4	<50.4	<50.4	<50.4	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	1,050
	"	3.0	<50.5	<50.5	<50.5	<50.5	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	393
	"	4.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	71.9
	"	5.0	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	22.2
	"	6.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	16.5
S-3	11/3/2023	0-1	<49.6	<49.6	<49.6	<49.6	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	4,550
	"	1.5	<50.5	<50.5	<50.5	<50.5	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	7,390
	"	2.0	<50.4	<50.4	<50.4	<50.4	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	4,990
	"	3.0	<50.5	<50.5	<50.5	<50.5	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	4,980
BH-3	11/20/2023	0-1	<50.1	<50.1	<50.1	<50.1	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	7,740
	"	1.5	<50.4	<50.4	<50.4	<50.4	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	2,410
	"	2.0	<50.5	<50.5	<50.5	<50.5	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	1,840
	"	3.0	<49.6	<49.6	<49.6	<49.6	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	949
	"	4.0	<49.7	<49.7	<49.7	<49.7	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	94.7
	"	5.0	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	21.3
	"	6.0	<49.6	<49.6	<49.6	<49.6	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	18.9
	"	7.0	<50.3	<50.3	<50.3	<50.3	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	38.1
	"	8.0	<50.4	<50.4	<50.4	<50.4	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	129
S-4	11/3/2023	0-1	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	287
	"	1.5	<50.1	<50.1	<50.1	<50.1	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	185
	"	2.0	<50.5	<50.5	<50.5	<50.5	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	76.1
S-5	11/3/2023	0-1	<50.5	<50.5	<50.5	<50.5	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	723
	"	1.5	<49.7	<49.7	<49.7	<49.7	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	408
	"	2.0	<49.6	<49.6	<49.6	<49.6	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	501
Regulatory Criteria ^A						100 mg/kg	10 mg/kg				50 mg/kg	600 mg/kg

(-) Not Analyzed

^A - Table 1 - 19.15.29 NMAC

mg/kg - milligram per kilogram

TPH- Total Petroleum Hydrocarbons

ft-feet

(S) Sample Point

(BH) Borehole

 Proposed Excavation

Table 1
Marathon Oil Co.
Southern Comfort 5, 6, 10, 12 (10.21.2023)
Eddy County, New Mexico

Sample ID	Date	Depth (ft)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	Total						
H-1	11/3/2023	0-0.5	<50.3	<50.3	<50.3	<50.3	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	7.90
H-2	11/3/2023	0-0.5	<50.1	<50.1	<50.1	<50.1	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<5.05
H-3	11/3/2023	0-0.5	<50.4	<50.4	<50.4	<50.4	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	24.3
H-4	11/3/2023	0-0.5	<50.5	<50.5	<50.5	<50.5	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<5.00
H-5	11/3/2023	0-0.5	<49.7	<49.7	<49.7	<49.7	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	26.0
H-6	11/3/2023	0-0.5	<49.6	<49.6	<49.6	<49.6	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	237
H-7	11/3/2023	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	239
Regulatory Criteria ^A			100 mg/kg				10 mg/kg				50 mg/kg	600 mg/kg

(-) Not Analyzed

^A – Table 1 - 19.15.29 NMAC

mg/kg - milligram per kilogram

TPH- Total Petroleum Hydrocarbons

ft-feet

(H) Horizontal Sample

APPENDIX B

CARMONA RESOURCES



PHOTOGRAPHIC LOG**Marathon Oil Corporation****Photograph No. 1****Facility:** Southern Comfort 5 6 10 12**County:** Eddy County, New Mexico**Description:**

View North, area of S-1 through S-4.

**Photograph No. 2****Facility:** Southern Comfort 5 6 10 12**County:** Eddy County, New Mexico**Description:**

View North, area of S-4 through S-5.

**Photograph No. 3****Facility:** Southern Comfort 5 6 10 12**County:** Eddy County, New Mexico**Description:**

View East, area of S-4 through S-5.



PHOTOGRAPHIC LOG

Marathon Oil Corporation

Photograph No. 4

Facility: Southern Comfort 5 6 10 12

County: Eddy County, New Mexico

Description:

View Northwest, area of S-2/BH-2



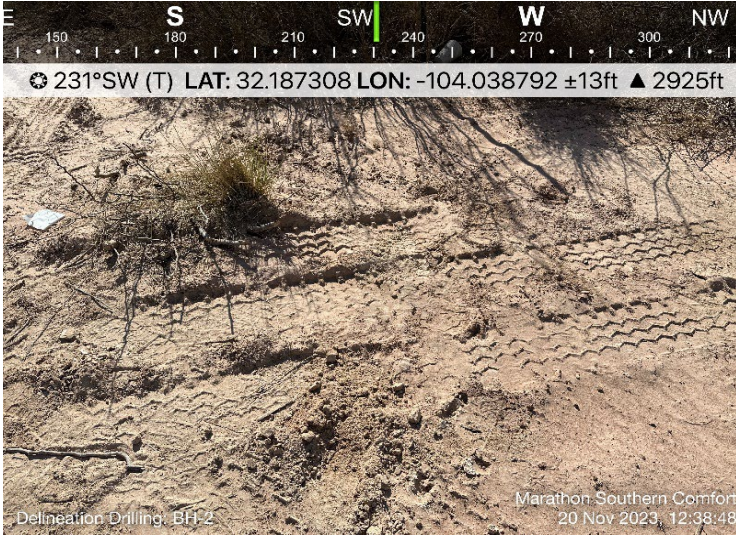
Photograph No. 5

Facility: Southern Comfort 5 6 10 12

County: Eddy County, New Mexico

Description:

View Northwest, area of S-2/BH-2



APPENDIX C

CARMONA RESOURCES



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

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

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

Incident ID	nAPP2329764387
District RP	
Facility ID	fAPP2126039206
Application ID	

Release Notification

Responsible Party

Responsible Party Marathon Oil Permian LLC	OGRID 372098
Contact Name Melodie Sanjari	Contact Telephone 575-988-8753
Contact email msanjari@marathonoil.com	Incident # (assigned by OCD)
Contact mailing address 4111 S. Tidwell Rd., Carlsbad, NM 8220	

Location of Release Source

Latitude 32.1876931 Longitude- 104.0373727
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Southern Comfort 5 6 10 12	Site Type Oil & Gas Facility
Date Release Discovered: 10/21/23	API# (if applicable)

Unit Letter	Section	Township	Range	County
J	25	24S	28E	Eddy

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 24.95	Volume Recovered (bbls) 23.95
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Failure on an air eliminator on the water line resulted in the release of approx. 24.95 bbl. of produced water within the lined secondary containment and 1 bbl of that spilled just outside containment and onto the pad do to the overspray. Source was isolated. Notice will be sent out prior to liner integrity inspection and the area outside of the containment will be remediated.

Incident ID	nAPP2329764387
District RP	
Facility ID	fAPP2126039206
Application ID	

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

Initial Response

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

☒ The source of the release has been stopped. ☒ The impacted area has been secured to protect human health and the environment. ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. ☒ All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why: 	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Melodie Sanjari</u>	Title: <u>Environmental Professional</u>
Signature: <u>Melodie Sanjari</u>	Date: 10/25/2023
email: <u>msanjari@marathonoil.com</u>	Telephone: <u>575-988-8753</u>
<u>OCD Only</u> Received by: _____ Date: _____	

Oil Conservation Division

Incident ID	nAPP2329764387
District RP	
Facility ID	fAPP2126039206
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: Melodie Sanjari Title: Environmental Professional

Signature: Melodie Sanjari

Date:

email: msanjari@marathonoil.com

Telephone: 575-988-8753

OCD Only

Received by: _____ Date: _____

Incident ID	nAPP2329764387
District RP	
Facility ID	fAPP2126039206
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: Melodie Sanjari Title: Environmental Professional

Signature: Melodie Sanjari Date: _____

email: msanjari@marathonoil.com Telephone: 575-988-8753

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

Incident ID	nAPP2329764387
District RP	
Facility ID	fAPP2126039206
Application ID	

Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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

Printed Name: Melodie Sanjari Title: Environmental Professional

Signature: Melodie Sanjari Date 10/9/2023

email: msanjari@marathonoil.com Telephone: 575-988-8753

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

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.

Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

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: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

APPENDIX D

CARMONA RESOURCES

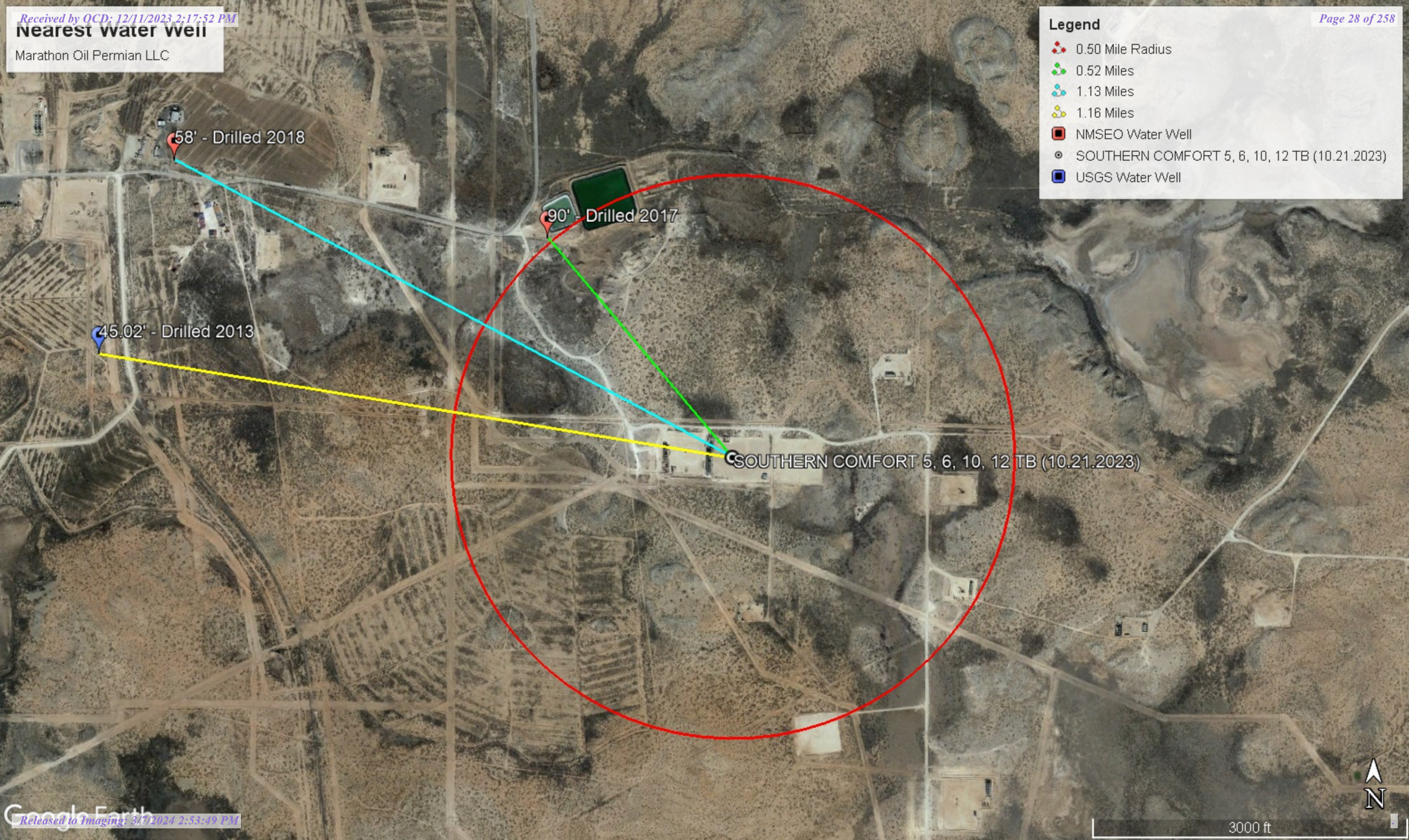


Nearest water well

Marathon Oil Permian LLC

Legend

- 0.50 Mile Radius
- 0.52 Miles
- 1.13 Miles
- 1.16 Miles
- NMSEO Water Well
- SOUTHERN COMFORT 5, 6, 10, 12 TB (10.21.2023)
- USGS Water Well



Medium Karst

Marathon Oil Permian LLC

Legend

-  High
-  Medium
-  SOUTHERN COMFORT 5, 6, 10, 12 TB (10.21.2023)

SOUTHERN COMFORT 5, 6, 10, 12 TB (10.21.2023)





New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 04026 POD1	CUB	ED	3	2	1	25	24S	28E	590148	3562290		822	190	90	100
C 00857	CUB	ED	3	1	4	30	24S	29E	592135	3561440*		1472	306		
C 04180 POD1	CUB	ED	2	1	2	26	24S	28E	589055	3562502		1828	160	58	102
C 00856	CUB	ED	1	2	4	30	24S	29E	592538	3561644*		1859	380		
C 00862	CUB	ED	1	2	4	30	24S	29E	592538	3561644*		1859	155		
C 03833 POD1	C	ED	2	1	2	26	24S	28E	589014	3562545		1884	96	55	41
C 03423	CUB	ED	2	4	1	26	24S	28E	588786	3561952		1914	126		

Average Depth to Water: **67 feet**

Minimum Depth: **55 feet**

Maximum Depth: **90 feet**

Record Count: 7

UTMNAD83 Radius Search (in meters):

Easting (X): 590679

Northing (Y): 3561662

Radius: 2000

*UTM location was derived from PLSS - see Help

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

10/25/23 9:13 AM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER



New Mexico Office of the State Engineer

Point of Diversion Summary

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

(NAD83 UTM in meters)

Well Tag

POD Number

Q64 Q16 Q4 Sec Tws Rng

X

Y

C 04026 POD1

3 2 1 25 24S 28E

590148 3562290

Driller License: 331

Driller Company: SBQ2, LLC DBA STEWART BROTHERS DRILLING CO.

Driller Name:

Drill Start Date: 04/25/2017

Drill Finish Date: 04/26/2017

Plug Date:

Log File Date: 05/16/2017

PCW Rcv Date:

Source: Shallow

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size: 8.60

Depth Well: 190 feet

Depth Water: 90 feet

Water Bearing Stratifications:

Top Bottom Description

120 190 Sandstone/Gravel/Conglomerate

Casing Perforations:

Top Bottom

88 190

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



New Mexico Office of the State Engineer

Point of Diversion Summary

		(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			
NA	C 04180 POD1	2	1	2	26	24S	28E	589055	3562502			
Driller License:		1706		Driller Company:			ELITE DRILLERS CORPORATION					
Driller Name:		WALLACE, BRYCE J.										
Drill Start Date:		01/08/2018		Drill Finish Date:			01/10/2018		Plug Date:			
Log File Date:		01/31/2018		PCW Rcv Date:						Source: Shallow		
Pump Type:					Pipe Discharge Size:						Estimated Yield: 100 GPM	
Casing Size:		9.00		Depth Well:			160 feet		Depth Water:		58 feet	
Water Bearing Stratifications:				Top	Bottom	Description						
				20	100	Limestone/Dolomite/Chalk						
				100	160	Limestone/Dolomite/Chalk						
Casing Perforations:				Top	Bottom							
				40	160							

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

10/25/23 9:24 AM

POINT OF DIVERSION SUMMARY

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

Click to hideNews Bulletins

- 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 =

- 321126104032101

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 321126104032101 24S.28E.26.23133

Eddy County, New Mexico
Latitude 32°11'25.8", Longitude 104°03'27.0" NAD83
Land-surface elevation 2,944.90 feet above NGVD29
The depth of the well is 126 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measur
1978-02-21			D 62610		2917.33	NGVD29	1		Z	
1978-02-21			D 62611		2918.89	NAVD88	1		Z	
1978-02-21			D 72019	27.57			1		Z	
1983-01-31			D 62610		2923.07	NGVD29	1		Z	
1983-01-31			D 62611		2924.63	NAVD88	1		Z	
1983-01-31			D 72019	21.83			1		Z	
1987-10-16			D 62610		2923.07	NGVD29	1		Z	
1987-10-16			D 62611		2924.63	NAVD88	1		Z	
1987-10-16			D 72019	21.83			1		Z	
1988-02-10			D 62610		2923.01	NGVD29	1		Z	
1988-02-10			D 62611		2924.57	NAVD88	1		Z	
1988-02-10			D 72019	21.89			1		Z	
1992-10-20			D 62610		2922.57	NGVD29	1		S	
1992-10-20			D 62611		2924.13	NAVD88	1		S	

Date	Time	Water-level date-time accuracy	Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	
1992-10-20		D	72019	22.33		1	S
1998-01-23		D	62610	2917.92	NGVD29	1	S
1998-01-23		D	62611	2919.48	NAVD88	1	S
1998-01-23		D	72019	26.98		1	S
2003-02-04		D	62610	2907.65	NGVD29	1	S USGS
2003-02-04		D	62611	2909.21	NAVD88	1	S USGS
2003-02-04		D	72019	37.25		1	S USGS
2013-01-10	21:50 UTC	m	62610	2899.88	NGVD29	1	S USGS
2013-01-10	21:50 UTC	m	62611	2901.44	NAVD88	1	S USGS
2013-01-10	21:50 UTC	m	72019	45.02		1	S USGS

Explanation

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

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Title: Groundwater for New Mexico: Water Levels

URL: [https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?](https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?site_no=321126104032101&agency_cd=USGS&format=html)

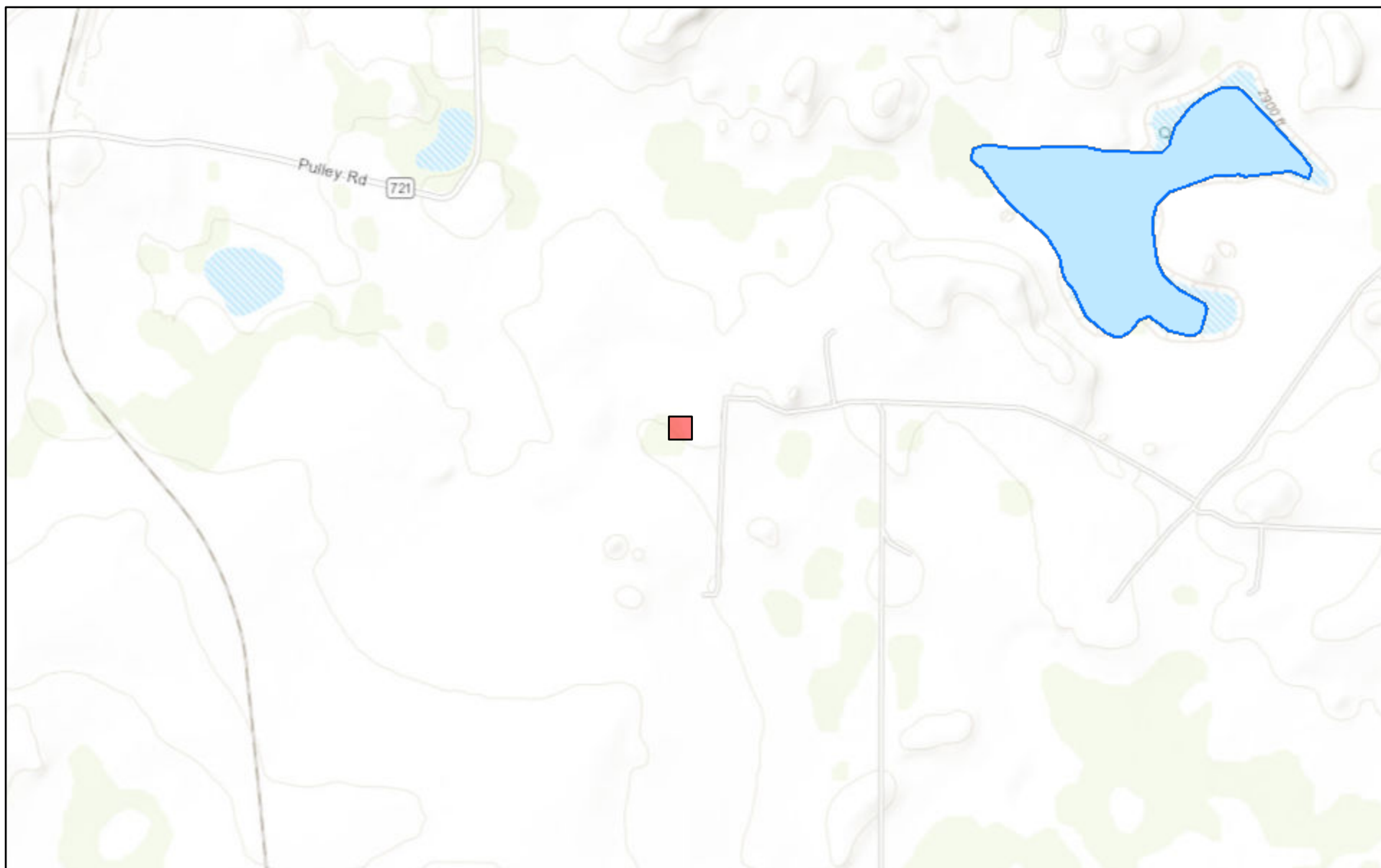


Page Contact Information: [New Mexico Water Data Maintainer](#)

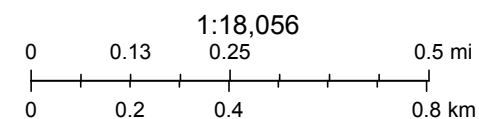
Page Last Modified: 2023-10-25 11:26:42 EDT

0.29 0.25 nadww01

New Mexico NFHL Data



October 23, 2023



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





Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 11/13/2023 2:04:06 PM

JOB DESCRIPTION

Southern Comfort 5 6 10 12
SDG NUMBER Eddy County, New Mexico

JOB NUMBER

880-35379-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

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

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

Authorization



Generated
11/13/2023 2:04:06 PM

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

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Laboratory Job ID: 880-35379-1
SDG: Eddy County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35379-1
SDG: Eddy County, New Mexico

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
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: Southern Comfort 5 6 10 12

Job ID: 880-35379-1
SDG: Eddy County, New Mexico

Job ID: 880-35379-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-35379-1**

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

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

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

Receipt

The sample was received on 11/6/2023 3:52 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -1.7°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S-1 (0-1') (880-35379-1).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-66374 and 880-66737 and analytical batch 880-66684 was outside the upper control limits.

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 surrogate recovery for the blank associated with preparation batch 880-66317 and analytical batch 880-66340 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-66340/20), (CCV 880-66340/31), (CCV 880-66340/5), (CCV 880-66340/57) and (CCV 880-66340/58). 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: Southern Comfort 5 6 10 12

Job ID: 880-35379-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35379-1

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 20:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 20:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 20:44	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/07/23 13:38	11/11/23 20:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 20:44	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/07/23 13:38	11/11/23 20:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	11/07/23 13:38	11/11/23 20:44	1
1,4-Difluorobenzene (Surr)	115		70 - 130	11/07/23 13:38	11/11/23 20:44	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			11/11/23 20:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			11/07/23 17:36	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	<50.3	U	50.3		mg/Kg		11/07/23 08:34	11/07/23 17:36	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		11/07/23 08:34	11/07/23 17:36	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		11/07/23 08:34	11/07/23 17:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	11/07/23 08:34	11/07/23 17:36	1
o-Terphenyl	90		70 - 130	11/07/23 08:34	11/07/23 17:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1840		49.6		mg/Kg			11/11/23 20:27	10

Eurofins Midland

Surrogate Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35379-1
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)
880-35379-1	S-1 (0-1')	108	115
880-35383-A-1-A MS	Matrix Spike	111	104
880-35383-A-1-B MSD	Matrix Spike Duplicate	107	106
LCS 880-66374/1-A	Lab Control Sample	94	109
LCSD 880-66374/2-A	Lab Control Sample Dup	105	105
MB 880-66374/5-A	Method Blank	112	148 S1+
MB 880-66373/5-A	Method Blank	111	140 S1+
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)
880-35379-1	S-1 (0-1')	90	90
890-5564-A-18-B MS	Matrix Spike	95	86
890-5564-A-18-C MSD	Matrix Spike Duplicate	96	89
LCS 880-66317/2-A	Lab Control Sample	103	115
LCSD 880-66317/3-A	Lab Control Sample Dup	98	101
MB 880-66317/1-A	Method Blank	162 S1+	169 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35379-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-66374/5-A

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66374

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/07/23 13:38	11/11/23 12:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	11/07/23 13:38	11/11/23 12:36	1
1,4-Difluorobenzene (Surr)	148	S1+	70 - 130	11/07/23 13:38	11/11/23 12:36	1

Lab Sample ID: LCS 880-66374/1-A

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66374

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1210		mg/Kg		121	70 - 130
Toluene	0.100	0.09759		mg/Kg		98	70 - 130
Ethylbenzene	0.100	0.09011		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	0.200	0.2039		mg/Kg		102	70 - 130
o-Xylene	0.100	0.1001		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-66374/2-A

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 66374

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.1181		mg/Kg		118	70 - 130	2	35
Toluene	0.100	0.09679		mg/Kg		97	70 - 130	1	35
Ethylbenzene	0.100	0.09554		mg/Kg		96	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.2185		mg/Kg		109	70 - 130	7	35
o-Xylene	0.100	0.1055		mg/Kg		105	70 - 130	5	35

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

Lab Sample ID: 880-35383-A-1-A MS

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 66374

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0996	0.09797		mg/Kg		98	70 - 130
Toluene	<0.00199	U	0.0996	0.08425		mg/Kg		85	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35379-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35383-A-1-A MS

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 66374

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.0996	0.07323		mg/Kg		74	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1788		mg/Kg		90	70 - 130
o-Xylene	<0.00199	U	0.0996	0.08545		mg/Kg		85	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 880-35383-A-1-B MSD

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 66374

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	0.1024		mg/Kg		103	70 - 130	4	35
Toluene	<0.00199	U	0.0990	0.08336		mg/Kg		84	70 - 130	1	35
Ethylbenzene	<0.00199	U	0.0990	0.07097		mg/Kg		72	70 - 130	3	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1681		mg/Kg		85	70 - 130	6	35
o-Xylene	<0.00199	U	0.0990	0.08061		mg/Kg		81	70 - 130	6	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: MB 880-66737/5-A

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66737

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/10/23 14:57	11/11/23 00:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/10/23 14:57	11/11/23 00:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/10/23 14:57	11/11/23 00:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/10/23 14:57	11/11/23 00:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/10/23 14:57	11/11/23 00:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/10/23 14:57	11/11/23 00:58	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	11/10/23 14:57	11/11/23 00:58	1
1,4-Difluorobenzene (Surr)	140	S1+	70 - 130	11/10/23 14:57	11/11/23 00:58	1

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

Lab Sample ID: MB 880-66317/1-A

Matrix: Solid

Analysis Batch: 66340

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66317

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/06/23 16:35	11/07/23 08:58	1

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35379-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: MB 880-66317/1-A

Matrix: Solid

Analysis Batch: 66340

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66317

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/06/23 16:35	11/07/23 08:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/06/23 16:35	11/07/23 08:58	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	162	S1+	70 - 130				11/06/23 16:35	11/07/23 08:58	1
o-Terphenyl	169	S1+	70 - 130				11/06/23 16:35	11/07/23 08:58	1

Lab Sample ID: LCS 880-66317/2-A

Matrix: Solid

Analysis Batch: 66340

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66317

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	924.3		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1057		mg/Kg		106	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	103		70 - 130				
o-Terphenyl	115		70 - 130				

Lab Sample ID: LCSD 880-66317/3-A

Matrix: Solid

Analysis Batch: 66340

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 66317

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	932.7		mg/Kg		93	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	1011		mg/Kg		101	70 - 130	4	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	98		70 - 130						
o-Terphenyl	101		70 - 130						

Lab Sample ID: 890-5564-A-18-B MS

Matrix: Solid

Analysis Batch: 66340

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 66317

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	1010	737.2		mg/Kg		71	70 - 130
Diesel Range Organics (Over C10-C28)	<50.1	U	1010	759.3		mg/Kg		74	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	95		70 - 130						
o-Terphenyl	86		70 - 130						

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35379-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 890-5564-A-18-C MSD

Matrix: Solid

Analysis Batch: 66340

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 66317

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	1010	744.9		mg/Kg		71	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.1	U	1010	798.0		mg/Kg		77	70 - 130	5	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	96		70 - 130								
o-Terphenyl	89		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-66462/1-A

Matrix: Solid

Analysis Batch: 66742

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/11/23 19:08	1

Lab Sample ID: LCS 880-66462/2-A

Matrix: Solid

Analysis Batch: 66742

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	246.6		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-66462/3-A

Matrix: Solid

Analysis Batch: 66742

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	247.3		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 880-35345-A-37-C MS

Matrix: Solid

Analysis Batch: 66742

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	76.9		252	325.0		mg/Kg		99	90 - 110

Lab Sample ID: 880-35345-A-37-D MSD

Matrix: Solid

Analysis Batch: 66742

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	76.9		252	325.1		mg/Kg		99	90 - 110	0	20

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35379-1
SDG: Eddy County, New Mexico

GC VOA

Prep Batch: 66374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35379-1	S-1 (0-1')	Total/NA	Solid	5035	
MB 880-66374/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-66374/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-66374/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-35383-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-35383-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 66684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35379-1	S-1 (0-1')	Total/NA	Solid	8021B	66374
MB 880-66374/5-A	Method Blank	Total/NA	Solid	8021B	66374
MB 880-66737/5-A	Method Blank	Total/NA	Solid	8021B	66737
LCS 880-66374/1-A	Lab Control Sample	Total/NA	Solid	8021B	66374
LCSD 880-66374/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	66374
880-35383-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	66374
880-35383-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	66374

Prep Batch: 66737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-66737/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 66870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35379-1	S-1 (0-1')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 66317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35379-1	S-1 (0-1')	Total/NA	Solid	8015NM Prep	
MB 880-66317/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-66317/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-66317/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5564-A-18-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5564-A-18-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 66340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35379-1	S-1 (0-1')	Total/NA	Solid	8015B NM	66317
MB 880-66317/1-A	Method Blank	Total/NA	Solid	8015B NM	66317
LCS 880-66317/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	66317
LCSD 880-66317/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	66317
890-5564-A-18-B MS	Matrix Spike	Total/NA	Solid	8015B NM	66317
890-5564-A-18-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	66317

Analysis Batch: 66483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35379-1	S-1 (0-1')	Total/NA	Solid	8015 NM	

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35379-1
SDG: Eddy County, New Mexico

HPLC/IC

Leach Batch: 66462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35379-1	S-1 (0-1')	Soluble	Solid	DI Leach	
MB 880-66462/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-66462/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-66462/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-35345-A-37-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-35345-A-37-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 66742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35379-1	S-1 (0-1')	Soluble	Solid	300.0	66462
MB 880-66462/1-A	Method Blank	Soluble	Solid	300.0	66462
LCS 880-66462/2-A	Lab Control Sample	Soluble	Solid	300.0	66462
LCSD 880-66462/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	66462
880-35345-A-37-C MS	Matrix Spike	Soluble	Solid	300.0	66462
880-35345-A-37-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	66462

Lab Chronicle

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35379-1
SDG: Eddy County, New Mexico

Client Sample ID: S-1 (0-1')
Date Collected: 11/03/23 00:00
Date Received: 11/06/23 15:52

Lab Sample ID: 880-35379-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	66374	11/07/23 13:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/11/23 20:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66870	11/11/23 20:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			66483	11/07/23 17:36	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	66317	11/07/23 08:34	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66340	11/07/23 17:36	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	66462	11/07/23 19:01	SMC	EET MID
Soluble	Analysis	300.0		10			66742	11/11/23 20:27	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: Southern Comfort 5 6 10 12

Job ID: 880-35379-1
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	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

1
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Method Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35379-1
SDG: Eddy County, New Mexico

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35379-1
SDG: Eddy County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-35379-1	S-1 (0-1')	Solid	11/03/23 00:00	11/06/23 15:52

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880-35379 Chain of Custody

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

Work Order Comments									
Program	UST/PST	☐ PRP	☐ Flowfields	☐ RRC	☐ Impfund	☐	☐	☐	☐
State of Project:									
Reporting Level II	☐ Level III	☐ ST/UST	☐ RRP	☐ Level IV	☐	☐	☐	☐	☐
Deliverables	☐ EDD	☐ AdAPT	☐ Other						

[illegible]

Comments Email results to Mike Carmona mcarmona@carmonaresources.com, Conner Moehring cmoehring@carmonaresources.com, Clint Merritt MerrittC@carmonaresources.com

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
	11/6/23 15:52		

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-35379-1
SDG Number: Eddy County, New Mexico

Login Number: 35379

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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 11/14/2023 9:53:21 AM

JOB DESCRIPTION

Southern Comfort 5 6 10 12
Eddy County, New Mexico

JOB NUMBER

880-35384-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

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

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

Authorization



Generated
11/14/2023 9:53:21 AM

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

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Laboratory Job ID: 880-35384-1
SDG: Eddy County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35384-1
SDG: Eddy County, New Mexico

Qualifiers

GC VOA

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

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35384-1
SDG: Eddy County, New Mexico

Job ID: 880-35384-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-35384-1**

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

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

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

Receipt

The samples were received on 11/6/2023 3:52 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -1.7°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: S-2 (0-1') (880-35384-1), S-2 (1.5') (880-35384-2), S-2 (2') (880-35384-3) and S-2 (3') (880-35384-4).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-66374 and 880-66737 and analytical batch 880-66684 was outside the upper control limits.

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

GC Semi VOA

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-66463 and analytical batch 880-66743 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35384-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35384-1

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 14:27	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 14:27	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 14:27	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/07/23 13:38	11/11/23 14:27	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 14:27	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/07/23 13:38	11/11/23 14:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	11/07/23 13:38	11/11/23 14:27	1
1,4-Difluorobenzene (Surr)	112		70 - 130	11/07/23 13:38	11/11/23 14:27	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/11/23 14:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			11/13/23 23:21	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	<50.3	U	50.3		mg/Kg		11/10/23 13:16	11/13/23 23:21	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		11/10/23 13:16	11/13/23 23:21	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		11/10/23 13:16	11/13/23 23:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130	11/10/23 13:16	11/13/23 23:21	1
o-Terphenyl	127		70 - 130	11/10/23 13:16	11/13/23 23:21	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1930	F1	49.7		mg/Kg			11/11/23 22:43	10

Client Sample ID: S-2 (1.5')

Lab Sample ID: 880-35384-2

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 14:48	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 14:48	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 14:48	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/07/23 13:38	11/11/23 14:48	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 14:48	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/07/23 13:38	11/11/23 14:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	11/07/23 13:38	11/11/23 14:48	1
1,4-Difluorobenzene (Surr)	110		70 - 130	11/07/23 13:38	11/11/23 14:48	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35384-1
SDG: Eddy County, New Mexico

Client Sample ID: S-2 (1.5')

Lab Sample ID: 880-35384-2

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/11/23 14:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			11/14/23 04:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		11/10/23 13:16	11/14/23 04:15	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		11/10/23 13:16	11/14/23 04:15	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		11/10/23 13:16	11/14/23 04:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130				11/10/23 13:16	11/14/23 04:15	1
o-Terphenyl	130		70 - 130				11/10/23 13:16	11/14/23 04:15	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1700		25.2		mg/Kg			11/13/23 07:38	5

Client Sample ID: S-2 (2')

Lab Sample ID: 880-35384-3

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 15:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 15:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 15:08	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/07/23 13:38	11/11/23 15:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 15:08	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/07/23 13:38	11/11/23 15:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				11/07/23 13:38	11/11/23 15:08	1
1,4-Difluorobenzene (Surr)	109		70 - 130				11/07/23 13:38	11/11/23 15:08	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/11/23 15:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			11/14/23 04:37	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	<49.6	U	49.6		mg/Kg		11/10/23 13:16	11/14/23 04:37	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		11/10/23 13:16	11/14/23 04:37	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35384-1
SDG: Eddy County, New Mexico

Client Sample ID: S-2 (2')

Lab Sample ID: 880-35384-3

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		11/10/23 13:16	11/14/23 04:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				11/10/23 13:16	11/14/23 04:37	1
o-Terphenyl	116		70 - 130				11/10/23 13:16	11/14/23 04:37	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1660		25.2		mg/Kg			11/13/23 07:43	5

Client Sample ID: S-2 (3')

Lab Sample ID: 880-35384-4

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/07/23 13:38	11/11/23 15:29	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/07/23 13:38	11/11/23 15:29	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/07/23 13:38	11/11/23 15:29	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/07/23 13:38	11/11/23 15:29	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/07/23 13:38	11/11/23 15:29	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/07/23 13:38	11/11/23 15:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				11/07/23 13:38	11/11/23 15:29	1
1,4-Difluorobenzene (Surr)	109		70 - 130				11/07/23 13:38	11/11/23 15:29	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			11/11/23 15:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			11/14/23 05:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		11/10/23 13:16	11/14/23 05:00	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		11/10/23 13:16	11/14/23 05:00	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		11/10/23 13:16	11/14/23 05:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130				11/10/23 13:16	11/14/23 05:00	1
o-Terphenyl	117		70 - 130				11/10/23 13:16	11/14/23 05:00	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	610		50.1		mg/Kg			11/13/23 08:09	10

Eurofins Midland

Surrogate Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35384-1
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)
880-35383-A-1-A MS	Matrix Spike	111	104
880-35383-A-1-B MSD	Matrix Spike Duplicate	107	106
880-35384-1	S-2 (0-1')	114	112
880-35384-2	S-2 (1.5')	112	110
880-35384-3	S-2 (2')	105	109
880-35384-4	S-2 (3')	105	109
LCS 880-66374/1-A	Lab Control Sample	94	109
LCSD 880-66374/2-A	Lab Control Sample Dup	105	105
MB 880-66374/5-A	Method Blank	112	148 S1+
MB 880-66737/5-A	Method Blank	111	140 S1+
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)
880-35384-1	S-2 (0-1')	114	127
880-35384-1 MS	S-2 (0-1')	113	114
880-35384-1 MSD	S-2 (0-1')	116	116
880-35384-2	S-2 (1.5')	118	130
880-35384-3	S-2 (2')	104	116
880-35384-4	S-2 (3')	107	117
LCS 880-66716/2-A	Lab Control Sample	107	125
LCSD 880-66716/3-A	Lab Control Sample Dup	76	88
MB 880-66716/1-A	Method Blank	112	127
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35384-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-66374/5-A

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66374

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/07/23 13:38	11/11/23 12:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	11/07/23 13:38	11/11/23 12:36	1
1,4-Difluorobenzene (Surr)	148	S1+	70 - 130	11/07/23 13:38	11/11/23 12:36	1

Lab Sample ID: LCS 880-66374/1-A

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66374

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1210		mg/Kg		121	70 - 130
Toluene	0.100	0.09759		mg/Kg		98	70 - 130
Ethylbenzene	0.100	0.09011		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	0.200	0.2039		mg/Kg		102	70 - 130
o-Xylene	0.100	0.1001		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-66374/2-A

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 66374

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1181		mg/Kg		118	70 - 130	2	35
Toluene	0.100	0.09679		mg/Kg		97	70 - 130	1	35
Ethylbenzene	0.100	0.09554		mg/Kg		96	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.2185		mg/Kg		109	70 - 130	7	35
o-Xylene	0.100	0.1055		mg/Kg		105	70 - 130	5	35

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

Lab Sample ID: 880-35383-A-1-A MS

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 66374

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0996	0.09797		mg/Kg		98	70 - 130
Toluene	<0.00199	U	0.0996	0.08425		mg/Kg		85	70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35384-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35383-A-1-A MS

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 66374

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.0996	0.07323		mg/Kg		74	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1788		mg/Kg		90	70 - 130
o-Xylene	<0.00199	U	0.0996	0.08545		mg/Kg		85	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 880-35383-A-1-B MSD

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 66374

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	0.1024		mg/Kg		103	70 - 130	4	35
Toluene	<0.00199	U	0.0990	0.08336		mg/Kg		84	70 - 130	1	35
Ethylbenzene	<0.00199	U	0.0990	0.07097		mg/Kg		72	70 - 130	3	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1681		mg/Kg		85	70 - 130	6	35
o-Xylene	<0.00199	U	0.0990	0.08061		mg/Kg		81	70 - 130	6	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: MB 880-66737/5-A

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66737

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/10/23 14:57	11/11/23 00:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/10/23 14:57	11/11/23 00:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/10/23 14:57	11/11/23 00:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/10/23 14:57	11/11/23 00:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/10/23 14:57	11/11/23 00:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/10/23 14:57	11/11/23 00:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	11/10/23 14:57	11/11/23 00:58	1
1,4-Difluorobenzene (Surr)	140	S1+	70 - 130	11/10/23 14:57	11/11/23 00:58	1

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

Lab Sample ID: MB 880-66716/1-A

Matrix: Solid

Analysis Batch: 66797

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66716

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/10/23 13:16	11/13/23 22:12	1

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35384-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: MB 880-66716/1-A

Matrix: Solid

Analysis Batch: 66797

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66716

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/10/23 13:16	11/13/23 22:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/10/23 13:16	11/13/23 22:12	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130				11/10/23 13:16	11/13/23 22:12	1
o-Terphenyl	127		70 - 130				11/10/23 13:16	11/13/23 22:12	1

Lab Sample ID: LCS 880-66716/2-A

Matrix: Solid

Analysis Batch: 66797

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66716

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	936.3		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	1000	983.0		mg/Kg		98	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	107		70 - 130				
o-Terphenyl	125		70 - 130				

Lab Sample ID: LCSD 880-66716/3-A

Matrix: Solid

Analysis Batch: 66797

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 66716

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	833.1		mg/Kg		83	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	1000	844.4		mg/Kg		84	70 - 130	15	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	76		70 - 130						
o-Terphenyl	88		70 - 130						

Lab Sample ID: 880-35384-1 MS

Matrix: Solid

Analysis Batch: 66797

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

Prep Type: Total/NA

Prep Batch: 66716

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	1010	1036		mg/Kg		101	70 - 130
Diesel Range Organics (Over C10-C28)	<50.3	U	1010	1085		mg/Kg		104	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	113		70 - 130						
o-Terphenyl	114		70 - 130						

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35384-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35384-1 MSD

Matrix: Solid

Analysis Batch: 66797

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

Prep Type: Total/NA

Prep Batch: 66716

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	1000	1133		mg/Kg		111	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	<50.3	U	1000	1110		mg/Kg		106	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	116		70 - 130								
o-Terphenyl	116		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-66463/1-A

Matrix: Solid

Analysis Batch: 66743

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/11/23 22:26	1

Lab Sample ID: LCS 880-66463/2-A

Matrix: Solid

Analysis Batch: 66743

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	247.3		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-66463/3-A

Matrix: Solid

Analysis Batch: 66743

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	248.0		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 880-35384-1 MS

Matrix: Solid

Analysis Batch: 66743

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

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1930	F1	2490	4963	F1	mg/Kg		122	90 - 110

Lab Sample ID: 880-35384-1 MSD

Matrix: Solid

Analysis Batch: 66743

Client Sample ID: S-2 (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	1930	F1	2490	4932	F1	mg/Kg		121	90 - 110	1	20

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QC Association Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35384-1
SDG: Eddy County, New Mexico

GC VOA

Prep Batch: 66374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35384-1	S-2 (0-1')	Total/NA	Solid	5035	
880-35384-2	S-2 (1.5')	Total/NA	Solid	5035	
880-35384-3	S-2 (2')	Total/NA	Solid	5035	
880-35384-4	S-2 (3')	Total/NA	Solid	5035	
MB 880-66374/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-66374/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-66374/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-35383-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-35383-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 66684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35384-1	S-2 (0-1')	Total/NA	Solid	8021B	66374
880-35384-2	S-2 (1.5')	Total/NA	Solid	8021B	66374
880-35384-3	S-2 (2')	Total/NA	Solid	8021B	66374
880-35384-4	S-2 (3')	Total/NA	Solid	8021B	66374
MB 880-66374/5-A	Method Blank	Total/NA	Solid	8021B	66374
MB 880-66737/5-A	Method Blank	Total/NA	Solid	8021B	66737
LCS 880-66374/1-A	Lab Control Sample	Total/NA	Solid	8021B	66374
LCSD 880-66374/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	66374
880-35383-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	66374
880-35383-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	66374

Prep Batch: 66737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-66737/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 66868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35384-1	S-2 (0-1')	Total/NA	Solid	Total BTEX	
880-35384-2	S-2 (1.5')	Total/NA	Solid	Total BTEX	
880-35384-3	S-2 (2')	Total/NA	Solid	Total BTEX	
880-35384-4	S-2 (3')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 66716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35384-1	S-2 (0-1')	Total/NA	Solid	8015NM Prep	
880-35384-2	S-2 (1.5')	Total/NA	Solid	8015NM Prep	
880-35384-3	S-2 (2')	Total/NA	Solid	8015NM Prep	
880-35384-4	S-2 (3')	Total/NA	Solid	8015NM Prep	
MB 880-66716/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-66716/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-66716/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-35384-1 MS	S-2 (0-1')	Total/NA	Solid	8015NM Prep	
880-35384-1 MSD	S-2 (0-1')	Total/NA	Solid	8015NM Prep	

Analysis Batch: 66797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35384-1	S-2 (0-1')	Total/NA	Solid	8015B NM	66716

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QC Association Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35384-1
SDG: Eddy County, New Mexico

GC Semi VOA (Continued)

Analysis Batch: 66797 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35384-2	S-2 (1.5')	Total/NA	Solid	8015B NM	66716
880-35384-3	S-2 (2')	Total/NA	Solid	8015B NM	66716
880-35384-4	S-2 (3')	Total/NA	Solid	8015B NM	66716
MB 880-66716/1-A	Method Blank	Total/NA	Solid	8015B NM	66716
LCS 880-66716/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	66716
LCSD 880-66716/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	66716
880-35384-1 MS	S-2 (0-1')	Total/NA	Solid	8015B NM	66716
880-35384-1 MSD	S-2 (0-1')	Total/NA	Solid	8015B NM	66716

Analysis Batch: 66964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35384-1	S-2 (0-1')	Total/NA	Solid	8015 NM	
880-35384-2	S-2 (1.5')	Total/NA	Solid	8015 NM	
880-35384-3	S-2 (2')	Total/NA	Solid	8015 NM	
880-35384-4	S-2 (3')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 66463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35384-1	S-2 (0-1')	Soluble	Solid	DI Leach	
880-35384-2	S-2 (1.5')	Soluble	Solid	DI Leach	
880-35384-3	S-2 (2')	Soluble	Solid	DI Leach	
880-35384-4	S-2 (3')	Soluble	Solid	DI Leach	
MB 880-66463/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-66463/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-66463/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-35384-1 MS	S-2 (0-1')	Soluble	Solid	DI Leach	
880-35384-1 MSD	S-2 (0-1')	Soluble	Solid	DI Leach	

Analysis Batch: 66743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35384-1	S-2 (0-1')	Soluble	Solid	300.0	66463
880-35384-2	S-2 (1.5')	Soluble	Solid	300.0	66463
880-35384-3	S-2 (2')	Soluble	Solid	300.0	66463
880-35384-4	S-2 (3')	Soluble	Solid	300.0	66463
MB 880-66463/1-A	Method Blank	Soluble	Solid	300.0	66463
LCS 880-66463/2-A	Lab Control Sample	Soluble	Solid	300.0	66463
LCSD 880-66463/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	66463
880-35384-1 MS	S-2 (0-1')	Soluble	Solid	300.0	66463
880-35384-1 MSD	S-2 (0-1')	Soluble	Solid	300.0	66463

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35384-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35384-1

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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	66374	11/07/23 13:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/11/23 14:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66868	11/11/23 14:27	SM	EET MID
Total/NA	Analysis	8015 NM		1			66964	11/13/23 23:21	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	66716	11/10/23 13:16	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66797	11/13/23 23:21	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	66463	11/07/23 19:02	SMC	EET MID
Soluble	Analysis	300.0		10			66743	11/11/23 22:43	CH	EET MID

Client Sample ID: S-2 (1.5')

Lab Sample ID: 880-35384-2

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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	66374	11/07/23 13:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/11/23 14:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66868	11/11/23 14:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			66964	11/14/23 04:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	66716	11/10/23 13:16	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66797	11/14/23 04:15	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	66463	11/07/23 19:02	SMC	EET MID
Soluble	Analysis	300.0		5			66743	11/13/23 07:38	CH	EET MID

Client Sample ID: S-2 (2')

Lab Sample ID: 880-35384-3

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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	66374	11/07/23 13:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/11/23 15:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66868	11/11/23 15:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			66964	11/14/23 04:37	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	66716	11/10/23 13:16	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66797	11/14/23 04:37	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	66463	11/07/23 19:02	SMC	EET MID
Soluble	Analysis	300.0		5			66743	11/13/23 07:43	CH	EET MID

Client Sample ID: S-2 (3')

Lab Sample ID: 880-35384-4

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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	66374	11/07/23 13:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/11/23 15:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66868	11/11/23 15:29	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35384-1
SDG: Eddy County, New Mexico

Client Sample ID: S-2 (3')
Date Collected: 11/03/23 00:00
Date Received: 11/06/23 15:52

Lab Sample ID: 880-35384-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			66964	11/14/23 05:00	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	66716	11/10/23 13:16	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66797	11/14/23 05:00	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	66463	11/07/23 19:02	SMC	EET MID
Soluble	Analysis	300.0		10			66743	11/13/23 08:09	CH	EET MID

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

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Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35384-1
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	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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Method Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35384-1
SDG: Eddy County, New Mexico

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35384-1
SDG: Eddy County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-35384-1	S-2 (0-1')	Solid	11/03/23 00:00	11/06/23 15:52
880-35384-2	S-2 (1.5')	Solid	11/03/23 00:00	11/06/23 15:52
880-35384-3	S-2 (2')	Solid	11/03/23 00:00	11/06/23 15:52
880-35384-4	S-2 (3')	Solid	11/03/23 00:00	11/06/23 15:52

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

Work Order Comments				
Program: UST/PST	☐ PRP	☐ Brownfields	☐ RC	☐ perfund
State of Project:				
Reporting Level II	☐ Level III	☐ ST/UST	☐ RRP	☐ Level IV
Deliverables: EDD	☐ ADAPT	☐ Other		

[illegible]

880-35384 Chain of Custody



Page

Comments Email results to Mike Carmona mcarmona@carmonaresources.com, Conner Moehring cmoehring@carmonaresources.com, Clint Merritt MerrittC@carmonaresources.com

Comments		Email results to Mike Carmona mcarmona@carmonaresources.com, Conner Moehring cmoehring@carmonaresources.com, Clint Merritt merrittc@carmonaresources.com	
Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
	11-0-73 1537		

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-35384-1

SDG Number: Eddy County, New Mexico

Login Number: 35384

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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 11/13/2023 2:04:40 PM

JOB DESCRIPTION

Southern Comfort 5 6 10 12
SDG NUMBER Eddy County, New Mexico

JOB NUMBER

880-35383-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

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

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

Authorization



Generated
11/13/2023 2:04:40 PM

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

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Laboratory Job ID: 880-35383-1
SDG: Eddy County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35383-1
SDG: Eddy County, New Mexico

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD 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.
α	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: Southern Comfort 5 6 10 12

Job ID: 880-35383-1
SDG: Eddy County, New Mexico

Job ID: 880-35383-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-35383-1**

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

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

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

Receipt

The samples were received on 11/6/2023 3:52 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -1.7°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: S-3 (0-1') (880-35383-1), S-3 (1.5') (880-35383-2), S-3 (2') (880-35383-3) and S-3 (3') (880-35383-4).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-66374 and 880-66737 and analytical batch 880-66684 was outside the upper control limits.

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: Surrogate recovery for the following samples were outside control limits: S-3 (0-1') (880-35383-1), S-3 (1.5') (880-35383-2), S-3 (2') (880-35383-3), S-3 (3') (880-35383-4), (890-5569-A-19-C), (890-5569-A-19-D MS) and (890-5569-A-19-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (CCV 880-66679/47). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-66455 and analytical batch 880-66679 was outside control limits. Sample non-homogeneity is suspected.

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: Southern Comfort 5 6 10 12

Job ID: 880-35383-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35383-1

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 13:05	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 13:05	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 13:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/07/23 13:38	11/11/23 13:05	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 13:05	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/07/23 13:38	11/11/23 13:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	11/07/23 13:38	11/11/23 13:05	1
1,4-Difluorobenzene (Surr)	102		70 - 130	11/07/23 13:38	11/11/23 13:05	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/11/23 13:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			11/11/23 04:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		11/07/23 17:50	11/11/23 04:00	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		11/07/23 17:50	11/11/23 04:00	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		11/07/23 17:50	11/11/23 04:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	184	S1+	70 - 130	11/07/23 17:50	11/11/23 04:00	1
o-Terphenyl	168	S1+	70 - 130	11/07/23 17:50	11/11/23 04:00	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4550		49.6		mg/Kg			11/11/23 21:35	10

Client Sample ID: S-3 (1.5')

Lab Sample ID: 880-35383-2

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 13:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 13:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 13:26	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/07/23 13:38	11/11/23 13:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 13:26	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/07/23 13:38	11/11/23 13:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	11/07/23 13:38	11/11/23 13:26	1
1,4-Difluorobenzene (Surr)	107		70 - 130	11/07/23 13:38	11/11/23 13:26	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35383-1
SDG: Eddy County, New Mexico

Client Sample ID: S-3 (1.5')

Lab Sample ID: 880-35383-2

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/11/23 13:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			11/11/23 04:22	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	<50.5	U	50.5		mg/Kg		11/07/23 17:50	11/11/23 04:22	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		11/07/23 17:50	11/11/23 04:22	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		11/07/23 17:50	11/11/23 04:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	195	S1+	70 - 130				11/07/23 17:50	11/11/23 04:22	1
o-Terphenyl	179	S1+	70 - 130				11/07/23 17:50	11/11/23 04:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7390		50.5		mg/Kg			11/11/23 21:41	10

Client Sample ID: S-3 (2')

Lab Sample ID: 880-35383-3

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 13:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 13:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 13:46	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/07/23 13:38	11/11/23 13:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 13:46	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/07/23 13:38	11/11/23 13:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				11/07/23 13:38	11/11/23 13:46	1
1,4-Difluorobenzene (Surr)	107		70 - 130				11/07/23 13:38	11/11/23 13:46	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/11/23 13:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			11/11/23 04:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		11/07/23 17:50	11/11/23 04:44	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		11/07/23 17:50	11/11/23 04:44	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35383-1
SDG: Eddy County, New Mexico

Client Sample ID: S-3 (2')

Lab Sample ID: 880-35383-3

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		11/07/23 17:50	11/11/23 04:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	191	S1+	70 - 130				11/07/23 17:50	11/11/23 04:44	1
o-Terphenyl	175	S1+	70 - 130				11/07/23 17:50	11/11/23 04:44	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4990		101		mg/Kg			11/11/23 21:46	20

Client Sample ID: S-3 (3')

Lab Sample ID: 880-35383-4

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 14:07	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 14:07	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 14:07	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/07/23 13:38	11/11/23 14:07	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 14:07	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/07/23 13:38	11/11/23 14:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130				11/07/23 13:38	11/11/23 14:07	1
1,4-Difluorobenzene (Surr)	115		70 - 130				11/07/23 13:38	11/11/23 14:07	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/11/23 14:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			11/11/23 05:06	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	<50.5	U	50.5		mg/Kg		11/07/23 17:50	11/11/23 05:06	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		11/07/23 17:50	11/11/23 05:06	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		11/07/23 17:50	11/11/23 05:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	161	S1+	70 - 130				11/07/23 17:50	11/11/23 05:06	1
o-Terphenyl	147	S1+	70 - 130				11/07/23 17:50	11/11/23 05:06	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4980		100		mg/Kg			11/11/23 21:52	20

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Surrogate Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35383-1
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)
880-35383-1	S-3 (0-1')	88	102
880-35383-1 MS	S-3 (0-1')	111	104
880-35383-1 MSD	S-3 (0-1')	107	106
880-35383-2	S-3 (1.5')	96	107
880-35383-3	S-3 (2')	107	107
880-35383-4	S-3 (3')	99	115
LCS 880-66374/1-A	Lab Control Sample	94	109
LCSD 880-66374/2-A	Lab Control Sample Dup	105	105
MB 880-66374/5-A	Method Blank	112	148 S1+
MB 880-66737/5-A	Method Blank	111	140 S1+
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)
880-35383-1	S-3 (0-1')	184 S1+	168 S1+
880-35383-2	S-3 (1.5')	195 S1+	179 S1+
880-35383-3	S-3 (2')	191 S1+	175 S1+
880-35383-4	S-3 (3')	161 S1+	147 S1+
890-5569-A-19-D MS	Matrix Spike	175 S1+	148 S1+
890-5569-A-19-E MSD	Matrix Spike Duplicate	153 S1+	130
LCS 880-66455/2-A	Lab Control Sample	104	109
LCSD 880-66455/3-A	Lab Control Sample Dup	105	115
MB 880-66455/1-A	Method Blank	113	105
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35383-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-66374/5-A

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66374

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/07/23 13:38	11/11/23 12:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	11/07/23 13:38	11/11/23 12:36	1
1,4-Difluorobenzene (Surr)	148	S1+	70 - 130	11/07/23 13:38	11/11/23 12:36	1

Lab Sample ID: LCS 880-66374/1-A

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66374

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1210		mg/Kg		121	70 - 130
Toluene	0.100	0.09759		mg/Kg		98	70 - 130
Ethylbenzene	0.100	0.09011		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	0.200	0.2039		mg/Kg		102	70 - 130
o-Xylene	0.100	0.1001		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-66374/2-A

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 66374

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.1181		mg/Kg		118	70 - 130	2	35
Toluene	0.100	0.09679		mg/Kg		97	70 - 130	1	35
Ethylbenzene	0.100	0.09554		mg/Kg		96	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.2185		mg/Kg		109	70 - 130	7	35
o-Xylene	0.100	0.1055		mg/Kg		105	70 - 130	5	35

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

Lab Sample ID: 880-35383-1 MS

Matrix: Solid

Analysis Batch: 66684

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

Prep Type: Total/NA

Prep Batch: 66374

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0996	0.09797		mg/Kg		98	70 - 130
Toluene	<0.00199	U	0.0996	0.08425		mg/Kg		85	70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35383-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35383-1 MS

Matrix: Solid

Analysis Batch: 66684

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

Prep Type: Total/NA

Prep Batch: 66374

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.0996	0.07323		mg/Kg		74	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1788		mg/Kg		90	70 - 130
o-Xylene	<0.00199	U	0.0996	0.08545		mg/Kg		85	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 880-35383-1 MSD

Matrix: Solid

Analysis Batch: 66684

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

Prep Type: Total/NA

Prep Batch: 66374

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	0.1024		mg/Kg		103	70 - 130	4	35
Toluene	<0.00199	U	0.0990	0.08336		mg/Kg		84	70 - 130	1	35
Ethylbenzene	<0.00199	U	0.0990	0.07097		mg/Kg		72	70 - 130	3	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1681		mg/Kg		85	70 - 130	6	35
o-Xylene	<0.00199	U	0.0990	0.08061		mg/Kg		81	70 - 130	6	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: MB 880-66737/5-A

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66737

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/10/23 14:57	11/11/23 00:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/10/23 14:57	11/11/23 00:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/10/23 14:57	11/11/23 00:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/10/23 14:57	11/11/23 00:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/10/23 14:57	11/11/23 00:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/10/23 14:57	11/11/23 00:58	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	11/10/23 14:57	11/11/23 00:58	1
1,4-Difluorobenzene (Surr)	140	S1+	70 - 130	11/10/23 14:57	11/11/23 00:58	1

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

Lab Sample ID: MB 880-66455/1-A

Matrix: Solid

Analysis Batch: 66679

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66455

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/07/23 17:50	11/10/23 19:49	1

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35383-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: MB 880-66455/1-A

Matrix: Solid

Analysis Batch: 66679

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66455

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/07/23 17:50	11/10/23 19:49	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/07/23 17:50	11/10/23 19:49	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130				11/07/23 17:50	11/10/23 19:49	1
o-Terphenyl	105		70 - 130				11/07/23 17:50	11/10/23 19:49	1

Lab Sample ID: LCS 880-66455/2-A

Matrix: Solid

Analysis Batch: 66679

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66455

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	872.1		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	906.7		mg/Kg		91	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	104		70 - 130				
o-Terphenyl	109		70 - 130				

Lab Sample ID: LCSD 880-66455/3-A

Matrix: Solid

Analysis Batch: 66679

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 66455

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	846.2		mg/Kg		85	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	889.6		mg/Kg		89	70 - 130	2	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	105		70 - 130						
o-Terphenyl	115		70 - 130						

Lab Sample ID: 890-5569-A-19-D MS

Matrix: Solid

Analysis Batch: 66679

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 66455

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.5	U F2	1010	907.9		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	<49.5	U	1010	1313		mg/Kg		129	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	175	S1+	70 - 130						
o-Terphenyl	148	S1+	70 - 130						

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35383-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 890-5569-A-19-E MSD

Matrix: Solid

Analysis Batch: 66679

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 66455

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	<49.5	U F2	1010	1194	F2	mg/Kg		119	70 - 130	27	20
Diesel Range Organics (Over C10-C28)	<49.5	U	1010	1175		mg/Kg		115	70 - 130	11	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	153	S1+	70 - 130								
o-Terphenyl	130		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-66462/1-A

Matrix: Solid

Analysis Batch: 66742

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/11/23 19:08	1

Lab Sample ID: LCS 880-66462/2-A

Matrix: Solid

Analysis Batch: 66742

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	250	246.6		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-66462/3-A

Matrix: Solid

Analysis Batch: 66742

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	247.3		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 880-35381-A-2-D MS

Matrix: Solid

Analysis Batch: 66742

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	408		1240	1683		mg/Kg		103	90 - 110		

Lab Sample ID: 880-35381-A-2-E MSD

Matrix: Solid

Analysis Batch: 66742

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	408		1240	1685		mg/Kg		103	90 - 110	0	20

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QC Association Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35383-1
SDG: Eddy County, New Mexico

GC VOA

Prep Batch: 66374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35383-1	S-3 (0-1')	Total/NA	Solid	5035	
880-35383-2	S-3 (1.5')	Total/NA	Solid	5035	
880-35383-3	S-3 (2')	Total/NA	Solid	5035	
880-35383-4	S-3 (3')	Total/NA	Solid	5035	
MB 880-66374/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-66374/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-66374/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-35383-1 MS	S-3 (0-1')	Total/NA	Solid	5035	
880-35383-1 MSD	S-3 (0-1')	Total/NA	Solid	5035	

Analysis Batch: 66684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35383-1	S-3 (0-1')	Total/NA	Solid	8021B	66374
880-35383-2	S-3 (1.5')	Total/NA	Solid	8021B	66374
880-35383-3	S-3 (2')	Total/NA	Solid	8021B	66374
880-35383-4	S-3 (3')	Total/NA	Solid	8021B	66374
MB 880-66374/5-A	Method Blank	Total/NA	Solid	8021B	66374
MB 880-66737/5-A	Method Blank	Total/NA	Solid	8021B	66737
LCS 880-66374/1-A	Lab Control Sample	Total/NA	Solid	8021B	66374
LCSD 880-66374/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	66374
880-35383-1 MS	S-3 (0-1')	Total/NA	Solid	8021B	66374
880-35383-1 MSD	S-3 (0-1')	Total/NA	Solid	8021B	66374

Prep Batch: 66737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-66737/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 66867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35383-1	S-3 (0-1')	Total/NA	Solid	Total BTEX	
880-35383-2	S-3 (1.5')	Total/NA	Solid	Total BTEX	
880-35383-3	S-3 (2')	Total/NA	Solid	Total BTEX	
880-35383-4	S-3 (3')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 66455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35383-1	S-3 (0-1')	Total/NA	Solid	8015NM Prep	
880-35383-2	S-3 (1.5')	Total/NA	Solid	8015NM Prep	
880-35383-3	S-3 (2')	Total/NA	Solid	8015NM Prep	
880-35383-4	S-3 (3')	Total/NA	Solid	8015NM Prep	
MB 880-66455/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-66455/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-66455/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5569-A-19-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5569-A-19-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 66679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35383-1	S-3 (0-1')	Total/NA	Solid	8015B NM	66455

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QC Association Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35383-1
SDG: Eddy County, New Mexico

GC Semi VOA (Continued)

Analysis Batch: 66679 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35383-2	S-3 (1.5')	Total/NA	Solid	8015B NM	66455
880-35383-3	S-3 (2')	Total/NA	Solid	8015B NM	66455
880-35383-4	S-3 (3')	Total/NA	Solid	8015B NM	66455
MB 880-66455/1-A	Method Blank	Total/NA	Solid	8015B NM	66455
LCS 880-66455/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	66455
LCSD 880-66455/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	66455
890-5569-A-19-D MS	Matrix Spike	Total/NA	Solid	8015B NM	66455
890-5569-A-19-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	66455

Analysis Batch: 66840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35383-1	S-3 (0-1')	Total/NA	Solid	8015 NM	
880-35383-2	S-3 (1.5')	Total/NA	Solid	8015 NM	
880-35383-3	S-3 (2')	Total/NA	Solid	8015 NM	
880-35383-4	S-3 (3')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 66462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35383-1	S-3 (0-1')	Soluble	Solid	DI Leach	
880-35383-2	S-3 (1.5')	Soluble	Solid	DI Leach	
880-35383-3	S-3 (2')	Soluble	Solid	DI Leach	
880-35383-4	S-3 (3')	Soluble	Solid	DI Leach	
MB 880-66462/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-66462/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-66462/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-35381-A-2-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-35381-A-2-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 66742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35383-1	S-3 (0-1')	Soluble	Solid	300.0	66462
880-35383-2	S-3 (1.5')	Soluble	Solid	300.0	66462
880-35383-3	S-3 (2')	Soluble	Solid	300.0	66462
880-35383-4	S-3 (3')	Soluble	Solid	300.0	66462
MB 880-66462/1-A	Method Blank	Soluble	Solid	300.0	66462
LCS 880-66462/2-A	Lab Control Sample	Soluble	Solid	300.0	66462
LCSD 880-66462/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	66462
880-35381-A-2-D MS	Matrix Spike	Soluble	Solid	300.0	66462
880-35381-A-2-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	66462

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35383-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35383-1

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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	66374	11/07/23 13:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/11/23 13:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66867	11/11/23 13:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			66840	11/11/23 04:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	66455	11/07/23 17:50	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66679	11/11/23 04:00	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	66462	11/07/23 19:01	SMC	EET MID
Soluble	Analysis	300.0		10			66742	11/11/23 21:35	CH	EET MID

Client Sample ID: S-3 (1.5')

Lab Sample ID: 880-35383-2

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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	66374	11/07/23 13:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/11/23 13:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66867	11/11/23 13:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			66840	11/11/23 04:22	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	66455	11/07/23 17:50	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66679	11/11/23 04:22	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66462	11/07/23 19:01	SMC	EET MID
Soluble	Analysis	300.0		10			66742	11/11/23 21:41	CH	EET MID

Client Sample ID: S-3 (2')

Lab Sample ID: 880-35383-3

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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	66374	11/07/23 13:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/11/23 13:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66867	11/11/23 13:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			66840	11/11/23 04:44	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	66455	11/07/23 17:50	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66679	11/11/23 04:44	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	66462	11/07/23 19:01	SMC	EET MID
Soluble	Analysis	300.0		20			66742	11/11/23 21:46	CH	EET MID

Client Sample ID: S-3 (3')

Lab Sample ID: 880-35383-4

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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	66374	11/07/23 13:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/11/23 14:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66867	11/11/23 14:07	SM	EET MID

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Lab Chronicle

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35383-1
SDG: Eddy County, New Mexico

Client Sample ID: S-3 (3')
Date Collected: 11/03/23 00:00
Date Received: 11/06/23 15:52

Lab Sample ID: 880-35383-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			66840	11/11/23 05:06	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	66455	11/07/23 17:50	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66679	11/11/23 05:06	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	66462	11/07/23 19:01	SMC	EET MID
Soluble	Analysis	300.0		20			66742	11/11/23 21:52	CH	EET MID

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

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Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35383-1
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	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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Method Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35383-1
SDG: Eddy County, New Mexico

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35383-1
SDG: Eddy County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-35383-1	S-3 (0-1')	Solid	11/03/23 00:00	11/06/23 15:52
880-35383-2	S-3 (1.5')	Solid	11/03/23 00:00	11/06/23 15:52
880-35383-3	S-3 (2')	Solid	11/03/23 00:00	11/06/23 15:52
880-35383-4	S-3 (3')	Solid	11/03/23 00:00	11/06/23 15:52

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

Work Order Comments	
Program State of Project:	UST/PST ☐ RRP ☐ Brownfields ☐ RC ☐ Superfund ☐
Reporting Level II	☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐
Deliverables	EDD ☐ ADAPT ☐ Other ☐

[illegible]

W/C



880-35383 Chain of Custody

Comments. Email results to Mike Carmona mcarmona@carmonaresources.com, Conner Moehring cmoehring@carmonaresources.com, Clint Merritt MerrittC@carmonaresources.com

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
<i>Michael Jones</i>	11-6-23 1552	<i>[Signature]</i>	

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-35383-1

SDG Number: Eddy County, New Mexico

Login Number: 35383

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 11/13/2023 11:53:19 AM

JOB DESCRIPTION

Southern Comfort 5 6 10 12
SDG NUMBER Eddy County, New Mexico

JOB NUMBER

880-35382-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

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

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

Authorization



Generated
11/13/2023 11:53:19 AM

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

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Laboratory Job ID: 880-35382-1
SDG: Eddy County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35382-1
SDG: Eddy County, New Mexico

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
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: Southern Comfort 5 6 10 12

Job ID: 880-35382-1
SDG: Eddy County, New Mexico

Job ID: 880-35382-1

Laboratory: Eurofins Midland

Narrative**Job Narrative
880-35382-1**

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

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

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

Receipt

The samples were received on 11/6/2023 3:52 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -1.7°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: S-4 (0-1') (880-35382-1), S-4 (1.5') (880-35382-2) and S-4 (2') (880-35382-3).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-66262 and 880-66319 and analytical batch 880-66231 was outside the upper control limits.

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 surrogate recovery for the blank associated with preparation batch 880-66317 and analytical batch 880-66340 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-66340/20), (CCV 880-66340/31), (CCV 880-66340/5), (CCV 880-66340/57) and (CCV 880-66340/58). 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: Southern Comfort 5 6 10 12

Job ID: 880-35382-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35382-1

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:07	11/08/23 06:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:07	11/08/23 06:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:07	11/08/23 06:44	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/06/23 17:07	11/08/23 06:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:07	11/08/23 06:44	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/06/23 17:07	11/08/23 06:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	11/06/23 17:07	11/08/23 06:44	1
1,4-Difluorobenzene (Surr)	112		70 - 130	11/06/23 17:07	11/08/23 06:44	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			11/08/23 06:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/07/23 19:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/07/23 08:34	11/07/23 19:23	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/07/23 08:34	11/07/23 19:23	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/07/23 08:34	11/07/23 19:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	11/07/23 08:34	11/07/23 19:23	1
o-Terphenyl	91		70 - 130	11/07/23 08:34	11/07/23 19:23	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	287		5.04		mg/Kg			11/13/23 10:41	1

Client Sample ID: S-4 (1.5')

Lab Sample ID: 880-35382-2

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/06/23 17:07	11/08/23 07:05	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/06/23 17:07	11/08/23 07:05	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/06/23 17:07	11/08/23 07:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/06/23 17:07	11/08/23 07:05	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/06/23 17:07	11/08/23 07:05	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/06/23 17:07	11/08/23 07:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	11/06/23 17:07	11/08/23 07:05	1
1,4-Difluorobenzene (Surr)	104		70 - 130	11/06/23 17:07	11/08/23 07:05	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35382-1
SDG: Eddy County, New Mexico

Client Sample ID: S-4 (1.5')

Lab Sample ID: 880-35382-2

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/08/23 07:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			11/07/23 19:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		11/07/23 08:34	11/07/23 19:44	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		11/07/23 08:34	11/07/23 19:44	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		11/07/23 08:34	11/07/23 19:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				11/07/23 08:34	11/07/23 19:44	1
o-Terphenyl	91		70 - 130				11/07/23 08:34	11/07/23 19:44	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	185		5.00		mg/Kg			11/13/23 10:46	1

Client Sample ID: S-4 (2')

Lab Sample ID: 880-35382-3

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/06/23 17:07	11/08/23 07:25	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/06/23 17:07	11/08/23 07:25	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/06/23 17:07	11/08/23 07:25	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		11/06/23 17:07	11/08/23 07:25	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/06/23 17:07	11/08/23 07:25	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		11/06/23 17:07	11/08/23 07:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130				11/06/23 17:07	11/08/23 07:25	1
1,4-Difluorobenzene (Surr)	112		70 - 130				11/06/23 17:07	11/08/23 07:25	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			11/08/23 07:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			11/07/23 20:05	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	<50.5	U	50.5		mg/Kg		11/07/23 08:34	11/07/23 20:05	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		11/07/23 08:34	11/07/23 20:05	1

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Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35382-1
SDG: Eddy County, New Mexico

Client Sample ID: S-4 (2')
Date Collected: 11/03/23 00:00
Date Received: 11/06/23 15:52

Lab Sample ID: 880-35382-3
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		11/07/23 08:34	11/07/23 20:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				11/07/23 08:34	11/07/23 20:05	1
o-Terphenyl	91		70 - 130				11/07/23 08:34	11/07/23 20:05	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	76.1		5.03		mg/Kg			11/13/23 10:52	1

Surrogate Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35382-1
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)
880-34990-A-6-A MB	Method Blank	89	114
880-35382-1	S-4 (0-1')	103	112
880-35382-2	S-4 (1.5')	101	104
880-35382-3	S-4 (2')	99	112
890-5566-A-1-C MS	Matrix Spike	100	107
890-5566-A-1-D MSD	Matrix Spike Duplicate	94	106
LCS 880-66319/1-A	Lab Control Sample	95	108
LCSD 880-66319/2-A	Lab Control Sample Dup	94	109
MB 880-66262/5-A	Method Blank	116	152 S1+
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)
880-35382-1	S-4 (0-1')	90	91
880-35382-2	S-4 (1.5')	88	91
880-35382-3	S-4 (2')	89	91
890-5564-A-18-B MS	Matrix Spike	95	86
890-5564-A-18-C MSD	Matrix Spike Duplicate	96	89
LCS 880-66317/2-A	Lab Control Sample	103	115
LCSD 880-66317/3-A	Lab Control Sample Dup	98	101
MB 880-66317/1-A	Method Blank	162 S1+	169 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35382-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-66262/5-A

Matrix: Solid

Analysis Batch: 66231

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66262

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/06/23 11:29	11/07/23 12:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/06/23 11:29	11/07/23 12:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/06/23 11:29	11/07/23 12:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/06/23 11:29	11/07/23 12:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/06/23 11:29	11/07/23 12:04	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/06/23 11:29	11/07/23 12:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	11/06/23 11:29	11/07/23 12:04	1
1,4-Difluorobenzene (Surr)	152	S1+	70 - 130	11/06/23 11:29	11/07/23 12:04	1

Lab Sample ID: 880-34990-A-6-A MB

Matrix: Solid

Analysis Batch: 66231

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66319

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:07	11/08/23 05:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:07	11/08/23 05:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:07	11/08/23 05:22	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/06/23 17:07	11/08/23 05:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:07	11/08/23 05:22	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/06/23 17:07	11/08/23 05:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	11/06/23 17:07	11/08/23 05:22	1
1,4-Difluorobenzene (Surr)	114		70 - 130	11/06/23 17:07	11/08/23 05:22	1

Lab Sample ID: LCS 880-66319/1-A

Matrix: Solid

Analysis Batch: 66231

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66319

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1051		mg/Kg		105	70 - 130
Toluene	0.100	0.09486		mg/Kg		95	70 - 130
Ethylbenzene	0.100	0.08840		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	0.200	0.2102		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1013		mg/Kg		101	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: LCSD 880-66319/2-A

Matrix: Solid

Analysis Batch: 66231

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 66319

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1032		mg/Kg		103	70 - 130	2	35

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35382-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: LCSD 880-66319/2-A

Matrix: Solid

Analysis Batch: 66231

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 66319

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.09356		mg/Kg		94	70 - 130	1	35
Ethylbenzene	0.100	0.08388		mg/Kg		84	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1941		mg/Kg		97	70 - 130	8	35
o-Xylene	0.100	0.09487		mg/Kg		95	70 - 130	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 890-5566-A-1-C MS

Matrix: Solid

Analysis Batch: 66231

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 66319

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0996	0.09646		mg/Kg		97	70 - 130
Toluene	<0.00199	U	0.0996	0.07486		mg/Kg		75	70 - 130
Ethylbenzene	<0.00199	U	0.0996	0.07053		mg/Kg		71	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1634		mg/Kg		82	70 - 130
o-Xylene	<0.00199	U	0.0996	0.08304		mg/Kg		83	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 890-5566-A-1-D MSD

Matrix: Solid

Analysis Batch: 66231

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 66319

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	0.09714		mg/Kg		98	70 - 130	1	35
Toluene	<0.00199	U	0.0990	0.08114		mg/Kg		82	70 - 130	8	35
Ethylbenzene	<0.00199	U	0.0990	0.07147		mg/Kg		72	70 - 130	1	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1705		mg/Kg		86	70 - 130	4	35
o-Xylene	<0.00199	U	0.0990	0.08622		mg/Kg		87	70 - 130	4	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

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

Lab Sample ID: MB 880-66317/1-A

Matrix: Solid

Analysis Batch: 66340

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66317

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/06/23 16:35	11/07/23 08:58	1

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35382-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: MB 880-66317/1-A

Matrix: Solid

Analysis Batch: 66340

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66317

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/06/23 16:35	11/07/23 08:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/06/23 16:35	11/07/23 08:58	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	162	S1+	70 - 130				11/06/23 16:35	11/07/23 08:58	1
o-Terphenyl	169	S1+	70 - 130				11/06/23 16:35	11/07/23 08:58	1

Lab Sample ID: LCS 880-66317/2-A

Matrix: Solid

Analysis Batch: 66340

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66317

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	924.3		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1057		mg/Kg		106	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	103		70 - 130				
o-Terphenyl	115		70 - 130				

Lab Sample ID: LCSD 880-66317/3-A

Matrix: Solid

Analysis Batch: 66340

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 66317

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	932.7		mg/Kg		93	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	1011		mg/Kg		101	70 - 130	4	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	98		70 - 130						
o-Terphenyl	101		70 - 130						

Lab Sample ID: 890-5564-A-18-B MS

Matrix: Solid

Analysis Batch: 66340

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 66317

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	1010	737.2		mg/Kg		71	70 - 130
Diesel Range Organics (Over C10-C28)	<50.1	U	1010	759.3		mg/Kg		74	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	95		70 - 130						
o-Terphenyl	86		70 - 130						

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35382-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 890-5564-A-18-C MSD

Matrix: Solid

Analysis Batch: 66340

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 66317

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	1010	744.9		mg/Kg		71	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.1	U	1010	798.0		mg/Kg		77	70 - 130	5	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	96		70 - 130								
o-Terphenyl	89		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-66462/1-A

Matrix: Solid

Analysis Batch: 66742

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/11/23 19:08	1

Lab Sample ID: LCS 880-66462/2-A

Matrix: Solid

Analysis Batch: 66742

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	246.6		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-66462/3-A

Matrix: Solid

Analysis Batch: 66742

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	247.3		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 880-35345-A-37-C MS

Matrix: Solid

Analysis Batch: 66742

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	76.9		252	325.0		mg/Kg		99	90 - 110

Lab Sample ID: 880-35345-A-37-D MSD

Matrix: Solid

Analysis Batch: 66742

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	76.9		252	325.1		mg/Kg		99	90 - 110	0	20

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35382-1
SDG: Eddy County, New Mexico

GC VOA

Analysis Batch: 66231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35382-1	S-4 (0-1')	Total/NA	Solid	8021B	66319
880-35382-2	S-4 (1.5')	Total/NA	Solid	8021B	66319
880-35382-3	S-4 (2')	Total/NA	Solid	8021B	66319
880-34990-A-6-A MB	Method Blank	Total/NA	Solid	8021B	66319
MB 880-66262/5-A	Method Blank	Total/NA	Solid	8021B	66262
LCS 880-66319/1-A	Lab Control Sample	Total/NA	Solid	8021B	66319
LCSD 880-66319/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	66319
890-5566-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	66319
890-5566-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	66319

Prep Batch: 66262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-66262/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 66319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35382-1	S-4 (0-1')	Total/NA	Solid	5035	
880-35382-2	S-4 (1.5')	Total/NA	Solid	5035	
880-35382-3	S-4 (2')	Total/NA	Solid	5035	
880-34990-A-6-A MB	Method Blank	Total/NA	Solid	5035	
LCS 880-66319/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-66319/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5566-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-5566-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 66524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35382-1	S-4 (0-1')	Total/NA	Solid	Total BTEX	
880-35382-2	S-4 (1.5')	Total/NA	Solid	Total BTEX	
880-35382-3	S-4 (2')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 66317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35382-1	S-4 (0-1')	Total/NA	Solid	8015NM Prep	
880-35382-2	S-4 (1.5')	Total/NA	Solid	8015NM Prep	
880-35382-3	S-4 (2')	Total/NA	Solid	8015NM Prep	
MB 880-66317/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-66317/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-66317/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5564-A-18-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5564-A-18-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 66340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35382-1	S-4 (0-1')	Total/NA	Solid	8015B NM	66317
880-35382-2	S-4 (1.5')	Total/NA	Solid	8015B NM	66317
880-35382-3	S-4 (2')	Total/NA	Solid	8015B NM	66317
MB 880-66317/1-A	Method Blank	Total/NA	Solid	8015B NM	66317
LCS 880-66317/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	66317

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QC Association Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35382-1
SDG: Eddy County, New Mexico

GC Semi VOA (Continued)

Analysis Batch: 66340 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-66317/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	66317
890-5564-A-18-B MS	Matrix Spike	Total/NA	Solid	8015B NM	66317
890-5564-A-18-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	66317

Analysis Batch: 66486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35382-1	S-4 (0-1')	Total/NA	Solid	8015 NM	
880-35382-2	S-4 (1.5')	Total/NA	Solid	8015 NM	
880-35382-3	S-4 (2')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 66462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35382-1	S-4 (0-1')	Soluble	Solid	DI Leach	
880-35382-2	S-4 (1.5')	Soluble	Solid	DI Leach	
880-35382-3	S-4 (2')	Soluble	Solid	DI Leach	
MB 880-66462/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-66462/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-66462/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-35345-A-37-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-35345-A-37-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 66742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35382-1	S-4 (0-1')	Soluble	Solid	300.0	66462
880-35382-2	S-4 (1.5')	Soluble	Solid	300.0	66462
880-35382-3	S-4 (2')	Soluble	Solid	300.0	66462
MB 880-66462/1-A	Method Blank	Soluble	Solid	300.0	66462
LCS 880-66462/2-A	Lab Control Sample	Soluble	Solid	300.0	66462
LCSD 880-66462/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	66462
880-35345-A-37-C MS	Matrix Spike	Soluble	Solid	300.0	66462
880-35345-A-37-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	66462

Lab Chronicle

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35382-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35382-1

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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	66319	11/06/23 17:07	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66231	11/08/23 06:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66524	11/08/23 06:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			66486	11/07/23 19:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	66317	11/07/23 08:34	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66340	11/07/23 19:23	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	66462	11/07/23 19:01	SMC	EET MID
Soluble	Analysis	300.0		1			66742	11/13/23 10:41	CH	EET MID

Client Sample ID: S-4 (1.5')

Lab Sample ID: 880-35382-2

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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	66319	11/06/23 17:07	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66231	11/08/23 07:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66524	11/08/23 07:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			66486	11/07/23 19:44	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	66317	11/07/23 08:34	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66340	11/07/23 19:44	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	66462	11/07/23 19:01	SMC	EET MID
Soluble	Analysis	300.0		1			66742	11/13/23 10:46	CH	EET MID

Client Sample ID: S-4 (2')

Lab Sample ID: 880-35382-3

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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	66319	11/06/23 17:07	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66231	11/08/23 07:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66524	11/08/23 07:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			66486	11/07/23 20:05	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	66317	11/07/23 08:34	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66340	11/07/23 20:05	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	66462	11/07/23 19:01	SMC	EET MID
Soluble	Analysis	300.0		1			66742	11/13/23 10:52	CH	EET MID

Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35382-1
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	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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

Method Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35382-1
SDG: Eddy County, New Mexico

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35382-1
SDG: Eddy County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-35382-1	S-4 (0-1')	Solid	11/03/23 00:00	11/06/23 15:52
880-35382-2	S-4 (1.5')	Solid	11/03/23 00:00	11/06/23 15:52
880-35382-3	S-4 (2')	Solid	11/03/23 00:00	11/06/23 15:52

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[illegible]

W/C



880-35382 Chain of Custody

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-35382-1

SDG Number: Eddy County, New Mexico

Login Number: 35382

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 11/13/2023 11:53:14 AM

JOB DESCRIPTION

Southern Comfort 5 6 10 12
SDG NUMBER Eddy County, New Mexico

JOB NUMBER

880-35381-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

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

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

Authorization



Generated
11/13/2023 11:53:14 AM

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

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Laboratory Job ID: 880-35381-1
SDG: Eddy County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35381-1
SDG: Eddy County, New Mexico

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
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: Southern Comfort 5 6 10 12

Job ID: 880-35381-1
SDG: Eddy County, New Mexico

Job ID: 880-35381-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-35381-1**

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

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

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

Receipt

The samples were received on 11/6/2023 3:52 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -1.7°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: S-5 (0-1') (880-35381-1), S-5 (1.5') (880-35381-2) and S-5 (2') (880-35381-3).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-66262 and 880-66319 and analytical batch 880-66231 was outside the upper control limits.

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 surrogate recovery for the blank associated with preparation batch 880-66317 and analytical batch 880-66340 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-66340/20), (CCV 880-66340/31), (CCV 880-66340/5), (CCV 880-66340/57) and (CCV 880-66340/58). 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: Southern Comfort 5 6 10 12

Job ID: 880-35381-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35381-1

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/06/23 17:07	11/08/23 05:43	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/06/23 17:07	11/08/23 05:43	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/06/23 17:07	11/08/23 05:43	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/06/23 17:07	11/08/23 05:43	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/06/23 17:07	11/08/23 05:43	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/06/23 17:07	11/08/23 05:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130				11/06/23 17:07	11/08/23 05:43	1
1,4-Difluorobenzene (Surr)	116		70 - 130				11/06/23 17:07	11/08/23 05:43	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/08/23 05:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			11/07/23 18:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		11/07/23 08:34	11/07/23 18:20	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		11/07/23 08:34	11/07/23 18:20	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		11/07/23 08:34	11/07/23 18:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130				11/07/23 08:34	11/07/23 18:20	1
o-Terphenyl	89		70 - 130				11/07/23 08:34	11/07/23 18:20	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	723		25.3		mg/Kg			11/11/23 20:39	5

Client Sample ID: S-5 (1.5')

Lab Sample ID: 880-35381-2

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:07	11/08/23 06:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:07	11/08/23 06:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:07	11/08/23 06:03	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/06/23 17:07	11/08/23 06:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:07	11/08/23 06:03	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/06/23 17:07	11/08/23 06:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130				11/06/23 17:07	11/08/23 06:03	1
1,4-Difluorobenzene (Surr)	114		70 - 130				11/06/23 17:07	11/08/23 06:03	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35381-1
SDG: Eddy County, New Mexico

Client Sample ID: S-5 (1.5')

Lab Sample ID: 880-35381-2

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/08/23 06:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			11/07/23 18:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		11/07/23 08:34	11/07/23 18:41	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		11/07/23 08:34	11/07/23 18:41	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		11/07/23 08:34	11/07/23 18:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130				11/07/23 08:34	11/07/23 18:41	1
o-Terphenyl	90		70 - 130				11/07/23 08:34	11/07/23 18:41	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	408		24.8		mg/Kg			11/11/23 20:44	5

Client Sample ID: S-5 (2')

Lab Sample ID: 880-35381-3

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/06/23 17:07	11/08/23 06:24	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/06/23 17:07	11/08/23 06:24	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/06/23 17:07	11/08/23 06:24	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/06/23 17:07	11/08/23 06:24	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/06/23 17:07	11/08/23 06:24	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/06/23 17:07	11/08/23 06:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				11/06/23 17:07	11/08/23 06:24	1
1,4-Difluorobenzene (Surr)	118		70 - 130				11/06/23 17:07	11/08/23 06:24	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			11/08/23 06:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			11/07/23 19:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		11/07/23 08:34	11/07/23 19:02	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		11/07/23 08:34	11/07/23 19:02	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35381-1
SDG: Eddy County, New Mexico

Client Sample ID: S-5 (2')
Date Collected: 11/03/23 00:00
Date Received: 11/06/23 15:52

Lab Sample ID: 880-35381-3
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)	<49.6	U	49.6		mg/Kg		11/07/23 08:34	11/07/23 19:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130				11/07/23 08:34	11/07/23 19:02	1
o-Terphenyl	89		70 - 130				11/07/23 08:34	11/07/23 19:02	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	501		50.2		mg/Kg			11/11/23 21:01	10

Surrogate Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35381-1
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)
880-34990-A-6-A MB	Method Blank	89	114
880-35381-1	S-5 (0-1')	98	116
880-35381-2	S-5 (1.5')	90	114
880-35381-3	S-5 (2')	97	118
890-5566-A-1-C MS	Matrix Spike	100	107
890-5566-A-1-D MSD	Matrix Spike Duplicate	94	106
LCS 880-66319/1-A	Lab Control Sample	95	108
LCSD 880-66319/2-A	Lab Control Sample Dup	94	109
MB 880-66262/5-A	Method Blank	116	152 S1+
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)
880-35381-1	S-5 (0-1')	84	89
880-35381-2	S-5 (1.5')	87	90
880-35381-3	S-5 (2')	87	89
890-5564-A-18-B MS	Matrix Spike	95	86
890-5564-A-18-C MSD	Matrix Spike Duplicate	96	89
LCS 880-66317/2-A	Lab Control Sample	103	115
LCSD 880-66317/3-A	Lab Control Sample Dup	98	101
MB 880-66317/1-A	Method Blank	162 S1+	169 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35381-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-66262/5-A

Matrix: Solid

Analysis Batch: 66231

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66262

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/06/23 11:29	11/07/23 12:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/06/23 11:29	11/07/23 12:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/06/23 11:29	11/07/23 12:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/06/23 11:29	11/07/23 12:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/06/23 11:29	11/07/23 12:04	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/06/23 11:29	11/07/23 12:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	11/06/23 11:29	11/07/23 12:04	1
1,4-Difluorobenzene (Surr)	152	S1+	70 - 130	11/06/23 11:29	11/07/23 12:04	1

Lab Sample ID: 880-34990-A-6-A MB

Matrix: Solid

Analysis Batch: 66231

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66319

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:07	11/08/23 05:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:07	11/08/23 05:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:07	11/08/23 05:22	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/06/23 17:07	11/08/23 05:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:07	11/08/23 05:22	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/06/23 17:07	11/08/23 05:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	11/06/23 17:07	11/08/23 05:22	1
1,4-Difluorobenzene (Surr)	114		70 - 130	11/06/23 17:07	11/08/23 05:22	1

Lab Sample ID: LCS 880-66319/1-A

Matrix: Solid

Analysis Batch: 66231

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66319

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1051		mg/Kg		105	70 - 130
Toluene	0.100	0.09486		mg/Kg		95	70 - 130
Ethylbenzene	0.100	0.08840		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	0.200	0.2102		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1013		mg/Kg		101	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: LCSD 880-66319/2-A

Matrix: Solid

Analysis Batch: 66231

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 66319

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1032		mg/Kg		103	70 - 130	2	35

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35381-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: LCSD 880-66319/2-A

Matrix: Solid

Analysis Batch: 66231

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 66319

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.09356		mg/Kg		94	70 - 130	1	35
Ethylbenzene	0.100	0.08388		mg/Kg		84	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1941		mg/Kg		97	70 - 130	8	35
o-Xylene	0.100	0.09487		mg/Kg		95	70 - 130	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 890-5566-A-1-C MS

Matrix: Solid

Analysis Batch: 66231

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 66319

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0996	0.09646		mg/Kg		97	70 - 130
Toluene	<0.00199	U	0.0996	0.07486		mg/Kg		75	70 - 130
Ethylbenzene	<0.00199	U	0.0996	0.07053		mg/Kg		71	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1634		mg/Kg		82	70 - 130
o-Xylene	<0.00199	U	0.0996	0.08304		mg/Kg		83	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 890-5566-A-1-D MSD

Matrix: Solid

Analysis Batch: 66231

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 66319

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	0.09714		mg/Kg		98	70 - 130	1	35
Toluene	<0.00199	U	0.0990	0.08114		mg/Kg		82	70 - 130	8	35
Ethylbenzene	<0.00199	U	0.0990	0.07147		mg/Kg		72	70 - 130	1	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1705		mg/Kg		86	70 - 130	4	35
o-Xylene	<0.00199	U	0.0990	0.08622		mg/Kg		87	70 - 130	4	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

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

Lab Sample ID: MB 880-66317/1-A

Matrix: Solid

Analysis Batch: 66340

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66317

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/06/23 16:35	11/07/23 08:58	1

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35381-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: MB 880-66317/1-A

Matrix: Solid

Analysis Batch: 66340

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66317

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/06/23 16:35	11/07/23 08:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/06/23 16:35	11/07/23 08:58	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	162	S1+	70 - 130				11/06/23 16:35	11/07/23 08:58	1
o-Terphenyl	169	S1+	70 - 130				11/06/23 16:35	11/07/23 08:58	1

Lab Sample ID: LCS 880-66317/2-A

Matrix: Solid

Analysis Batch: 66340

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66317

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	924.3		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1057		mg/Kg		106	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	103		70 - 130				
o-Terphenyl	115		70 - 130				

Lab Sample ID: LCSD 880-66317/3-A

Matrix: Solid

Analysis Batch: 66340

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 66317

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	932.7		mg/Kg		93	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	1011		mg/Kg		101	70 - 130	4	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	98		70 - 130						
o-Terphenyl	101		70 - 130						

Lab Sample ID: 890-5564-A-18-B MS

Matrix: Solid

Analysis Batch: 66340

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 66317

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	1010	737.2		mg/Kg		71	70 - 130
Diesel Range Organics (Over C10-C28)	<50.1	U	1010	759.3		mg/Kg		74	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	95		70 - 130						
o-Terphenyl	86		70 - 130						

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35381-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 890-5564-A-18-C MSD

Matrix: Solid

Analysis Batch: 66340

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 66317

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	1010	744.9		mg/Kg		71	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.1	U	1010	798.0		mg/Kg		77	70 - 130	5	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	96		70 - 130								
o-Terphenyl	89		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-66462/1-A

Matrix: Solid

Analysis Batch: 66742

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/11/23 19:08	1

Lab Sample ID: LCS 880-66462/2-A

Matrix: Solid

Analysis Batch: 66742

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	246.6		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-66462/3-A

Matrix: Solid

Analysis Batch: 66742

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	247.3		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 880-35381-2 MS

Matrix: Solid

Analysis Batch: 66742

Client Sample ID: S-5 (1.5')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	408		1240	1683		mg/Kg		103	90 - 110

Lab Sample ID: 880-35381-2 MSD

Matrix: Solid

Analysis Batch: 66742

Client Sample ID: S-5 (1.5')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	408		1240	1685		mg/Kg		103	90 - 110	0	20

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QC Association Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35381-1
SDG: Eddy County, New Mexico

GC VOA

Analysis Batch: 66231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35381-1	S-5 (0-1')	Total/NA	Solid	8021B	66319
880-35381-2	S-5 (1.5')	Total/NA	Solid	8021B	66319
880-35381-3	S-5 (2')	Total/NA	Solid	8021B	66319
880-34990-A-6-A MB	Method Blank	Total/NA	Solid	8021B	66319
MB 880-66262/5-A	Method Blank	Total/NA	Solid	8021B	66262
LCS 880-66319/1-A	Lab Control Sample	Total/NA	Solid	8021B	66319
LCSD 880-66319/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	66319
890-5566-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	66319
890-5566-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	66319

Prep Batch: 66262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-66262/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 66319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35381-1	S-5 (0-1')	Total/NA	Solid	5035	
880-35381-2	S-5 (1.5')	Total/NA	Solid	5035	
880-35381-3	S-5 (2')	Total/NA	Solid	5035	
880-34990-A-6-A MB	Method Blank	Total/NA	Solid	5035	
LCS 880-66319/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-66319/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5566-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-5566-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 66523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35381-1	S-5 (0-1')	Total/NA	Solid	Total BTEX	
880-35381-2	S-5 (1.5')	Total/NA	Solid	Total BTEX	
880-35381-3	S-5 (2')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 66317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35381-1	S-5 (0-1')	Total/NA	Solid	8015NM Prep	
880-35381-2	S-5 (1.5')	Total/NA	Solid	8015NM Prep	
880-35381-3	S-5 (2')	Total/NA	Solid	8015NM Prep	
MB 880-66317/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-66317/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-66317/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5564-A-18-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5564-A-18-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 66340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35381-1	S-5 (0-1')	Total/NA	Solid	8015B NM	66317
880-35381-2	S-5 (1.5')	Total/NA	Solid	8015B NM	66317
880-35381-3	S-5 (2')	Total/NA	Solid	8015B NM	66317
MB 880-66317/1-A	Method Blank	Total/NA	Solid	8015B NM	66317
LCS 880-66317/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	66317

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QC Association Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35381-1
SDG: Eddy County, New Mexico

GC Semi VOA (Continued)

Analysis Batch: 66340 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-66317/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	66317
890-5564-A-18-B MS	Matrix Spike	Total/NA	Solid	8015B NM	66317
890-5564-A-18-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	66317

Analysis Batch: 66485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35381-1	S-5 (0-1')	Total/NA	Solid	8015 NM	
880-35381-2	S-5 (1.5')	Total/NA	Solid	8015 NM	
880-35381-3	S-5 (2')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 66462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35381-1	S-5 (0-1')	Soluble	Solid	DI Leach	
880-35381-2	S-5 (1.5')	Soluble	Solid	DI Leach	
880-35381-3	S-5 (2')	Soluble	Solid	DI Leach	
MB 880-66462/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-66462/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-66462/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-35381-2 MS	S-5 (1.5')	Soluble	Solid	DI Leach	
880-35381-2 MSD	S-5 (1.5')	Soluble	Solid	DI Leach	

Analysis Batch: 66742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35381-1	S-5 (0-1')	Soluble	Solid	300.0	66462
880-35381-2	S-5 (1.5')	Soluble	Solid	300.0	66462
880-35381-3	S-5 (2')	Soluble	Solid	300.0	66462
MB 880-66462/1-A	Method Blank	Soluble	Solid	300.0	66462
LCS 880-66462/2-A	Lab Control Sample	Soluble	Solid	300.0	66462
LCSD 880-66462/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	66462
880-35381-2 MS	S-5 (1.5')	Soluble	Solid	300.0	66462
880-35381-2 MSD	S-5 (1.5')	Soluble	Solid	300.0	66462

Lab Chronicle

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35381-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35381-1

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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	66319	11/06/23 17:07	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66231	11/08/23 05:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66523	11/08/23 05:43	SM	EET MID
Total/NA	Analysis	8015 NM		1			66485	11/07/23 18:20	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	66317	11/07/23 08:34	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66340	11/07/23 18:20	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66462	11/07/23 19:01	SMC	EET MID
Soluble	Analysis	300.0		5			66742	11/11/23 20:39	CH	EET MID

Client Sample ID: S-5 (1.5')

Lab Sample ID: 880-35381-2

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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	66319	11/06/23 17:07	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66231	11/08/23 06:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66523	11/08/23 06:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			66485	11/07/23 18:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	66317	11/07/23 08:34	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66340	11/07/23 18:41	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	66462	11/07/23 19:01	SMC	EET MID
Soluble	Analysis	300.0		5			66742	11/11/23 20:44	CH	EET MID

Client Sample ID: S-5 (2')

Lab Sample ID: 880-35381-3

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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	66319	11/06/23 17:07	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66231	11/08/23 06:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66523	11/08/23 06:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			66485	11/07/23 19:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	66317	11/07/23 08:34	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66340	11/07/23 19:02	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	66462	11/07/23 19:01	SMC	EET MID
Soluble	Analysis	300.0		10			66742	11/11/23 21:01	CH	EET MID

Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35381-1
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	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35381-1
SDG: Eddy County, New Mexico

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35381-1
SDG: Eddy County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-35381-1	S-5 (0-1')	Solid	11/03/23 00:00	11/06/23 15:52
880-35381-2	S-5 (1.5')	Solid	11/03/23 00:00	11/06/23 15:52
880-35381-3	S-5 (2')	Solid	11/03/23 00:00	11/06/23 15:52

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

Work Order Comments				
Program, UST/PT	☐ PRP	☐ Brownfields	☐ RC	☐ Superfund
State of Project:				
Reporting Level II	☐ Level III	☐ ST/UST	☐ RRP	☐ Level IV
Deliverables	EDD ☐	ADAPT ☐	Other	

[illegible]

880-35381 Chain of Custody



Comments Email results to Mike Carmona mcarmona@carmonaresources.com, Conner McElhring cmehring@carmonaresources.com, Clint Merritt merrittc@carmonaresources.com

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
	11-0-23 1552		

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-35381-1

SDG Number: Eddy County, New Mexico

Login Number: 35381

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 11/14/2023 10:23:24 AM

JOB DESCRIPTION

Southern Comfort 5 6 10 12
Eddy County, New Mexico

JOB NUMBER

880-35385-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

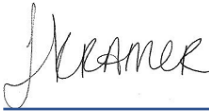
Eurofins Midland

Job Notes

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

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

Authorization



Generated
11/14/2023 10:23:24 AM

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

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Laboratory Job ID: 880-35385-1
SDG: Eddy County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
SDG: Eddy County, New Mexico

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
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: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
SDG: Eddy County, New Mexico

Job ID: 880-35385-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-35385-1**

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

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

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

Receipt

The samples were received on 11/6/2023 3:52 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -1.7°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: H-1 (0-0.5') (880-35385-1), H-2 (0-0.5') (880-35385-2), H-3 (0-0.5') (880-35385-3), H-4 (0-0.5') (880-35385-4), H-5 (0-0.5') (880-35385-5), H-6 (0-0.5') (880-35385-6) and H-7 (0-0.5') (880-35385-7).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-66374 and 880-66737 and analytical batch 880-66684 was outside the upper control limits.

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: Surrogate recovery for the following sample was outside control limits: H-7 (0-0.5') (880-35385-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35385-1

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 15:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 15:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 15:49	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/07/23 13:38	11/11/23 15:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 15:49	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/07/23 13:38	11/11/23 15:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	11/07/23 13:38	11/11/23 15:49	1
1,4-Difluorobenzene (Surr)	111		70 - 130	11/07/23 13:38	11/11/23 15:49	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			11/11/23 15:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			11/14/23 05:22	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	<50.3	U	50.3		mg/Kg		11/10/23 13:12	11/14/23 05:22	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		11/10/23 13:12	11/14/23 05:22	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		11/10/23 13:12	11/14/23 05:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	11/10/23 13:12	11/14/23 05:22	1
o-Terphenyl	101		70 - 130	11/10/23 13:12	11/14/23 05:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.90		5.04		mg/Kg			11/13/23 08:14	1

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

Lab Sample ID: 880-35385-2

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 16:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 16:10	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 16:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/07/23 13:38	11/11/23 16:10	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 16:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/07/23 13:38	11/11/23 16:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	11/07/23 13:38	11/11/23 16:10	1
1,4-Difluorobenzene (Surr)	110		70 - 130	11/07/23 13:38	11/11/23 16:10	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35385-2

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/11/23 16:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			11/14/23 05:45	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	<50.1	U	50.1		mg/Kg		11/10/23 13:12	11/14/23 05:45	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		11/10/23 13:12	11/14/23 05:45	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		11/10/23 13:12	11/14/23 05:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130				11/10/23 13:12	11/14/23 05:45	1
o-Terphenyl	104		70 - 130				11/10/23 13:12	11/14/23 05:45	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.05	U	5.05		mg/Kg			11/13/23 08:32	1

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

Lab Sample ID: 880-35385-3

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 18:00	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 18:00	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 18:00	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/07/23 13:38	11/11/23 18:00	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 18:00	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/07/23 13:38	11/11/23 18:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				11/07/23 13:38	11/11/23 18:00	1
1,4-Difluorobenzene (Surr)	104		70 - 130				11/07/23 13:38	11/11/23 18:00	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/11/23 18:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			11/14/23 06:07	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	<50.4	U	50.4		mg/Kg		11/10/23 13:12	11/14/23 06:07	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		11/10/23 13:12	11/14/23 06:07	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35385-3

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		11/10/23 13:12	11/14/23 06:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130				11/10/23 13:12	11/14/23 06:07	1
o-Terphenyl	97		70 - 130				11/10/23 13:12	11/14/23 06:07	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24.3		4.95		mg/Kg			11/13/23 08:37	1

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

Lab Sample ID: 880-35385-4

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 18:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 18:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 18:21	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/07/23 13:38	11/11/23 18:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 18:21	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/07/23 13:38	11/11/23 18:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				11/07/23 13:38	11/11/23 18:21	1
1,4-Difluorobenzene (Surr)	108		70 - 130				11/07/23 13:38	11/11/23 18:21	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/11/23 18:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			11/14/23 06:30	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	<50.5	U	50.5		mg/Kg		11/10/23 13:12	11/14/23 06:30	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		11/10/23 13:12	11/14/23 06:30	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		11/10/23 13:12	11/14/23 06:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				11/10/23 13:12	11/14/23 06:30	1
o-Terphenyl	94		70 - 130				11/10/23 13:12	11/14/23 06:30	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/13/23 08:43	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35385-5

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/07/23 13:38	11/11/23 18:41	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/07/23 13:38	11/11/23 18:41	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/07/23 13:38	11/11/23 18:41	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/07/23 13:38	11/11/23 18:41	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/07/23 13:38	11/11/23 18:41	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/07/23 13:38	11/11/23 18:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	11/07/23 13:38	11/11/23 18:41	1
1,4-Difluorobenzene (Surr)	108		70 - 130	11/07/23 13:38	11/11/23 18:41	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			11/11/23 18:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			11/14/23 06:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		11/10/23 13:12	11/14/23 06:53	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		11/10/23 13:12	11/14/23 06:53	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		11/10/23 13:12	11/14/23 06:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	11/10/23 13:12	11/14/23 06:53	1
o-Terphenyl	101		70 - 130	11/10/23 13:12	11/14/23 06:53	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26.0		5.04		mg/Kg			11/13/23 08:48	1

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

Lab Sample ID: 880-35385-6

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 19:02	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 19:02	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 19:02	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/07/23 13:38	11/11/23 19:02	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/07/23 13:38	11/11/23 19:02	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/07/23 13:38	11/11/23 19:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	11/07/23 13:38	11/11/23 19:02	1
1,4-Difluorobenzene (Surr)	105		70 - 130	11/07/23 13:38	11/11/23 19:02	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35385-6

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/11/23 19:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			11/14/23 07:15	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	<49.6	U	49.6		mg/Kg		11/10/23 13:12	11/14/23 07:15	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		11/10/23 13:12	11/14/23 07:15	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		11/10/23 13:12	11/14/23 07:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				11/10/23 13:12	11/14/23 07:15	1
o-Terphenyl	98		70 - 130				11/10/23 13:12	11/14/23 07:15	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	237		4.97		mg/Kg			11/13/23 08:54	1

Client Sample ID: H-7 (0-0.5')

Lab Sample ID: 880-35385-7

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 19:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 19:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 19:22	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/07/23 13:38	11/11/23 19:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 19:22	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/07/23 13:38	11/11/23 19:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				11/07/23 13:38	11/11/23 19:22	1
1,4-Difluorobenzene (Surr)	112		70 - 130				11/07/23 13:38	11/11/23 19:22	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/11/23 19:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/14/23 07:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/10/23 13:12	11/14/23 07:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/10/23 13:12	11/14/23 07:38	1

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Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
SDG: Eddy County, New Mexico

Client Sample ID: H-7 (0-0.5')
Date Collected: 11/03/23 00:00
Date Received: 11/06/23 15:52

Lab Sample ID: 880-35385-7
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		11/10/23 13:12	11/14/23 07:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	132	S1+	70 - 130				11/10/23 13:12	11/14/23 07:38	1
o-Terphenyl	117		70 - 130				11/10/23 13:12	11/14/23 07:38	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	239		5.01		mg/Kg			11/13/23 09:00	1

Surrogate Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
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)
880-35383-A-1-A MS	Matrix Spike	111	104
880-35383-A-1-B MSD	Matrix Spike Duplicate	107	106
880-35385-1	H-1 (0-0.5')	111	111
880-35385-2	H-2 (0-0.5')	101	110
880-35385-3	H-3 (0-0.5')	88	104
880-35385-4	H-4 (0-0.5')	102	108
880-35385-5	H-5 (0-0.5')	102	108
880-35385-6	H-6 (0-0.5')	99	105
880-35385-7	H-7 (0-0.5')	103	112
LCS 880-66374/1-A	Lab Control Sample	94	109
LCSD 880-66374/2-A	Lab Control Sample Dup	105	105
MB 880-66374/5-A	Method Blank	112	148 S1+
MB 880-66737/5-A	Method Blank	111	140 S1+
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)
880-35345-A-31-D MS	Matrix Spike	113	95
880-35345-A-31-E MSD	Matrix Spike Duplicate	109	94
880-35385-1	H-1 (0-0.5')	109	101
880-35385-2	H-2 (0-0.5')	112	104
880-35385-3	H-3 (0-0.5')	107	97
880-35385-4	H-4 (0-0.5')	103	94
880-35385-5	H-5 (0-0.5')	108	101
880-35385-6	H-6 (0-0.5')	110	98
880-35385-7	H-7 (0-0.5')	132 S1+	117
LCS 880-66712/2-A	Lab Control Sample	85	90
LCSD 880-66712/3-A	Lab Control Sample Dup	89	107
MB 880-66712/1-A	Method Blank	129	123
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-66374/5-A

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66374

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/07/23 13:38	11/11/23 12:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	11/07/23 13:38	11/11/23 12:36	1
1,4-Difluorobenzene (Surr)	148	S1+	70 - 130	11/07/23 13:38	11/11/23 12:36	1

Lab Sample ID: LCS 880-66374/1-A

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66374

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1210		mg/Kg		121	70 - 130
Toluene	0.100	0.09759		mg/Kg		98	70 - 130
Ethylbenzene	0.100	0.09011		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	0.200	0.2039		mg/Kg		102	70 - 130
o-Xylene	0.100	0.1001		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-66374/2-A

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 66374

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.1181		mg/Kg		118	70 - 130	2	35
Toluene	0.100	0.09679		mg/Kg		97	70 - 130	1	35
Ethylbenzene	0.100	0.09554		mg/Kg		96	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.2185		mg/Kg		109	70 - 130	7	35
o-Xylene	0.100	0.1055		mg/Kg		105	70 - 130	5	35

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

Lab Sample ID: 880-35383-A-1-A MS

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 66374

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0996	0.09797		mg/Kg		98	70 - 130
Toluene	<0.00199	U	0.0996	0.08425		mg/Kg		85	70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35383-A-1-A MS

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 66374

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.0996	0.07323		mg/Kg		74	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1788		mg/Kg		90	70 - 130
o-Xylene	<0.00199	U	0.0996	0.08545		mg/Kg		85	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 880-35383-A-1-B MSD

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 66374

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	0.1024		mg/Kg		103	70 - 130	4	35
Toluene	<0.00199	U	0.0990	0.08336		mg/Kg		84	70 - 130	1	35
Ethylbenzene	<0.00199	U	0.0990	0.07097		mg/Kg		72	70 - 130	3	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1681		mg/Kg		85	70 - 130	6	35
o-Xylene	<0.00199	U	0.0990	0.08061		mg/Kg		81	70 - 130	6	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: MB 880-66737/5-A

Matrix: Solid

Analysis Batch: 66684

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66737

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/10/23 14:57	11/11/23 00:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/10/23 14:57	11/11/23 00:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/10/23 14:57	11/11/23 00:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/10/23 14:57	11/11/23 00:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/10/23 14:57	11/11/23 00:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/10/23 14:57	11/11/23 00:58	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	11/10/23 14:57	11/11/23 00:58	1
1,4-Difluorobenzene (Surr)	140	S1+	70 - 130	11/10/23 14:57	11/11/23 00:58	1

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

Lab Sample ID: MB 880-66712/1-A

Matrix: Solid

Analysis Batch: 66799

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66712

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/10/23 13:12	11/13/23 22:12	1

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: MB 880-66712/1-A

Matrix: Solid

Analysis Batch: 66799

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66712

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/10/23 13:12	11/13/23 22:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/10/23 13:12	11/13/23 22:12	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	129		70 - 130				11/10/23 13:12	11/13/23 22:12	1
o-Terphenyl	123		70 - 130				11/10/23 13:12	11/13/23 22:12	1

Lab Sample ID: LCS 880-66712/2-A

Matrix: Solid

Analysis Batch: 66799

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66712

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	913.7		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	1000	983.1		mg/Kg		98	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	85		70 - 130				
o-Terphenyl	90		70 - 130				

Lab Sample ID: LCSD 880-66712/3-A

Matrix: Solid

Analysis Batch: 66799

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 66712

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	883.2		mg/Kg		88	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	990.4		mg/Kg		99	70 - 130	1	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	89		70 - 130						
o-Terphenyl	107		70 - 130						

Lab Sample ID: 880-35345-A-31-D MS

Matrix: Solid

Analysis Batch: 66799

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 66712

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1010	1269		mg/Kg		123	70 - 130
Diesel Range Organics (Over C10-C28)	<49.6	U	1010	1244		mg/Kg		121	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	113		70 - 130						
o-Terphenyl	95		70 - 130						

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35345-A-31-E MSD

Matrix: Solid

Analysis Batch: 66799

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 66712

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1010	1208		mg/Kg		117	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<49.6	U	1010	1245		mg/Kg		122	70 - 130	0	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	109		70 - 130								
o-Terphenyl	94		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-66463/1-A

Matrix: Solid

Analysis Batch: 66743

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/11/23 22:26	1

Lab Sample ID: LCS 880-66463/2-A

Matrix: Solid

Analysis Batch: 66743

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	247.3		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-66463/3-A

Matrix: Solid

Analysis Batch: 66743

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	248.0		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 880-35385-7 MS

Matrix: Solid

Analysis Batch: 66743

Client Sample ID: H-7 (0-0.5')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	239		251	481.1		mg/Kg		97	90 - 110

Lab Sample ID: 880-35385-7 MSD

Matrix: Solid

Analysis Batch: 66743

Client Sample ID: H-7 (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	239		251	479.6		mg/Kg		96	90 - 110	0	20

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
SDG: Eddy County, New Mexico

GC VOA

Prep Batch: 66374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35385-1	H-1 (0-0.5')	Total/NA	Solid	5035	
880-35385-2	H-2 (0-0.5')	Total/NA	Solid	5035	
880-35385-3	H-3 (0-0.5')	Total/NA	Solid	5035	
880-35385-4	H-4 (0-0.5')	Total/NA	Solid	5035	
880-35385-5	H-5 (0-0.5')	Total/NA	Solid	5035	
880-35385-6	H-6 (0-0.5')	Total/NA	Solid	5035	
880-35385-7	H-7 (0-0.5')	Total/NA	Solid	5035	
MB 880-66374/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-66374/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-66374/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-35383-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-35383-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 66684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35385-1	H-1 (0-0.5')	Total/NA	Solid	8021B	66374
880-35385-2	H-2 (0-0.5')	Total/NA	Solid	8021B	66374
880-35385-3	H-3 (0-0.5')	Total/NA	Solid	8021B	66374
880-35385-4	H-4 (0-0.5')	Total/NA	Solid	8021B	66374
880-35385-5	H-5 (0-0.5')	Total/NA	Solid	8021B	66374
880-35385-6	H-6 (0-0.5')	Total/NA	Solid	8021B	66374
880-35385-7	H-7 (0-0.5')	Total/NA	Solid	8021B	66374
MB 880-66374/5-A	Method Blank	Total/NA	Solid	8021B	66374
MB 880-66737/5-A	Method Blank	Total/NA	Solid	8021B	66737
LCS 880-66374/1-A	Lab Control Sample	Total/NA	Solid	8021B	66374
LCSD 880-66374/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	66374
880-35383-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	66374
880-35383-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	66374

Prep Batch: 66737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-66737/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 66869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35385-1	H-1 (0-0.5')	Total/NA	Solid	Total BTEX	
880-35385-2	H-2 (0-0.5')	Total/NA	Solid	Total BTEX	
880-35385-3	H-3 (0-0.5')	Total/NA	Solid	Total BTEX	
880-35385-4	H-4 (0-0.5')	Total/NA	Solid	Total BTEX	
880-35385-5	H-5 (0-0.5')	Total/NA	Solid	Total BTEX	
880-35385-6	H-6 (0-0.5')	Total/NA	Solid	Total BTEX	
880-35385-7	H-7 (0-0.5')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 66712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35385-1	H-1 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-35385-2	H-2 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-35385-3	H-3 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-35385-4	H-4 (0-0.5')	Total/NA	Solid	8015NM Prep	

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
SDG: Eddy County, New Mexico

GC Semi VOA (Continued)

Prep Batch: 66712 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35385-5	H-5 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-35385-6	H-6 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-35385-7	H-7 (0-0.5')	Total/NA	Solid	8015NM Prep	
MB 880-66712/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-66712/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-66712/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-35345-A-31-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-35345-A-31-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 66799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35385-1	H-1 (0-0.5')	Total/NA	Solid	8015B NM	66712
880-35385-2	H-2 (0-0.5')	Total/NA	Solid	8015B NM	66712
880-35385-3	H-3 (0-0.5')	Total/NA	Solid	8015B NM	66712
880-35385-4	H-4 (0-0.5')	Total/NA	Solid	8015B NM	66712
880-35385-5	H-5 (0-0.5')	Total/NA	Solid	8015B NM	66712
880-35385-6	H-6 (0-0.5')	Total/NA	Solid	8015B NM	66712
880-35385-7	H-7 (0-0.5')	Total/NA	Solid	8015B NM	66712
MB 880-66712/1-A	Method Blank	Total/NA	Solid	8015B NM	66712
LCS 880-66712/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	66712
LCSD 880-66712/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	66712
880-35345-A-31-D MS	Matrix Spike	Total/NA	Solid	8015B NM	66712
880-35345-A-31-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	66712

Analysis Batch: 66971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35385-1	H-1 (0-0.5')	Total/NA	Solid	8015 NM	
880-35385-2	H-2 (0-0.5')	Total/NA	Solid	8015 NM	
880-35385-3	H-3 (0-0.5')	Total/NA	Solid	8015 NM	
880-35385-4	H-4 (0-0.5')	Total/NA	Solid	8015 NM	
880-35385-5	H-5 (0-0.5')	Total/NA	Solid	8015 NM	
880-35385-6	H-6 (0-0.5')	Total/NA	Solid	8015 NM	
880-35385-7	H-7 (0-0.5')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 66463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35385-1	H-1 (0-0.5')	Soluble	Solid	DI Leach	
880-35385-2	H-2 (0-0.5')	Soluble	Solid	DI Leach	
880-35385-3	H-3 (0-0.5')	Soluble	Solid	DI Leach	
880-35385-4	H-4 (0-0.5')	Soluble	Solid	DI Leach	
880-35385-5	H-5 (0-0.5')	Soluble	Solid	DI Leach	
880-35385-6	H-6 (0-0.5')	Soluble	Solid	DI Leach	
880-35385-7	H-7 (0-0.5')	Soluble	Solid	DI Leach	
MB 880-66463/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-66463/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-66463/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-35385-7 MS	H-7 (0-0.5')	Soluble	Solid	DI Leach	
880-35385-7 MSD	H-7 (0-0.5')	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
SDG: Eddy County, New Mexico

HPLC/IC

Analysis Batch: 66743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35385-1	H-1 (0-0.5')	Soluble	Solid	300.0	66463
880-35385-2	H-2 (0-0.5')	Soluble	Solid	300.0	66463
880-35385-3	H-3 (0-0.5')	Soluble	Solid	300.0	66463
880-35385-4	H-4 (0-0.5')	Soluble	Solid	300.0	66463
880-35385-5	H-5 (0-0.5')	Soluble	Solid	300.0	66463
880-35385-6	H-6 (0-0.5')	Soluble	Solid	300.0	66463
880-35385-7	H-7 (0-0.5')	Soluble	Solid	300.0	66463
MB 880-66463/1-A	Method Blank	Soluble	Solid	300.0	66463
LCS 880-66463/2-A	Lab Control Sample	Soluble	Solid	300.0	66463
LCSD 880-66463/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	66463
880-35385-7 MS	H-7 (0-0.5')	Soluble	Solid	300.0	66463
880-35385-7 MSD	H-7 (0-0.5')	Soluble	Solid	300.0	66463

Lab Chronicle

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35385-1

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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	66374	11/07/23 13:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/11/23 15:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66869	11/11/23 15:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			66971	11/14/23 05:22	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	66712	11/10/23 13:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66799	11/14/23 05:22	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	66463	11/07/23 19:02	SMC	EET MID
Soluble	Analysis	300.0		1			66743	11/13/23 08:14	CH	EET MID

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

Lab Sample ID: 880-35385-2

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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	66374	11/07/23 13:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/11/23 16:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66869	11/11/23 16:10	SM	EET MID
Total/NA	Analysis	8015 NM		1			66971	11/14/23 05:45	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	66712	11/10/23 13:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66799	11/14/23 05:45	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66463	11/07/23 19:02	SMC	EET MID
Soluble	Analysis	300.0		1			66743	11/13/23 08:32	CH	EET MID

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

Lab Sample ID: 880-35385-3

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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	66374	11/07/23 13:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/11/23 18:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66869	11/11/23 18:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			66971	11/14/23 06:07	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	66712	11/10/23 13:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66799	11/14/23 06:07	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	66463	11/07/23 19:02	SMC	EET MID
Soluble	Analysis	300.0		1			66743	11/13/23 08:37	CH	EET MID

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

Lab Sample ID: 880-35385-4

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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	66374	11/07/23 13:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/11/23 18:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66869	11/11/23 18:21	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-35385-4

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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			66971	11/14/23 06:30	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	66712	11/10/23 13:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66799	11/14/23 06:30	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	66463	11/07/23 19:02	SMC	EET MID
Soluble	Analysis	300.0		1			66743	11/13/23 08:43	CH	EET MID

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

Lab Sample ID: 880-35385-5

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	66374	11/07/23 13:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/11/23 18:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66869	11/11/23 18:41	SM	EET MID
Total/NA	Analysis	8015 NM		1			66971	11/14/23 06:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	66712	11/10/23 13:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66799	11/14/23 06:53	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	66463	11/07/23 19:02	SMC	EET MID
Soluble	Analysis	300.0		1			66743	11/13/23 08:48	CH	EET MID

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

Lab Sample ID: 880-35385-6

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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	66374	11/07/23 13:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/11/23 19:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66869	11/11/23 19:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			66971	11/14/23 07:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	66712	11/10/23 13:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66799	11/14/23 07:15	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	66463	11/07/23 19:02	SMC	EET MID
Soluble	Analysis	300.0		1			66743	11/13/23 08:54	CH	EET MID

Client Sample ID: H-7 (0-0.5')

Lab Sample ID: 880-35385-7

Date Collected: 11/03/23 00:00

Matrix: Solid

Date Received: 11/06/23 15:52

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	66374	11/07/23 13:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/11/23 19:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66869	11/11/23 19:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			66971	11/14/23 07:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	66712	11/10/23 13:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66799	11/14/23 07:38	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
SDG: Eddy County, New Mexico

Client Sample ID: H-7 (0-0.5')
Date Collected: 11/03/23 00:00
Date Received: 11/06/23 15:52

Lab Sample ID: 880-35385-7
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			4.99 g	50 mL	66463	11/07/23 19:02	SMC	EET MID
Soluble	Analysis	300.0		1			66743	11/13/23 09:00	CH	EET MID

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

- 1
- 2
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Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
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	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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

Method Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
SDG: Eddy County, New Mexico

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-35385-1
SDG: Eddy County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-35385-1	H-1 (0-0.5')	Solid	11/03/23 00:00	11/06/23 15:52
880-35385-2	H-2 (0-0.5')	Solid	11/03/23 00:00	11/06/23 15:52
880-35385-3	H-3 (0-0.5')	Solid	11/03/23 00:00	11/06/23 15:52
880-35385-4	H-4 (0-0.5')	Solid	11/03/23 00:00	11/06/23 15:52
880-35385-5	H-5 (0-0.5')	Solid	11/03/23 00:00	11/06/23 15:52
880-35385-6	H-6 (0-0.5')	Solid	11/03/23 00:00	11/06/23 15:52
880-35385-7	H-7 (0-0.5')	Solid	11/03/23 00:00	11/06/23 15:52

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- 10
- 11
- 12
- 13
- 14

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

Work Order Comments									
Program	UST/ST	☐ PRP	☐ Brownfields	☐ RC	☐ Superfund	☐	☐	☐	☐
State of Project:									
Reporting Level II	☐ Level III	☐ ST/UST	☐ RRP	☐ Level IV	☐	☐	☐	☐	☐
Deliverables	EDD	☐	Adapt	☐	Other	☐	☐	☐	☐

[illegible]

Comments Email results to Mike Cammona mcammona@cammonaresources.com, Conner Moehring cmoehring@cammonaresources.com, Clint Merritt MerrittC@cammonaresources.com

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
	11-10-23		
	1552		

M

880-35385 Chain of Custody



Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-35385-1

SDG Number: Eddy County, New Mexico

Login Number: 35385

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 11/29/2023 3:29:50 PM

JOB DESCRIPTION

Southern Comfort 5 6 10 12
Eddy County, New Mexico

JOB NUMBER

880-36057-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

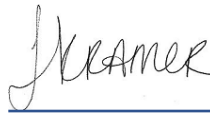
Eurofins Midland

Job Notes

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

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

Authorization



Generated
11/29/2023 3:29:50 PM

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

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Laboratory Job ID: 880-36057-1
SDG: Eddy County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36057-1
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, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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.
α	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: Southern Comfort 5 6 10 12

Job ID: 880-36057-1
SDG: Eddy County, New Mexico

Job ID: 880-36057-1

Laboratory: Eurofins Midland

Narrative**Job Narrative
880-36057-1**

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

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

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

Receipt

The samples were received on 11/21/2023 10:01 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 -6.1°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-67812 and analytical batch 880-67810 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-67812 and analytical batch 880-67810 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH-1 (1.5') (880-36057-2), BH-1 (3') (880-36057-4) and BH-1 (4') (880-36057-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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 surrogate recovery for the blank associated with preparation batch 880-67795 and analytical batch 880-67801 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH-1 (0-1') (880-36057-1), BH-1 (1.5') (880-36057-2), BH-1 (2') (880-36057-3), BH-1 (3') (880-36057-4), BH-1 (4') (880-36057-5), BH-1 (5') (880-36057-6), (890-5662-A-21-C), (890-5662-A-21-D MS) and (890-5662-A-21-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-67795 and analytical batch 880-67801 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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: Southern Comfort 5 6 10 12

Job ID: 880-36057-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-36057-1

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/28/23 08:46	11/28/23 12:57	1
Toluene	<0.00199	U F2 F1	0.00199		mg/Kg		11/28/23 08:46	11/28/23 12:57	1
Ethylbenzene	<0.00199	U F1	0.00199		mg/Kg		11/28/23 08:46	11/28/23 12:57	1
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.00398		mg/Kg		11/28/23 08:46	11/28/23 12:57	1
o-Xylene	<0.00199	U F2 F1	0.00199		mg/Kg		11/28/23 08:46	11/28/23 12:57	1
Xylenes, Total	<0.00398	U F2 F1	0.00398		mg/Kg		11/28/23 08:46	11/28/23 12:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130	11/28/23 08:46	11/28/23 12:57	1
1,4-Difluorobenzene (Surr)	102		70 - 130	11/28/23 08:46	11/28/23 12:57	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/28/23 12:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	59.3		49.7		mg/Kg			11/28/23 13:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		11/27/23 17:59	11/28/23 13:36	1
Diesel Range Organics (Over C10-C28)	59.3		49.7		mg/Kg		11/27/23 17:59	11/28/23 13:36	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		11/27/23 17:59	11/28/23 13:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	146	S1+	70 - 130	11/27/23 17:59	11/28/23 13:36	1
o-Terphenyl	132	S1+	70 - 130	11/27/23 17:59	11/28/23 13:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2140		50.5		mg/Kg			11/29/23 14:39	10

Client Sample ID: BH-1 (1.5')

Lab Sample ID: 880-36057-2

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/23 08:46	11/28/23 13:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/23 08:46	11/28/23 13:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/23 08:46	11/28/23 13:17	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/28/23 08:46	11/28/23 13:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/23 08:46	11/28/23 13:17	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/28/23 08:46	11/28/23 13:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	154	S1+	70 - 130	11/28/23 08:46	11/28/23 13:17	1
1,4-Difluorobenzene (Surr)	131	S1+	70 - 130	11/28/23 08:46	11/28/23 13:17	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36057-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-1 (1.5')

Lab Sample ID: 880-36057-2

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/28/23 13:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/28/23 13:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/27/23 17:59	11/28/23 13:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/27/23 17:59	11/28/23 13:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/27/23 17:59	11/28/23 13:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	148	S1+	70 - 130				11/27/23 17:59	11/28/23 13:59	1
o-Terphenyl	135	S1+	70 - 130				11/27/23 17:59	11/28/23 13:59	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	769		50.2		mg/Kg			11/29/23 14:44	10

Client Sample ID: BH-1 (2')

Lab Sample ID: 880-36057-3

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/23 08:46	11/28/23 13:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/23 08:46	11/28/23 13:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/23 08:46	11/28/23 13:38	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/28/23 08:46	11/28/23 13:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/23 08:46	11/28/23 13:38	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/28/23 08:46	11/28/23 13:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130				11/28/23 08:46	11/28/23 13:38	1
1,4-Difluorobenzene (Surr)	108		70 - 130				11/28/23 08:46	11/28/23 13:38	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			11/28/23 13:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			11/28/23 14:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		11/27/23 17:59	11/28/23 14:21	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		11/27/23 17:59	11/28/23 14:21	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36057-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-1 (2')

Lab Sample ID: 880-36057-3

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		11/27/23 17:59	11/28/23 14:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	172	S1+	70 - 130				11/27/23 17:59	11/28/23 14:21	1
o-Terphenyl	154	S1+	70 - 130				11/27/23 17:59	11/28/23 14:21	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48.9		5.05		mg/Kg			11/29/23 14:50	1

Client Sample ID: BH-1 (3')

Lab Sample ID: 880-36057-4

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/28/23 08:46	11/28/23 13:58	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/28/23 08:46	11/28/23 13:58	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/28/23 08:46	11/28/23 13:58	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/28/23 08:46	11/28/23 13:58	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/28/23 08:46	11/28/23 13:58	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/28/23 08:46	11/28/23 13:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130				11/28/23 08:46	11/28/23 13:58	1
1,4-Difluorobenzene (Surr)	139	S1+	70 - 130				11/28/23 08:46	11/28/23 13:58	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/28/23 13:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/28/23 14:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/27/23 17:59	11/28/23 14:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/27/23 17:59	11/28/23 14:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/27/23 17:59	11/28/23 14:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	165	S1+	70 - 130				11/27/23 17:59	11/28/23 14:43	1
o-Terphenyl	148	S1+	70 - 130				11/27/23 17:59	11/28/23 14:43	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.2		5.02		mg/Kg			11/29/23 14:56	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36057-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-1 (4')

Lab Sample ID: 880-36057-5

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/28/23 08:46	11/28/23 14:19	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/28/23 08:46	11/28/23 14:19	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/28/23 08:46	11/28/23 14:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/28/23 08:46	11/28/23 14:19	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/28/23 08:46	11/28/23 14:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/28/23 08:46	11/28/23 14:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130				11/28/23 08:46	11/28/23 14:19	1
1,4-Difluorobenzene (Surr)	137	S1+	70 - 130				11/28/23 08:46	11/28/23 14:19	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/28/23 14:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			11/28/23 15:27	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	<50.3	U	50.3		mg/Kg		11/27/23 17:59	11/28/23 15:27	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		11/27/23 17:59	11/28/23 15:27	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		11/27/23 17:59	11/28/23 15:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	148	S1+	70 - 130				11/27/23 17:59	11/28/23 15:27	1
o-Terphenyl	136	S1+	70 - 130				11/27/23 17:59	11/28/23 15:27	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.2		5.00		mg/Kg			11/29/23 15:01	1

Client Sample ID: BH-1 (5')

Lab Sample ID: 880-36057-6

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/23 08:46	11/28/23 14:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/23 08:46	11/28/23 14:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/23 08:46	11/28/23 14:39	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/28/23 08:46	11/28/23 14:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/23 08:46	11/28/23 14:39	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/28/23 08:46	11/28/23 14:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				11/28/23 08:46	11/28/23 14:39	1
1,4-Difluorobenzene (Surr)	112		70 - 130				11/28/23 08:46	11/28/23 14:39	1

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Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36057-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-1 (5')

Lab Sample ID: 880-36057-6

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/28/23 14:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			11/28/23 16:01	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	<50.5	U	50.5		mg/Kg		11/27/23 17:59	11/28/23 16:01	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		11/27/23 17:59	11/28/23 16:01	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		11/27/23 17:59	11/28/23 16:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	165	S1+	70 - 130				11/27/23 17:59	11/28/23 16:01	1
o-Terphenyl	148	S1+	70 - 130				11/27/23 17:59	11/28/23 16:01	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.5		4.95		mg/Kg			11/29/23 15:07	1

Surrogate Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36057-1
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)
880-36057-1	BH-1 (0-1')	82	102
880-36057-1 MS	BH-1 (0-1')	96	103
880-36057-1 MSD	BH-1 (0-1')	225 S1+	107
880-36057-2	BH-1 (1.5')	154 S1+	131 S1+
880-36057-3	BH-1 (2')	96	108
880-36057-4	BH-1 (3')	114	139 S1+
880-36057-5	BH-1 (4')	119	137 S1+
880-36057-6	BH-1 (5')	107	112
LCS 880-67812/1-A	Lab Control Sample	97	103
LCSD 880-67812/2-A	Lab Control Sample Dup	101	105
MB 880-67812/5-A	Method Blank	113	142 S1+
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)
880-36057-1	BH-1 (0-1')	146 S1+	132 S1+
880-36057-2	BH-1 (1.5')	148 S1+	135 S1+
880-36057-3	BH-1 (2')	172 S1+	154 S1+
880-36057-4	BH-1 (3')	165 S1+	148 S1+
880-36057-5	BH-1 (4')	148 S1+	136 S1+
880-36057-6	BH-1 (5')	165 S1+	148 S1+
890-5662-A-21-D MS	Matrix Spike	140 S1+	113
890-5662-A-21-E MSD	Matrix Spike Duplicate	163 S1+	130
LCS 880-67795/2-A	Lab Control Sample	84	86
LCSD 880-67795/3-A	Lab Control Sample Dup	94	102
MB 880-67795/1-A	Method Blank	172 S1+	163 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36057-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-67812/5-A

Matrix: Solid

Analysis Batch: 67810

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67812

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/23 08:46	11/28/23 12:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/23 08:46	11/28/23 12:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/23 08:46	11/28/23 12:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/28/23 08:46	11/28/23 12:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/23 08:46	11/28/23 12:25	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/28/23 08:46	11/28/23 12:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	11/28/23 08:46	11/28/23 12:25	1
1,4-Difluorobenzene (Surr)	142	S1+	70 - 130	11/28/23 08:46	11/28/23 12:25	1

Lab Sample ID: LCS 880-67812/1-A

Matrix: Solid

Analysis Batch: 67810

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 67812

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1004		mg/Kg		100	70 - 130
Toluene	0.100	0.08846		mg/Kg		88	70 - 130
Ethylbenzene	0.100	0.08537		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	0.200	0.1866		mg/Kg		93	70 - 130
o-Xylene	0.100	0.09086		mg/Kg		91	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 880-67812/2-A

Matrix: Solid

Analysis Batch: 67810

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 67812

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.09698		mg/Kg		97	70 - 130	3	35
Toluene	0.100	0.08171		mg/Kg		82	70 - 130	8	35
Ethylbenzene	0.100	0.08448		mg/Kg		84	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1902		mg/Kg		95	70 - 130	2	35
o-Xylene	0.100	0.09287		mg/Kg		93	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 880-36057-1 MS

Matrix: Solid

Analysis Batch: 67810

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

Prep Type: Total/NA

Prep Batch: 67812

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0996	0.08224		mg/Kg		83	70 - 130
Toluene	<0.00199	U F2 F1	0.0996	0.07286		mg/Kg		73	70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36057-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-36057-1 MS

Matrix: Solid

Analysis Batch: 67810

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

Prep Type: Total/NA

Prep Batch: 67812

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U F1	0.0996	0.06841	F1	mg/Kg		69	70 - 130
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.199	0.1580		mg/Kg		79	70 - 130
o-Xylene	<0.00199	U F2 F1	0.0996	0.07721		mg/Kg		78	70 - 130
Surrogate	%Recovery	MS Qualifier	MS Limits						
4-Bromofluorobenzene (Surr)	96		70 - 130						
1,4-Difluorobenzene (Surr)	103		70 - 130						

Lab Sample ID: 880-36057-1 MSD

Matrix: Solid

Analysis Batch: 67810

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

Prep Type: Total/NA

Prep Batch: 67812

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	0.1054		mg/Kg		106	70 - 130	25	35
Toluene	<0.00199	U F2 F1	0.0990	0.04491	F2 F1	mg/Kg		45	70 - 130	47	35
Ethylbenzene	<0.00199	U F1	0.0990	0.08820		mg/Kg		89	70 - 130	25	35
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.198	0.3222	F1 F2	mg/Kg		163	70 - 130	68	35
o-Xylene	<0.00199	U F2 F1	0.0990	0.1714	F1 F2	mg/Kg		173	70 - 130	76	35
Surrogate	%Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	225	S1+	70 - 130								
1,4-Difluorobenzene (Surr)	107		70 - 130								

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

Lab Sample ID: MB 880-67795/1-A

Matrix: Solid

Analysis Batch: 67801

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67795

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/27/23 17:59	11/28/23 08:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/27/23 17:59	11/28/23 08:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/27/23 17:59	11/28/23 08:05	1
Surrogate	%Recovery	MB Qualifier	MB Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	172	S1+	70 - 130				11/27/23 17:59	11/28/23 08:05	1
o-Terphenyl	163	S1+	70 - 130				11/27/23 17:59	11/28/23 08:05	1

Lab Sample ID: LCS 880-67795/2-A

Matrix: Solid

Analysis Batch: 67801

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 67795

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1062		mg/Kg		106	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1037		mg/Kg		104	70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36057-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: LCS 880-67795/2-A

Matrix: Solid

Analysis Batch: 67801

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 67795

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	84		70 - 130
o-Terphenyl	86		70 - 130

Lab Sample ID: LCSD 880-67795/3-A

Matrix: Solid

Analysis Batch: 67801

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 67795

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1038		mg/Kg		104	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	1006		mg/Kg		101	70 - 130	3	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	102		70 - 130

Lab Sample ID: 890-5662-A-21-D MS

Matrix: Solid

Analysis Batch: 67801

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 67795

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	991	906.3		mg/Kg		89	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U F1	991	1265		mg/Kg		125	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	140	S1+	70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: 890-5662-A-21-E MSD

Matrix: Solid

Analysis Batch: 67801

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 67795

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	<49.9	U	991	1088		mg/Kg		107	70 - 130	18	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	991	1478	F1	mg/Kg		147	70 - 130	16	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	163	S1+	70 - 130
o-Terphenyl	130		70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36057-1
SDG: Eddy County, New Mexico

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-67760/1-A
Matrix: Solid
Analysis Batch: 67822

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/29/23 10:35	1

Lab Sample ID: LCS 880-67760/2-A
Matrix: Solid
Analysis Batch: 67822

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	260.7		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-67760/3-A
Matrix: Solid
Analysis Batch: 67822

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	263.9		mg/Kg		106	90 - 110	1	20

Lab Sample ID: 880-36055-A-1-C MS
Matrix: Solid
Analysis Batch: 67822

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	91.2		252	362.0		mg/Kg		107	90 - 110

Lab Sample ID: 880-36055-A-1-D MSD
Matrix: Solid
Analysis Batch: 67822

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	91.2		252	361.0		mg/Kg		107	90 - 110	0	20

QC Association Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36057-1
SDG: Eddy County, New Mexico

GC VOA

Analysis Batch: 67810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36057-1	BH-1 (0-1')	Total/NA	Solid	8021B	67812
880-36057-2	BH-1 (1.5')	Total/NA	Solid	8021B	67812
880-36057-3	BH-1 (2')	Total/NA	Solid	8021B	67812
880-36057-4	BH-1 (3')	Total/NA	Solid	8021B	67812
880-36057-5	BH-1 (4')	Total/NA	Solid	8021B	67812
880-36057-6	BH-1 (5')	Total/NA	Solid	8021B	67812
MB 880-67812/5-A	Method Blank	Total/NA	Solid	8021B	67812
LCS 880-67812/1-A	Lab Control Sample	Total/NA	Solid	8021B	67812
LCSD 880-67812/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	67812
880-36057-1 MS	BH-1 (0-1')	Total/NA	Solid	8021B	67812
880-36057-1 MSD	BH-1 (0-1')	Total/NA	Solid	8021B	67812

Prep Batch: 67812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36057-1	BH-1 (0-1')	Total/NA	Solid	5035	
880-36057-2	BH-1 (1.5')	Total/NA	Solid	5035	
880-36057-3	BH-1 (2')	Total/NA	Solid	5035	
880-36057-4	BH-1 (3')	Total/NA	Solid	5035	
880-36057-5	BH-1 (4')	Total/NA	Solid	5035	
880-36057-6	BH-1 (5')	Total/NA	Solid	5035	
MB 880-67812/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-67812/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-67812/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-36057-1 MS	BH-1 (0-1')	Total/NA	Solid	5035	
880-36057-1 MSD	BH-1 (0-1')	Total/NA	Solid	5035	

Analysis Batch: 67953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36057-1	BH-1 (0-1')	Total/NA	Solid	Total BTEX	
880-36057-2	BH-1 (1.5')	Total/NA	Solid	Total BTEX	
880-36057-3	BH-1 (2')	Total/NA	Solid	Total BTEX	
880-36057-4	BH-1 (3')	Total/NA	Solid	Total BTEX	
880-36057-5	BH-1 (4')	Total/NA	Solid	Total BTEX	
880-36057-6	BH-1 (5')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 67795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36057-1	BH-1 (0-1')	Total/NA	Solid	8015NM Prep	
880-36057-2	BH-1 (1.5')	Total/NA	Solid	8015NM Prep	
880-36057-3	BH-1 (2')	Total/NA	Solid	8015NM Prep	
880-36057-4	BH-1 (3')	Total/NA	Solid	8015NM Prep	
880-36057-5	BH-1 (4')	Total/NA	Solid	8015NM Prep	
880-36057-6	BH-1 (5')	Total/NA	Solid	8015NM Prep	
MB 880-67795/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-67795/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-67795/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5662-A-21-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5662-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36057-1
SDG: Eddy County, New Mexico

GC Semi VOA

Analysis Batch: 67801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36057-1	BH-1 (0-1')	Total/NA	Solid	8015B NM	67795
880-36057-2	BH-1 (1.5')	Total/NA	Solid	8015B NM	67795
880-36057-3	BH-1 (2')	Total/NA	Solid	8015B NM	67795
880-36057-4	BH-1 (3')	Total/NA	Solid	8015B NM	67795
880-36057-5	BH-1 (4')	Total/NA	Solid	8015B NM	67795
880-36057-6	BH-1 (5')	Total/NA	Solid	8015B NM	67795
MB 880-67795/1-A	Method Blank	Total/NA	Solid	8015B NM	67795
LCS 880-67795/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	67795
LCSD 880-67795/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	67795
890-5662-A-21-D MS	Matrix Spike	Total/NA	Solid	8015B NM	67795
890-5662-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	67795

Analysis Batch: 67935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36057-1	BH-1 (0-1')	Total/NA	Solid	8015 NM	
880-36057-2	BH-1 (1.5')	Total/NA	Solid	8015 NM	
880-36057-3	BH-1 (2')	Total/NA	Solid	8015 NM	
880-36057-4	BH-1 (3')	Total/NA	Solid	8015 NM	
880-36057-5	BH-1 (4')	Total/NA	Solid	8015 NM	
880-36057-6	BH-1 (5')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 67760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36057-1	BH-1 (0-1')	Soluble	Solid	DI Leach	
880-36057-2	BH-1 (1.5')	Soluble	Solid	DI Leach	
880-36057-3	BH-1 (2')	Soluble	Solid	DI Leach	
880-36057-4	BH-1 (3')	Soluble	Solid	DI Leach	
880-36057-5	BH-1 (4')	Soluble	Solid	DI Leach	
880-36057-6	BH-1 (5')	Soluble	Solid	DI Leach	
MB 880-67760/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-67760/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-67760/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-36055-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-36055-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 67822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36057-1	BH-1 (0-1')	Soluble	Solid	300.0	67760
880-36057-2	BH-1 (1.5')	Soluble	Solid	300.0	67760
880-36057-3	BH-1 (2')	Soluble	Solid	300.0	67760
880-36057-4	BH-1 (3')	Soluble	Solid	300.0	67760
880-36057-5	BH-1 (4')	Soluble	Solid	300.0	67760
880-36057-6	BH-1 (5')	Soluble	Solid	300.0	67760
MB 880-67760/1-A	Method Blank	Soluble	Solid	300.0	67760
LCS 880-67760/2-A	Lab Control Sample	Soluble	Solid	300.0	67760
LCSD 880-67760/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	67760
880-36055-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	67760
880-36055-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	67760

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36057-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-36057-1

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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	67812	11/28/23 08:46	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67810	11/28/23 12:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67953	11/28/23 12:57	SM	EET MID
Total/NA	Analysis	8015 NM		1			67935	11/28/23 13:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	67795	11/27/23 17:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67801	11/28/23 13:36	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	67760	11/27/23 14:31	SA	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	67822	11/29/23 14:39	CH	EET MID

Client Sample ID: BH-1 (1.5')

Lab Sample ID: 880-36057-2

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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	67812	11/28/23 08:46	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67810	11/28/23 13:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67953	11/28/23 13:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			67935	11/28/23 13:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	67795	11/27/23 17:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67801	11/28/23 13:59	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	67760	11/27/23 14:31	SA	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	67822	11/29/23 14:44	CH	EET MID

Client Sample ID: BH-1 (2')

Lab Sample ID: 880-36057-3

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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	67812	11/28/23 08:46	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67810	11/28/23 13:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67953	11/28/23 13:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			67935	11/28/23 14:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	67795	11/27/23 17:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67801	11/28/23 14:21	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	67760	11/27/23 14:31	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67822	11/29/23 14:50	CH	EET MID

Client Sample ID: BH-1 (3')

Lab Sample ID: 880-36057-4

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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	67812	11/28/23 08:46	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67810	11/28/23 13:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67953	11/28/23 13:58	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36057-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-1 (3')
Date Collected: 11/20/23 00:00
Date Received: 11/21/23 10:01

Lab Sample ID: 880-36057-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			67935	11/28/23 14:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	67795	11/27/23 17:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67801	11/28/23 14:43	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	67760	11/27/23 14:31	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67822	11/29/23 14:56	CH	EET MID

Client Sample ID: BH-1 (4')
Date Collected: 11/20/23 00:00
Date Received: 11/21/23 10:01

Lab Sample ID: 880-36057-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	67812	11/28/23 08:46	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67810	11/28/23 14:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67953	11/28/23 14:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			67935	11/28/23 15:27	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	67795	11/27/23 17:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67801	11/28/23 15:27	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	67760	11/27/23 14:31	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67822	11/29/23 15:01	CH	EET MID

Client Sample ID: BH-1 (5')
Date Collected: 11/20/23 00:00
Date Received: 11/21/23 10:01

Lab Sample ID: 880-36057-6
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	67812	11/28/23 08:46	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67810	11/28/23 14:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67953	11/28/23 14:39	SM	EET MID
Total/NA	Analysis	8015 NM		1			67935	11/28/23 16:01	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	67795	11/27/23 17:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67801	11/28/23 16:01	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	67760	11/27/23 14:31	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67822	11/29/23 15:07	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: Southern Comfort 5 6 10 12

Job ID: 880-36057-1
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	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
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Method Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36057-1
SDG: Eddy County, New Mexico

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36057-1
SDG: Eddy County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-36057-1	BH-1 (0-1')	Solid	11/20/23 00:00	11/21/23 10:01
880-36057-2	BH-1 (1.5')	Solid	11/20/23 00:00	11/21/23 10:01
880-36057-3	BH-1 (2')	Solid	11/20/23 00:00	11/21/23 10:01
880-36057-4	BH-1 (3')	Solid	11/20/23 00:00	11/21/23 10:01
880-36057-5	BH-1 (4')	Solid	11/20/23 00:00	11/21/23 10:01
880-36057-6	BH-1 (5')	Solid	11/20/23 00:00	11/21/23 10:01

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

Work Order Comments	
Program: UST/PRP	PRP ☐ Brownfields ☐ RRC ☐ Uperfund ☐
State of Project.	
Reporting Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐	
Deliverables EDD ☐ ADAPT ☐ Other	



880-36057 Chain of Custody

Project Name		Southern Comfort 5 6 10 12		Turn Around		ANALYSIS REQUEST												Preservative Codes			
Project Number	2173	☒ Routine	☐ Rush	5 day		Pres. Code													None NO	DI Water H ₂ O	
Project Location	Eddy County, New Mexico		Due Date																Cool Cool	MeOH Me	
Sampler's Name	CCM																HCL HC	HNO ₃ HN			
PO #																	H ₂ SO ₄ H ₂	NaOH Na			
SAMPLE RECEIPT			Temp Blank	☒ Yes ☐ No	Thermometer ID		Wet Ice	☒ Yes ☐ No													H ₃ PO ₄ HP
Received Intact.			☒ Yes ☐ No																	NaHSO ₄ NABIS	
Cooler Custody Seals			☒ Yes ☐ No	N/A	Correction Factor															Na ₂ S ₂ O ₃ NaSO ₃	
Sample Custody Seals			☒ Yes ☐ No	N/A	Temperature Reading															Zn Acetate+NaOH Zn	
Total Containers					Corrected Temperature															NaOH+Ascorbic Acid SAPC	
Sample Identification		Date	Time	Soil	Water	Grab/Comp	# of Cont													Sample Comments	
BH-1 (0-1')		11/20/2023		X		G	1	X	X	X											
BH-1 (1-5')		11/20/2023		X		G	1	X	X	X											
BH-1 (2)		11/20/2023		X		G	1	X	X	X											
BH-1 (3)		11/20/2023		X		G	1	X	X	X											
BH-1 (4)		11/20/2023		X		G	1	X	X	X											
BH-1 (5)		11/20/2023		X		G	1	X	X	X											

Comments Email results to Mike Carmona mcarmona@carmonaresources.com, Conner Moehring cmoehring@carmonaresources.com, Clint Merritt merrittc@carmonaresources.com

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
<i>Cherise Huest</i>	11-21-23	<i>[Signature]</i>	
	1001		

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-36057-1

SDG Number: Eddy County, New Mexico

Login Number: 36057

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 11/30/2023 2:40:46 PM

JOB DESCRIPTION

Southern Comfort 5 6 10 12
Eddy County, New Mexico

JOB NUMBER

880-36058-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

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

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

Authorization



Generated
11/30/2023 2:40:46 PM

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

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Laboratory Job ID: 880-36058-1
SDG: Eddy County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
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.
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.
α	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: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
SDG: Eddy County, New Mexico

Job ID: 880-36058-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-36058-1**

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

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

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

Receipt

The samples were received on 11/21/2023 10:01 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 -6.1°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: BH-2 (0-1') (880-36058-1), BH-2 (1.5') (880-36058-2), BH-2 (2') (880-36058-3), BH-2 (3') (880-36058-4), BH-2 (4') (880-36058-5), BH-2 (5') (880-36058-6) and BH-2 (6') (880-36058-7).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-67901 and analytical batch 880-67897 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH-2 (1.5') (880-36058-2) and BH-2 (6') (880-36058-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-36058-1

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/29/23 09:09	11/29/23 16:56	1
Toluene	0.00237		0.00199		mg/Kg		11/29/23 09:09	11/29/23 16:56	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/29/23 09:09	11/29/23 16:56	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/29/23 09:09	11/29/23 16:56	1
o-Xylene	0.00704		0.00199		mg/Kg		11/29/23 09:09	11/29/23 16:56	1
Xylenes, Total	0.00704		0.00398		mg/Kg		11/29/23 09:09	11/29/23 16:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	11/29/23 09:09	11/29/23 16:56	1
1,4-Difluorobenzene (Surr)	83		70 - 130	11/29/23 09:09	11/29/23 16:56	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00941		0.00398		mg/Kg			11/29/23 16:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			11/28/23 02:16	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	<50.3	U	50.3		mg/Kg		11/27/23 13:23	11/28/23 02:16	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		11/27/23 13:23	11/28/23 02:16	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		11/27/23 13:23	11/28/23 02:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	11/27/23 13:23	11/28/23 02:16	1
o-Terphenyl	98		70 - 130	11/27/23 13:23	11/28/23 02:16	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2120		100		mg/Kg			11/29/23 04:17	20

Client Sample ID: BH-2 (1.5')

Lab Sample ID: 880-36058-2

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/29/23 09:09	11/29/23 17:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/29/23 09:09	11/29/23 17:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/29/23 09:09	11/29/23 17:16	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/29/23 09:09	11/29/23 17:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/29/23 09:09	11/29/23 17:16	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/29/23 09:09	11/29/23 17:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	11/29/23 09:09	11/29/23 17:16	1
1,4-Difluorobenzene (Surr)	69	S1-	70 - 130	11/29/23 09:09	11/29/23 17:16	1

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Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-2 (1.5')

Lab Sample ID: 880-36058-2

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/29/23 17:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			11/28/23 02:37	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	<50.1	U	50.1		mg/Kg		11/27/23 13:23	11/28/23 02:37	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		11/27/23 13:23	11/28/23 02:37	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		11/27/23 13:23	11/28/23 02:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				11/27/23 13:23	11/28/23 02:37	1
o-Terphenyl	92		70 - 130				11/27/23 13:23	11/28/23 02:37	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1650		49.9		mg/Kg			11/29/23 04:34	10

Client Sample ID: BH-2 (2')

Lab Sample ID: 880-36058-3

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/29/23 09:09	11/29/23 17:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/29/23 09:09	11/29/23 17:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/29/23 09:09	11/29/23 17:37	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/29/23 09:09	11/29/23 17:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/29/23 09:09	11/29/23 17:37	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/29/23 09:09	11/29/23 17:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130				11/29/23 09:09	11/29/23 17:37	1
1,4-Difluorobenzene (Surr)	71		70 - 130				11/29/23 09:09	11/29/23 17:37	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			11/29/23 17:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			11/28/23 02:57	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	<50.4	U	50.4		mg/Kg		11/27/23 13:23	11/28/23 02:57	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		11/27/23 13:23	11/28/23 02:57	1

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Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-2 (2')

Lab Sample ID: 880-36058-3

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		11/27/23 13:23	11/28/23 02:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				11/27/23 13:23	11/28/23 02:57	1
o-Terphenyl	94		70 - 130				11/27/23 13:23	11/28/23 02:57	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1050		50.2		mg/Kg			11/29/23 04:40	10

Client Sample ID: BH-2 (3')

Lab Sample ID: 880-36058-4

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/29/23 09:09	11/29/23 17:57	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/29/23 09:09	11/29/23 17:57	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/29/23 09:09	11/29/23 17:57	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/29/23 09:09	11/29/23 17:57	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/29/23 09:09	11/29/23 17:57	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/29/23 09:09	11/29/23 17:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130				11/29/23 09:09	11/29/23 17:57	1
1,4-Difluorobenzene (Surr)	86		70 - 130				11/29/23 09:09	11/29/23 17:57	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/29/23 17:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			11/28/23 03:18	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	<50.5	U	50.5		mg/Kg		11/27/23 13:23	11/28/23 03:18	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		11/27/23 13:23	11/28/23 03:18	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		11/27/23 13:23	11/28/23 03:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				11/27/23 13:23	11/28/23 03:18	1
o-Terphenyl	88		70 - 130				11/27/23 13:23	11/28/23 03:18	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	393		4.97		mg/Kg			11/29/23 11:43	1

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Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-2 (4')

Lab Sample ID: 880-36058-5

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/29/23 09:09	11/29/23 18:18	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/29/23 09:09	11/29/23 18:18	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/29/23 09:09	11/29/23 18:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/29/23 09:09	11/29/23 18:18	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/29/23 09:09	11/29/23 18:18	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/29/23 09:09	11/29/23 18:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	70		70 - 130	11/29/23 09:09	11/29/23 18:18	1
1,4-Difluorobenzene (Surr)	90		70 - 130	11/29/23 09:09	11/29/23 18:18	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/29/23 18:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/28/23 03:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/27/23 13:23	11/28/23 03:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/27/23 13:23	11/28/23 03:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/27/23 13:23	11/28/23 03:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	11/27/23 13:23	11/28/23 03:38	1
o-Terphenyl	88		70 - 130	11/27/23 13:23	11/28/23 03:38	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	71.9		5.05		mg/Kg			11/29/23 11:49	1

Client Sample ID: BH-2 (5')

Lab Sample ID: 880-36058-6

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/29/23 09:09	11/29/23 18:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/29/23 09:09	11/29/23 18:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/29/23 09:09	11/29/23 18:38	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/29/23 09:09	11/29/23 18:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/29/23 09:09	11/29/23 18:38	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/29/23 09:09	11/29/23 18:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	11/29/23 09:09	11/29/23 18:38	1
1,4-Difluorobenzene (Surr)	72		70 - 130	11/29/23 09:09	11/29/23 18:38	1

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Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-2 (5')

Lab Sample ID: 880-36058-6

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/29/23 18:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/28/23 03:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/27/23 13:23	11/28/23 03:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/27/23 13:23	11/28/23 03:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/27/23 13:23	11/28/23 03:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				11/27/23 13:23	11/28/23 03:58	1
o-Terphenyl	93		70 - 130				11/27/23 13:23	11/28/23 03:58	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.2		5.00		mg/Kg			11/29/23 11:55	1

Client Sample ID: BH-2 (6')

Lab Sample ID: 880-36058-7

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/29/23 09:09	11/29/23 18:59	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/29/23 09:09	11/29/23 18:59	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/29/23 09:09	11/29/23 18:59	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/29/23 09:09	11/29/23 18:59	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/29/23 09:09	11/29/23 18:59	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/29/23 09:09	11/29/23 18:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130				11/29/23 09:09	11/29/23 18:59	1
1,4-Difluorobenzene (Surr)	68	S1-	70 - 130				11/29/23 09:09	11/29/23 18:59	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			11/29/23 18:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/28/23 04:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/27/23 13:23	11/28/23 04:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/27/23 13:23	11/28/23 04:19	1

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Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-2 (6')
Date Collected: 11/20/23 00:00
Date Received: 11/21/23 10:01

Lab Sample ID: 880-36058-7
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		11/27/23 13:23	11/28/23 04:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				11/27/23 13:23	11/28/23 04:19	1
o-Terphenyl	88		70 - 130				11/27/23 13:23	11/28/23 04:19	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.5		4.96		mg/Kg			11/29/23 12:00	1

Surrogate Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
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)
880-36058-1	BH-2 (0-1')	73	83
880-36058-2	BH-2 (1.5')	87	69 S1-
880-36058-3	BH-2 (2')	96	71
880-36058-4	BH-2 (3')	73	86
880-36058-5	BH-2 (4')	70	90
880-36058-6	BH-2 (5')	101	72
880-36058-7	BH-2 (6')	94	68 S1-
880-36187-A-1-B MS	Matrix Spike	87	78
880-36187-A-1-C MSD	Matrix Spike Duplicate	128	100
LCS 880-67901/1-A	Lab Control Sample	124	100
LCSD 880-67901/2-A	Lab Control Sample Dup	123	97
MB 880-67901/5-A	Method Blank	76	87
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)
880-36058-1	BH-2 (0-1')	104	98
880-36058-2	BH-2 (1.5')	97	92
880-36058-3	BH-2 (2')	99	94
880-36058-4	BH-2 (3')	93	88
880-36058-5	BH-2 (4')	93	88
880-36058-6	BH-2 (5')	100	93
880-36058-7	BH-2 (6')	94	88
890-5669-A-1-B MS	Matrix Spike	95	83
890-5669-A-1-C MSD	Matrix Spike Duplicate	96	82
LCS 880-67746/2-A	Lab Control Sample	118	119
LCSD 880-67746/3-A	Lab Control Sample Dup	90	94
MB 880-67746/1-A	Method Blank	101	105
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-67901/5-A

Matrix: Solid

Analysis Batch: 67897

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67901

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/29/23 09:09	11/29/23 11:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/29/23 09:09	11/29/23 11:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/29/23 09:09	11/29/23 11:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/29/23 09:09	11/29/23 11:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/29/23 09:09	11/29/23 11:06	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/29/23 09:09	11/29/23 11:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76		70 - 130	11/29/23 09:09	11/29/23 11:06	1
1,4-Difluorobenzene (Surr)	87		70 - 130	11/29/23 09:09	11/29/23 11:06	1

Lab Sample ID: LCS 880-67901/1-A

Matrix: Solid

Analysis Batch: 67897

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 67901

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09301		mg/Kg		93	70 - 130
Toluene	0.100	0.08881		mg/Kg		89	70 - 130
Ethylbenzene	0.100	0.09948		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.2059		mg/Kg		103	70 - 130
o-Xylene	0.100	0.1012		mg/Kg		101	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	124		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-67901/2-A

Matrix: Solid

Analysis Batch: 67897

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 67901

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.07753		mg/Kg		78	70 - 130	18	35
Toluene	0.100	0.07454		mg/Kg		75	70 - 130	17	35
Ethylbenzene	0.100	0.08562		mg/Kg		86	70 - 130	15	35
m-Xylene & p-Xylene	0.200	0.1817		mg/Kg		91	70 - 130	12	35
o-Xylene	0.100	0.08960		mg/Kg		90	70 - 130	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	123		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: 880-36187-A-1-B MS

Matrix: Solid

Analysis Batch: 67897

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 67901

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U F2 F1	0.0996	0.04625	F1	mg/Kg		46	70 - 130
Toluene	<0.00199	U F1	0.0996	0.05465	F1	mg/Kg		55	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-36187-A-1-B MS

Matrix: Solid

Analysis Batch: 67897

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 67901

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U F2 F1	0.0996	0.05499	F1	mg/Kg		55	70 - 130
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.199	0.1014	F1	mg/Kg		51	70 - 130
o-Xylene	<0.00199	U F2 F1	0.0996	0.05222	F1	mg/Kg		52	70 - 130
Surrogate	MS %Recovery	MS Qualifier	MS Limits						
4-Bromofluorobenzene (Surr)	87		70 - 130						
1,4-Difluorobenzene (Surr)	78		70 - 130						

Lab Sample ID: 880-36187-A-1-C MSD

Matrix: Solid

Analysis Batch: 67897

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 67901

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F2 F1	0.0996	0.07684	F2	mg/Kg		77	70 - 130	50	35
Toluene	<0.00199	U F1	0.0996	0.07295		mg/Kg		73	70 - 130	29	35
Ethylbenzene	<0.00199	U F2 F1	0.0996	0.08638	F2	mg/Kg		87	70 - 130	44	35
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.199	0.1787	F2	mg/Kg		90	70 - 130	55	35
o-Xylene	<0.00199	U F2 F1	0.0996	0.08627	F2	mg/Kg		87	70 - 130	49	35
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	128		70 - 130								
1,4-Difluorobenzene (Surr)	100		70 - 130								

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

Lab Sample ID: MB 880-67746/1-A

Matrix: Solid

Analysis Batch: 67686

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67746

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/27/23 13:22	11/27/23 19:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/27/23 13:22	11/27/23 19:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/27/23 13:22	11/27/23 19:36	1
Surrogate	MB %Recovery	MB Qualifier	MB Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				11/27/23 13:22	11/27/23 19:36	1
o-Terphenyl	105		70 - 130				11/27/23 13:22	11/27/23 19:36	1

Lab Sample ID: LCS 880-67746/2-A

Matrix: Solid

Analysis Batch: 67686

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 67746

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	975.0		mg/Kg		98	70 - 130
Diesel Range Organics (Over C10-C28)	1000	986.8		mg/Kg		99	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: LCS 880-67746/2-A

Matrix: Solid

Analysis Batch: 67686

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 67746

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	119		70 - 130

Lab Sample ID: LCSD 880-67746/3-A

Matrix: Solid

Analysis Batch: 67686

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 67746

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	868.5		mg/Kg		87	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	1000	900.2		mg/Kg		90	70 - 130	9	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: 890-5669-A-1-B MS

Matrix: Solid

Analysis Batch: 67686

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 67746

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	997	767.8		mg/Kg		73	70 - 130
Diesel Range Organics (Over C10-C28)	<49.6	U	997	735.8		mg/Kg		71	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	83		70 - 130

Lab Sample ID: 890-5669-A-1-C MSD

Matrix: Solid

Analysis Batch: 67686

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 67746

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	997	780.3		mg/Kg		74	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.6	U	997	739.3		mg/Kg		72	70 - 130	0	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	82		70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
SDG: Eddy County, New Mexico

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-67761/1-A

Matrix: Solid

Analysis Batch: 67823

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/29/23 04:00	1

Lab Sample ID: LCS 880-67761/2-A

Matrix: Solid

Analysis Batch: 67823

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	250.6		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-67761/3-A

Matrix: Solid

Analysis Batch: 67823

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	254.8		mg/Kg		102	90 - 110	2	20

Lab Sample ID: 880-36058-1 MS

Matrix: Solid

Analysis Batch: 67823

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

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	2120		5020	7280		mg/Kg		103	90 - 110

Lab Sample ID: 880-36058-1 MSD

Matrix: Solid

Analysis Batch: 67823

Client Sample ID: BH-2 (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	2120		5020	7328		mg/Kg		104	90 - 110	1	20

QC Association Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
SDG: Eddy County, New Mexico

GC VOA

Analysis Batch: 67897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36058-1	BH-2 (0-1')	Total/NA	Solid	8021B	67901
880-36058-2	BH-2 (1.5')	Total/NA	Solid	8021B	67901
880-36058-3	BH-2 (2')	Total/NA	Solid	8021B	67901
880-36058-4	BH-2 (3')	Total/NA	Solid	8021B	67901
880-36058-5	BH-2 (4')	Total/NA	Solid	8021B	67901
880-36058-6	BH-2 (5')	Total/NA	Solid	8021B	67901
880-36058-7	BH-2 (6')	Total/NA	Solid	8021B	67901
MB 880-67901/5-A	Method Blank	Total/NA	Solid	8021B	67901
LCS 880-67901/1-A	Lab Control Sample	Total/NA	Solid	8021B	67901
LCSD 880-67901/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	67901
880-36187-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	67901
880-36187-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	67901

Prep Batch: 67901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36058-1	BH-2 (0-1')	Total/NA	Solid	5035	
880-36058-2	BH-2 (1.5')	Total/NA	Solid	5035	
880-36058-3	BH-2 (2')	Total/NA	Solid	5035	
880-36058-4	BH-2 (3')	Total/NA	Solid	5035	
880-36058-5	BH-2 (4')	Total/NA	Solid	5035	
880-36058-6	BH-2 (5')	Total/NA	Solid	5035	
880-36058-7	BH-2 (6')	Total/NA	Solid	5035	
MB 880-67901/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-67901/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-67901/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-36187-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-36187-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 68049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36058-1	BH-2 (0-1')	Total/NA	Solid	Total BTEX	
880-36058-2	BH-2 (1.5')	Total/NA	Solid	Total BTEX	
880-36058-3	BH-2 (2')	Total/NA	Solid	Total BTEX	
880-36058-4	BH-2 (3')	Total/NA	Solid	Total BTEX	
880-36058-5	BH-2 (4')	Total/NA	Solid	Total BTEX	
880-36058-6	BH-2 (5')	Total/NA	Solid	Total BTEX	
880-36058-7	BH-2 (6')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 67686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36058-1	BH-2 (0-1')	Total/NA	Solid	8015B NM	67746
880-36058-2	BH-2 (1.5')	Total/NA	Solid	8015B NM	67746
880-36058-3	BH-2 (2')	Total/NA	Solid	8015B NM	67746
880-36058-4	BH-2 (3')	Total/NA	Solid	8015B NM	67746
880-36058-5	BH-2 (4')	Total/NA	Solid	8015B NM	67746
880-36058-6	BH-2 (5')	Total/NA	Solid	8015B NM	67746
880-36058-7	BH-2 (6')	Total/NA	Solid	8015B NM	67746
MB 880-67746/1-A	Method Blank	Total/NA	Solid	8015B NM	67746
LCS 880-67746/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	67746

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
SDG: Eddy County, New Mexico

GC Semi VOA (Continued)

Analysis Batch: 67686 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-67746/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	67746
890-5669-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	67746
890-5669-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	67746

Prep Batch: 67746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36058-1	BH-2 (0-1')	Total/NA	Solid	8015NM Prep	
880-36058-2	BH-2 (1.5')	Total/NA	Solid	8015NM Prep	
880-36058-3	BH-2 (2')	Total/NA	Solid	8015NM Prep	
880-36058-4	BH-2 (3')	Total/NA	Solid	8015NM Prep	
880-36058-5	BH-2 (4')	Total/NA	Solid	8015NM Prep	
880-36058-6	BH-2 (5')	Total/NA	Solid	8015NM Prep	
880-36058-7	BH-2 (6')	Total/NA	Solid	8015NM Prep	
MB 880-67746/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-67746/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-67746/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5669-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5669-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 67826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36058-1	BH-2 (0-1')	Total/NA	Solid	8015 NM	
880-36058-2	BH-2 (1.5')	Total/NA	Solid	8015 NM	
880-36058-3	BH-2 (2')	Total/NA	Solid	8015 NM	
880-36058-4	BH-2 (3')	Total/NA	Solid	8015 NM	
880-36058-5	BH-2 (4')	Total/NA	Solid	8015 NM	
880-36058-6	BH-2 (5')	Total/NA	Solid	8015 NM	
880-36058-7	BH-2 (6')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 67761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36058-1	BH-2 (0-1')	Soluble	Solid	DI Leach	
880-36058-2	BH-2 (1.5')	Soluble	Solid	DI Leach	
880-36058-3	BH-2 (2')	Soluble	Solid	DI Leach	
880-36058-4	BH-2 (3')	Soluble	Solid	DI Leach	
880-36058-5	BH-2 (4')	Soluble	Solid	DI Leach	
880-36058-6	BH-2 (5')	Soluble	Solid	DI Leach	
880-36058-7	BH-2 (6')	Soluble	Solid	DI Leach	
MB 880-67761/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-67761/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-67761/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-36058-1 MS	BH-2 (0-1')	Soluble	Solid	DI Leach	
880-36058-1 MSD	BH-2 (0-1')	Soluble	Solid	DI Leach	

Analysis Batch: 67823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36058-1	BH-2 (0-1')	Soluble	Solid	300.0	67761
880-36058-2	BH-2 (1.5')	Soluble	Solid	300.0	67761
880-36058-3	BH-2 (2')	Soluble	Solid	300.0	67761

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
SDG: Eddy County, New Mexico

HPLC/IC (Continued)

Analysis Batch: 67823 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36058-4	BH-2 (3')	Soluble	Solid	300.0	67761
880-36058-5	BH-2 (4')	Soluble	Solid	300.0	67761
880-36058-6	BH-2 (5')	Soluble	Solid	300.0	67761
880-36058-7	BH-2 (6')	Soluble	Solid	300.0	67761
MB 880-67761/1-A	Method Blank	Soluble	Solid	300.0	67761
LCS 880-67761/2-A	Lab Control Sample	Soluble	Solid	300.0	67761
LCSD 880-67761/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	67761
880-36058-1 MS	BH-2 (0-1')	Soluble	Solid	300.0	67761
880-36058-1 MSD	BH-2 (0-1')	Soluble	Solid	300.0	67761

Lab Chronicle

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-36058-1

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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	67901	11/29/23 09:09	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67897	11/29/23 16:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68049	11/29/23 16:56	SM	EET MID
Total/NA	Analysis	8015 NM		1			67826	11/28/23 02:16	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	67746	11/27/23 13:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67686	11/28/23 02:16	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	67761	11/27/23 14:34	SA	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	67823	11/29/23 04:17	CH	EET MID

Client Sample ID: BH-2 (1.5')

Lab Sample ID: 880-36058-2

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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	67901	11/29/23 09:09	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67897	11/29/23 17:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68049	11/29/23 17:16	SM	EET MID
Total/NA	Analysis	8015 NM		1			67826	11/28/23 02:37	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	67746	11/27/23 13:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67686	11/28/23 02:37	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	67761	11/27/23 14:34	SA	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	67823	11/29/23 04:34	CH	EET MID

Client Sample ID: BH-2 (2')

Lab Sample ID: 880-36058-3

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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	67901	11/29/23 09:09	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67897	11/29/23 17:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68049	11/29/23 17:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			67826	11/28/23 02:57	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	67746	11/27/23 13:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67686	11/28/23 02:57	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	67761	11/27/23 14:34	SA	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	67823	11/29/23 04:40	CH	EET MID

Client Sample ID: BH-2 (3')

Lab Sample ID: 880-36058-4

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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	67901	11/29/23 09:09	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67897	11/29/23 17:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68049	11/29/23 17:57	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-2 (3')
Date Collected: 11/20/23 00:00
Date Received: 11/21/23 10:01

Lab Sample ID: 880-36058-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			67826	11/28/23 03:18	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	67746	11/27/23 13:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67686	11/28/23 03:18	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	67761	11/27/23 14:34	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67823	11/29/23 11:43	CH	EET MID

Client Sample ID: BH-2 (4')
Date Collected: 11/20/23 00:00
Date Received: 11/21/23 10:01

Lab Sample ID: 880-36058-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	67901	11/29/23 09:09	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67897	11/29/23 18:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68049	11/29/23 18:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			67826	11/28/23 03:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	67746	11/27/23 13:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67686	11/28/23 03:38	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	67761	11/27/23 14:34	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67823	11/29/23 11:49	CH	EET MID

Client Sample ID: BH-2 (5')
Date Collected: 11/20/23 00:00
Date Received: 11/21/23 10:01

Lab Sample ID: 880-36058-6
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	67901	11/29/23 09:09	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67897	11/29/23 18:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68049	11/29/23 18:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			67826	11/28/23 03:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	67746	11/27/23 13:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67686	11/28/23 03:58	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	67761	11/27/23 14:34	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67823	11/29/23 11:55	CH	EET MID

Client Sample ID: BH-2 (6')
Date Collected: 11/20/23 00:00
Date Received: 11/21/23 10:01

Lab Sample ID: 880-36058-7
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	67901	11/29/23 09:09	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67897	11/29/23 18:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68049	11/29/23 18:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			67826	11/28/23 04:19	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	67746	11/27/23 13:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67686	11/28/23 04:19	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-2 (6')
Date Collected: 11/20/23 00:00
Date Received: 11/21/23 10:01

Lab Sample ID: 880-36058-7
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			5.04 g	50 mL	67761	11/27/23 14:34	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67823	11/29/23 12:00	CH	EET MID

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

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Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
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	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
SDG: Eddy County, New Mexico

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36058-1
SDG: Eddy County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-36058-1	BH-2 (0-1')	Solid	11/20/23 00:00	11/21/23 10:01
880-36058-2	BH-2 (1.5')	Solid	11/20/23 00:00	11/21/23 10:01
880-36058-3	BH-2 (2')	Solid	11/20/23 00:00	11/21/23 10:01
880-36058-4	BH-2 (3')	Solid	11/20/23 00:00	11/21/23 10:01
880-36058-5	BH-2 (4')	Solid	11/20/23 00:00	11/21/23 10:01
880-36058-6	BH-2 (5')	Solid	11/20/23 00:00	11/21/23 10:01
880-36058-7	BH-2 (6')	Solid	11/20/23 00:00	11/21/23 10:01



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

Work Order Comments	
Program: UST/PST ☐ PRP ☐ ROWfields ☐ RRC ☐ Iperfund ☐	
State of Project	
Reporting Level II ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐	
Deliverables EDD ☐ ADAPT ☐ Other	

W/O



880-36058 Chain of Custody

Project Name	Southern Comfort 5 6 10 12		Turn Around	Pres. Code	ANALYSIS REQUEST												Preservative Codes	
Project Number	2173	☒ Routine ☐ Rush	Due Date	5 day													None NO	DI Water H ₂ O
Project Location	Eddy County, New Mexico																Cool Cool	MeOH Me
Sampler's Name	CCM																HCL HC	HNO ₃ HN
PO #																	H ₂ SO ₄ H ₂	NaOH Na
SAMPLE RECEIPT	Temp Blank	Yes/No	Thermometer ID	Wet Ice	Yes/No	Parameters												Hold
Received Inact.	Yes/No					BTEX 8021B												
Cooler Custody Seals	Yes/No		Correction Factor			TPH 8015M (GRO + DRO + MRO)												
Sample Custody Seals	Yes/No		Temperature Reading			Chloride 300 0												
Total Containers	Yes/No		Corrected Temperature														NaHSO ₄ NABIS	
																	Na ₂ S ₂ O ₃ NaSO ₃	
																	Zn Acetate+NaOH Zn	
																	NaOH+Ascorbic Acid SAPC	
Sample Identification	Date	Time	Soil	Water	Grab/Comp	# of Cont												Sample Comments
BH-2 (0-1')	11/20/2023		X		G	1	X	X	X									
BH-2 (1-5')	11/20/2023		X		G	1	X	X	X									
BH-2 (2')	11/20/2023		X		G	1	X	X	X									
BH-2 (3')	11/20/2023		X		G	1	X	X	X									
BH-2 (4')	11/20/2023		X		G	1	X	X	X									
BH-2 (5')	11/20/2023		X		G	1	X	X	X									
BH-2 (6')	11/20/2023		X		G	1	X	X	X									

Comments Email results to Mike Carmona mcarmona@camonareresources.com, Conner Moehring cmoehring@camonareresources.com, Clint Merritt merrittc@camonareresources.com

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
	11-21-23		1001

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-36058-1

SDG Number: Eddy County, New Mexico

Login Number: 36058

List Source: Eurofins Midland

List Number: 1

Creator: Rodriguez, Leticia

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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 12/1/2023 2:03:36 PM

JOB DESCRIPTION

Southern Comfort 5 6 10 12
Eddy County, New Mexico

JOB NUMBER

880-36059-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

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

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

Authorization



Generated
12/1/2023 2:03:36 PM

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

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Laboratory Job ID: 880-36059-1
SDG: Eddy County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
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: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
SDG: Eddy County, New Mexico

Job ID: 880-36059-1

Laboratory: Eurofins Midland

Narrative**Job Narrative
880-36059-1**

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

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

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

Receipt

The samples were received on 11/21/2023 10:01 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 -6.1°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: BH-3 (0-1') (880-36059-1), BH-3 (1.5') (880-36059-2), BH-3 (2') (880-36059-3), BH-3 (3') (880-36059-4), BH-3 (4') (880-36059-5), BH-3 (5') (880-36059-6), BH-3 (6') (880-36059-7), BH-3 (7') (880-36059-8) and BH-3 (8') (880-36059-9).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-67866 and 880-67875 and analytical batch 880-67898 was outside the control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH-3 (0-1') (880-36059-1), BH-3 (3') (880-36059-4) and BH-3 (6') (880-36059-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-67866 and analytical batch 880-67898 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-67803/20) and (CCV 880-67803/5). 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: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-36059-1

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F2 F1	0.00199		mg/Kg		11/28/23 12:57	11/30/23 01:49	1
Toluene	<0.00199	U F1	0.00199		mg/Kg		11/28/23 12:57	11/30/23 01:49	1
Ethylbenzene	<0.00199	U F1	0.00199		mg/Kg		11/28/23 12:57	11/30/23 01:49	1
m-Xylene & p-Xylene	<0.00398	U F1	0.00398		mg/Kg		11/28/23 12:57	11/30/23 01:49	1
o-Xylene	<0.00199	U F1	0.00199		mg/Kg		11/28/23 12:57	11/30/23 01:49	1
Xylenes, Total	<0.00398	U F1	0.00398		mg/Kg		11/28/23 12:57	11/30/23 01:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	52	S1-	70 - 130	11/28/23 12:57	11/30/23 01:49	1
1,4-Difluorobenzene (Surr)	77		70 - 130	11/28/23 12:57	11/30/23 01:49	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/30/23 01:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			11/28/23 10:39	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	<50.1	U	50.1		mg/Kg		11/27/23 18:02	11/28/23 10:39	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		11/27/23 18:02	11/28/23 10:39	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		11/27/23 18:02	11/28/23 10:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	11/27/23 18:02	11/28/23 10:39	1
o-Terphenyl	113		70 - 130	11/27/23 18:02	11/28/23 10:39	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7740		100		mg/Kg			11/29/23 05:19	20

Client Sample ID: BH-3 (1.5')

Lab Sample ID: 880-36059-2

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/23 12:57	11/30/23 02:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/23 12:57	11/30/23 02:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/23 12:57	11/30/23 02:14	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/28/23 12:57	11/30/23 02:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/23 12:57	11/30/23 02:14	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/28/23 12:57	11/30/23 02:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	11/28/23 12:57	11/30/23 02:14	1
1,4-Difluorobenzene (Surr)	100		70 - 130	11/28/23 12:57	11/30/23 02:14	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-3 (1.5')

Lab Sample ID: 880-36059-2

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/30/23 02:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			11/28/23 11:45	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	<50.4	U	50.4		mg/Kg		11/27/23 18:02	11/28/23 11:45	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		11/27/23 18:02	11/28/23 11:45	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		11/27/23 18:02	11/28/23 11:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				11/27/23 18:02	11/28/23 11:45	1
o-Terphenyl	114		70 - 130				11/27/23 18:02	11/28/23 11:45	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2410		49.8		mg/Kg			11/29/23 05:25	10

Client Sample ID: BH-3 (2')

Lab Sample ID: 880-36059-3

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/28/23 12:57	11/30/23 02:40	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/28/23 12:57	11/30/23 02:40	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/28/23 12:57	11/30/23 02:40	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/28/23 12:57	11/30/23 02:40	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/28/23 12:57	11/30/23 02:40	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/28/23 12:57	11/30/23 02:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				11/28/23 12:57	11/30/23 02:40	1
1,4-Difluorobenzene (Surr)	93		70 - 130				11/28/23 12:57	11/30/23 02:40	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			11/30/23 02:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			11/28/23 12:08	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	<50.5	U	50.5		mg/Kg		11/27/23 18:02	11/28/23 12:08	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		11/27/23 18:02	11/28/23 12:08	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-3 (2')

Lab Sample ID: 880-36059-3

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		11/27/23 18:02	11/28/23 12:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				11/27/23 18:02	11/28/23 12:08	1
o-Terphenyl	112		70 - 130				11/27/23 18:02	11/28/23 12:08	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1840		49.5		mg/Kg			11/29/23 05:31	10

Client Sample ID: BH-3 (3')

Lab Sample ID: 880-36059-4

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/23 12:57	11/30/23 03:05	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/23 12:57	11/30/23 03:05	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/23 12:57	11/30/23 03:05	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/28/23 12:57	11/30/23 03:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/23 12:57	11/30/23 03:05	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/28/23 12:57	11/30/23 03:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	63	S1-	70 - 130				11/28/23 12:57	11/30/23 03:05	1
1,4-Difluorobenzene (Surr)	84		70 - 130				11/28/23 12:57	11/30/23 03:05	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			11/30/23 03:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			11/28/23 12:30	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	<49.6	U	49.6		mg/Kg		11/27/23 18:02	11/28/23 12:30	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		11/27/23 18:02	11/28/23 12:30	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		11/27/23 18:02	11/28/23 12:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130				11/27/23 18:02	11/28/23 12:30	1
o-Terphenyl	120		70 - 130				11/27/23 18:02	11/28/23 12:30	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	949		50.4		mg/Kg			11/29/23 05:36	10

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-3 (4')

Lab Sample ID: 880-36059-5

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/28/23 12:57	11/30/23 03:31	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/28/23 12:57	11/30/23 03:31	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/28/23 12:57	11/30/23 03:31	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/28/23 12:57	11/30/23 03:31	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/28/23 12:57	11/30/23 03:31	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/28/23 12:57	11/30/23 03:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	11/28/23 12:57	11/30/23 03:31	1
1,4-Difluorobenzene (Surr)	87		70 - 130	11/28/23 12:57	11/30/23 03:31	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/30/23 03:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			11/28/23 12:52	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	<49.7	U	49.7		mg/Kg		11/27/23 18:02	11/28/23 12:52	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		11/27/23 18:02	11/28/23 12:52	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		11/27/23 18:02	11/28/23 12:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	11/27/23 18:02	11/28/23 12:52	1
o-Terphenyl	114		70 - 130	11/27/23 18:02	11/28/23 12:52	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	94.7		5.01		mg/Kg			11/29/23 12:06	1

Client Sample ID: BH-3 (5')

Lab Sample ID: 880-36059-6

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/23 12:57	11/30/23 03:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/23 12:57	11/30/23 03:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/23 12:57	11/30/23 03:57	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/28/23 12:57	11/30/23 03:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/23 12:57	11/30/23 03:57	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/28/23 12:57	11/30/23 03:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	11/28/23 12:57	11/30/23 03:57	1
1,4-Difluorobenzene (Surr)	95		70 - 130	11/28/23 12:57	11/30/23 03:57	1

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Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-3 (5')

Lab Sample ID: 880-36059-6

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/30/23 03:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/28/23 13:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/27/23 18:02	11/28/23 13:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/27/23 18:02	11/28/23 13:14	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/27/23 18:02	11/28/23 13:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130				11/27/23 18:02	11/28/23 13:14	1
o-Terphenyl	119		70 - 130				11/27/23 18:02	11/28/23 13:14	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.3		5.03		mg/Kg			11/29/23 12:12	1

Client Sample ID: BH-3 (6')

Lab Sample ID: 880-36059-7

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/28/23 12:57	11/30/23 04:23	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/28/23 12:57	11/30/23 04:23	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/28/23 12:57	11/30/23 04:23	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/28/23 12:57	11/30/23 04:23	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/28/23 12:57	11/30/23 04:23	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/28/23 12:57	11/30/23 04:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	142	S1+	70 - 130				11/28/23 12:57	11/30/23 04:23	1
1,4-Difluorobenzene (Surr)	106		70 - 130				11/28/23 12:57	11/30/23 04:23	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/30/23 04:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			11/28/23 13:36	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	<49.6	U	49.6		mg/Kg		11/27/23 18:02	11/28/23 13:36	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		11/27/23 18:02	11/28/23 13:36	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-3 (6')

Lab Sample ID: 880-36059-7

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		11/27/23 18:02	11/28/23 13:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				11/27/23 18:02	11/28/23 13:36	1
o-Terphenyl	109		70 - 130				11/27/23 18:02	11/28/23 13:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.9		5.01		mg/Kg			11/29/23 12:17	1

Client Sample ID: BH-3 (7')

Lab Sample ID: 880-36059-8

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/28/23 12:57	11/30/23 04:48	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/28/23 12:57	11/30/23 04:48	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/28/23 12:57	11/30/23 04:48	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/28/23 12:57	11/30/23 04:48	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/28/23 12:57	11/30/23 04:48	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/28/23 12:57	11/30/23 04:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130				11/28/23 12:57	11/30/23 04:48	1
1,4-Difluorobenzene (Surr)	100		70 - 130				11/28/23 12:57	11/30/23 04:48	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/30/23 04:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			11/28/23 13:59	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	<50.3	U	50.3		mg/Kg		11/27/23 18:02	11/28/23 13:59	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		11/27/23 18:02	11/28/23 13:59	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		11/27/23 18:02	11/28/23 13:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				11/27/23 18:02	11/28/23 13:59	1
o-Terphenyl	110		70 - 130				11/27/23 18:02	11/28/23 13:59	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.1		5.05		mg/Kg			11/29/23 12:23	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-3 (8')

Lab Sample ID: 880-36059-9

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/23 12:57	11/30/23 05:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/23 12:57	11/30/23 05:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/23 12:57	11/30/23 05:14	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/28/23 12:57	11/30/23 05:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/23 12:57	11/30/23 05:14	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/28/23 12:57	11/30/23 05:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	11/28/23 12:57	11/30/23 05:14	1
1,4-Difluorobenzene (Surr)	94		70 - 130	11/28/23 12:57	11/30/23 05:14	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/30/23 05:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			11/28/23 14:21	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	<50.4	U	50.4		mg/Kg		11/27/23 18:02	11/28/23 14:21	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		11/27/23 18:02	11/28/23 14:21	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		11/27/23 18:02	11/28/23 14:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	11/27/23 18:02	11/28/23 14:21	1
o-Terphenyl	116		70 - 130	11/27/23 18:02	11/28/23 14:21	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	129		5.02		mg/Kg			11/29/23 12:29	1

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Surrogate Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
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)
880-36059-1	BH-3 (0-1')	52 S1-	77
880-36059-1 MS	BH-3 (0-1')	113	95
880-36059-1 MSD	BH-3 (0-1')	97	139 S1+
880-36059-2	BH-3 (1.5')	114	100
880-36059-3	BH-3 (2')	110	93
880-36059-4	BH-3 (3')	63 S1-	84
880-36059-5	BH-3 (4')	120	87
880-36059-6	BH-3 (5')	107	95
880-36059-7	BH-3 (6')	142 S1+	106
880-36059-8	BH-3 (7')	127	100
880-36059-9	BH-3 (8')	112	94
LCS 880-67866/1-A	Lab Control Sample	120	99
LCSD 880-67866/2-A	Lab Control Sample Dup	108	103
MB 880-67866/5-A	Method Blank	58 S1-	90
MB 880-67875/5-A	Method Blank	63 S1-	88
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)
880-36059-1	BH-3 (0-1')	106	113
880-36059-1 MS	BH-3 (0-1')	99	99
880-36059-1 MSD	BH-3 (0-1')	112	109
880-36059-2	BH-3 (1.5')	106	114
880-36059-3	BH-3 (2')	104	112
880-36059-4	BH-3 (3')	114	120
880-36059-5	BH-3 (4')	108	114
880-36059-6	BH-3 (5')	113	119
880-36059-7	BH-3 (6')	101	109
880-36059-8	BH-3 (7')	104	110
880-36059-9	BH-3 (8')	107	116
LCS 880-67796/2-A	Lab Control Sample	105	119
LCSD 880-67796/3-A	Lab Control Sample Dup	94	106
MB 880-67796/1-A	Method Blank	99	110
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-67866/5-A
Matrix: Solid
Analysis Batch: 67898

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 67866

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/23 12:57	11/30/23 01:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/23 12:57	11/30/23 01:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/23 12:57	11/30/23 01:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/28/23 12:57	11/30/23 01:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/23 12:57	11/30/23 01:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/28/23 12:57	11/30/23 01:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	58	S1-	70 - 130	11/28/23 12:57	11/30/23 01:23	1
1,4-Difluorobenzene (Surr)	90		70 - 130	11/28/23 12:57	11/30/23 01:23	1

Lab Sample ID: LCS 880-67866/1-A
Matrix: Solid
Analysis Batch: 67898

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 67866

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07773		mg/Kg		78	70 - 130
Toluene	0.100	0.09291		mg/Kg		93	70 - 130
Ethylbenzene	0.100	0.09651		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	0.200	0.1855		mg/Kg		93	70 - 130
o-Xylene	0.100	0.09435		mg/Kg		94	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-67866/2-A
Matrix: Solid
Analysis Batch: 67898

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 67866

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08168		mg/Kg		82	70 - 130	5	35
Toluene	0.100	0.08794		mg/Kg		88	70 - 130	5	35
Ethylbenzene	0.100	0.09657		mg/Kg		97	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.1845		mg/Kg		92	70 - 130	1	35
o-Xylene	0.100	0.08889		mg/Kg		89	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 880-36059-1 MS
Matrix: Solid
Analysis Batch: 67898

Client Sample ID: BH-3 (0-1')
Prep Type: Total/NA
Prep Batch: 67866

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U F2 F1	0.0996	0.07503		mg/Kg		75	70 - 130
Toluene	<0.00199	U F1	0.0996	0.05707	F1	mg/Kg		57	70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-36059-1 MS

Matrix: Solid

Analysis Batch: 67898

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

Prep Type: Total/NA

Prep Batch: 67866

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U F1	0.0996	0.04889	F1	mg/Kg		49	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.199	0.1157	F1	mg/Kg		58	70 - 130
o-Xylene	<0.00199	U F1	0.0996	0.06018	F1	mg/Kg		59	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 880-36059-1 MSD

Matrix: Solid

Analysis Batch: 67898

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

Prep Type: Total/NA

Prep Batch: 67866

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F2 F1	0.0990	0.05141	F2 F1	mg/Kg		52	70 - 130	37	35
Toluene	<0.00199	U F1	0.0990	0.05705	F1	mg/Kg		58	70 - 130	0	35
Ethylbenzene	<0.00199	U F1	0.0990	0.05658	F1	mg/Kg		57	70 - 130	15	35
m-Xylene & p-Xylene	<0.00398	U F1	0.198	0.1069	F1	mg/Kg		54	70 - 130	8	35
o-Xylene	<0.00199	U F1	0.0990	0.05818	F1	mg/Kg		58	70 - 130	3	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	139	S1+	70 - 130

Lab Sample ID: MB 880-67875/5-A

Matrix: Solid

Analysis Batch: 67898

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67875

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/23 14:33	11/29/23 11:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/23 14:33	11/29/23 11:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/23 14:33	11/29/23 11:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/28/23 14:33	11/29/23 11:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/23 14:33	11/29/23 11:55	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/28/23 14:33	11/29/23 11:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	63	S1-	70 - 130	11/28/23 14:33	11/29/23 11:55	1
1,4-Difluorobenzene (Surr)	88		70 - 130	11/28/23 14:33	11/29/23 11:55	1

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

Lab Sample ID: MB 880-67796/1-A

Matrix: Solid

Analysis Batch: 67803

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67796

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/27/23 18:02	11/28/23 08:05	1

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: MB 880-67796/1-A

Matrix: Solid

Analysis Batch: 67803

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67796

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/27/23 18:02	11/28/23 08:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/27/23 18:02	11/28/23 08:05	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				11/27/23 18:02	11/28/23 08:05	1
o-Terphenyl	110		70 - 130				11/27/23 18:02	11/28/23 08:05	1

Lab Sample ID: LCS 880-67796/2-A

Matrix: Solid

Analysis Batch: 67803

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 67796

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1053		mg/Kg		105	70 - 130
Diesel Range Organics (Over C10-C28)	1000	943.1		mg/Kg		94	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	105		70 - 130				
o-Terphenyl	119		70 - 130				

Lab Sample ID: LCSD 880-67796/3-A

Matrix: Solid

Analysis Batch: 67803

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 67796

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1011		mg/Kg		101	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	892.2		mg/Kg		89	70 - 130	6	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	94		70 - 130						
o-Terphenyl	106		70 - 130						

Lab Sample ID: 880-36059-1 MS

Matrix: Solid

Analysis Batch: 67803

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

Prep Type: Total/NA

Prep Batch: 67796

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	1010	1058		mg/Kg		103	70 - 130
Diesel Range Organics (Over C10-C28)	<50.1	U	1010	755.6		mg/Kg		70	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	99		70 - 130						
o-Terphenyl	99		70 - 130						

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QC Sample Results

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-36059-1 MSD

Matrix: Solid

Analysis Batch: 67803

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

Prep Type: Total/NA

Prep Batch: 67796

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	1010	1186		mg/Kg		115	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	<50.1	U	1010	853.0		mg/Kg		80	70 - 130	12	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	112		70 - 130								
o-Terphenyl	109		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-67761/1-A

Matrix: Solid

Analysis Batch: 67823

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/29/23 04:00	1

Lab Sample ID: LCS 880-67761/2-A

Matrix: Solid

Analysis Batch: 67823

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	250.6		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-67761/3-A

Matrix: Solid

Analysis Batch: 67823

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	254.8		mg/Kg		102	90 - 110	2	20

Lab Sample ID: 880-36059-4 MS

Matrix: Solid

Analysis Batch: 67823

Client Sample ID: BH-3 (3')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	949		2520	3660		mg/Kg		108	90 - 110

Lab Sample ID: 880-36059-4 MSD

Matrix: Solid

Analysis Batch: 67823

Client Sample ID: BH-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	949		2520	3662		mg/Kg		108	90 - 110	0	20

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QC Association Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
SDG: Eddy County, New Mexico

GC VOA

Prep Batch: 67866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36059-1	BH-3 (0-1')	Total/NA	Solid	5035	
880-36059-2	BH-3 (1.5')	Total/NA	Solid	5035	
880-36059-3	BH-3 (2')	Total/NA	Solid	5035	
880-36059-4	BH-3 (3')	Total/NA	Solid	5035	
880-36059-5	BH-3 (4')	Total/NA	Solid	5035	
880-36059-6	BH-3 (5')	Total/NA	Solid	5035	
880-36059-7	BH-3 (6')	Total/NA	Solid	5035	
880-36059-8	BH-3 (7')	Total/NA	Solid	5035	
880-36059-9	BH-3 (8')	Total/NA	Solid	5035	
MB 880-67866/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-67866/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-67866/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-36059-1 MS	BH-3 (0-1')	Total/NA	Solid	5035	
880-36059-1 MSD	BH-3 (0-1')	Total/NA	Solid	5035	

Prep Batch: 67875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-67875/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 67898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36059-1	BH-3 (0-1')	Total/NA	Solid	8021B	67866
880-36059-2	BH-3 (1.5')	Total/NA	Solid	8021B	67866
880-36059-3	BH-3 (2')	Total/NA	Solid	8021B	67866
880-36059-4	BH-3 (3')	Total/NA	Solid	8021B	67866
880-36059-5	BH-3 (4')	Total/NA	Solid	8021B	67866
880-36059-6	BH-3 (5')	Total/NA	Solid	8021B	67866
880-36059-7	BH-3 (6')	Total/NA	Solid	8021B	67866
880-36059-8	BH-3 (7')	Total/NA	Solid	8021B	67866
880-36059-9	BH-3 (8')	Total/NA	Solid	8021B	67866
MB 880-67866/5-A	Method Blank	Total/NA	Solid	8021B	67866
MB 880-67875/5-A	Method Blank	Total/NA	Solid	8021B	67875
LCS 880-67866/1-A	Lab Control Sample	Total/NA	Solid	8021B	67866
LCSD 880-67866/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	67866
880-36059-1 MS	BH-3 (0-1')	Total/NA	Solid	8021B	67866
880-36059-1 MSD	BH-3 (0-1')	Total/NA	Solid	8021B	67866

Analysis Batch: 68154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36059-1	BH-3 (0-1')	Total/NA	Solid	Total BTEX	
880-36059-2	BH-3 (1.5')	Total/NA	Solid	Total BTEX	
880-36059-3	BH-3 (2')	Total/NA	Solid	Total BTEX	
880-36059-4	BH-3 (3')	Total/NA	Solid	Total BTEX	
880-36059-5	BH-3 (4')	Total/NA	Solid	Total BTEX	
880-36059-6	BH-3 (5')	Total/NA	Solid	Total BTEX	
880-36059-7	BH-3 (6')	Total/NA	Solid	Total BTEX	
880-36059-8	BH-3 (7')	Total/NA	Solid	Total BTEX	
880-36059-9	BH-3 (8')	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
SDG: Eddy County, New Mexico

GC Semi VOA

Prep Batch: 67796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36059-1	BH-3 (0-1')	Total/NA	Solid	8015NM Prep	
880-36059-2	BH-3 (1.5')	Total/NA	Solid	8015NM Prep	
880-36059-3	BH-3 (2')	Total/NA	Solid	8015NM Prep	
880-36059-4	BH-3 (3')	Total/NA	Solid	8015NM Prep	
880-36059-5	BH-3 (4')	Total/NA	Solid	8015NM Prep	
880-36059-6	BH-3 (5')	Total/NA	Solid	8015NM Prep	
880-36059-7	BH-3 (6')	Total/NA	Solid	8015NM Prep	
880-36059-8	BH-3 (7')	Total/NA	Solid	8015NM Prep	
880-36059-9	BH-3 (8')	Total/NA	Solid	8015NM Prep	
MB 880-67796/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-67796/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-67796/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-36059-1 MS	BH-3 (0-1')	Total/NA	Solid	8015NM Prep	
880-36059-1 MSD	BH-3 (0-1')	Total/NA	Solid	8015NM Prep	

Analysis Batch: 67803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36059-1	BH-3 (0-1')	Total/NA	Solid	8015B NM	67796
880-36059-2	BH-3 (1.5')	Total/NA	Solid	8015B NM	67796
880-36059-3	BH-3 (2')	Total/NA	Solid	8015B NM	67796
880-36059-4	BH-3 (3')	Total/NA	Solid	8015B NM	67796
880-36059-5	BH-3 (4')	Total/NA	Solid	8015B NM	67796
880-36059-6	BH-3 (5')	Total/NA	Solid	8015B NM	67796
880-36059-7	BH-3 (6')	Total/NA	Solid	8015B NM	67796
880-36059-8	BH-3 (7')	Total/NA	Solid	8015B NM	67796
880-36059-9	BH-3 (8')	Total/NA	Solid	8015B NM	67796
MB 880-67796/1-A	Method Blank	Total/NA	Solid	8015B NM	67796
LCS 880-67796/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	67796
LCSD 880-67796/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	67796
880-36059-1 MS	BH-3 (0-1')	Total/NA	Solid	8015B NM	67796
880-36059-1 MSD	BH-3 (0-1')	Total/NA	Solid	8015B NM	67796

Analysis Batch: 67939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36059-1	BH-3 (0-1')	Total/NA	Solid	8015 NM	
880-36059-2	BH-3 (1.5')	Total/NA	Solid	8015 NM	
880-36059-3	BH-3 (2')	Total/NA	Solid	8015 NM	
880-36059-4	BH-3 (3')	Total/NA	Solid	8015 NM	
880-36059-5	BH-3 (4')	Total/NA	Solid	8015 NM	
880-36059-6	BH-3 (5')	Total/NA	Solid	8015 NM	
880-36059-7	BH-3 (6')	Total/NA	Solid	8015 NM	
880-36059-8	BH-3 (7')	Total/NA	Solid	8015 NM	
880-36059-9	BH-3 (8')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 67761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36059-1	BH-3 (0-1')	Soluble	Solid	DI Leach	
880-36059-2	BH-3 (1.5')	Soluble	Solid	DI Leach	
880-36059-3	BH-3 (2')	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
SDG: Eddy County, New Mexico

HPLC/IC (Continued)

Leach Batch: 67761 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36059-4	BH-3 (3')	Soluble	Solid	DI Leach	
880-36059-5	BH-3 (4')	Soluble	Solid	DI Leach	
880-36059-6	BH-3 (5')	Soluble	Solid	DI Leach	
880-36059-7	BH-3 (6')	Soluble	Solid	DI Leach	
880-36059-8	BH-3 (7')	Soluble	Solid	DI Leach	
880-36059-9	BH-3 (8')	Soluble	Solid	DI Leach	
MB 880-67761/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-67761/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-67761/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-36059-4 MS	BH-3 (3')	Soluble	Solid	DI Leach	
880-36059-4 MSD	BH-3 (3')	Soluble	Solid	DI Leach	

Analysis Batch: 67823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-36059-1	BH-3 (0-1')	Soluble	Solid	300.0	67761
880-36059-2	BH-3 (1.5')	Soluble	Solid	300.0	67761
880-36059-3	BH-3 (2')	Soluble	Solid	300.0	67761
880-36059-4	BH-3 (3')	Soluble	Solid	300.0	67761
880-36059-5	BH-3 (4')	Soluble	Solid	300.0	67761
880-36059-6	BH-3 (5')	Soluble	Solid	300.0	67761
880-36059-7	BH-3 (6')	Soluble	Solid	300.0	67761
880-36059-8	BH-3 (7')	Soluble	Solid	300.0	67761
880-36059-9	BH-3 (8')	Soluble	Solid	300.0	67761
MB 880-67761/1-A	Method Blank	Soluble	Solid	300.0	67761
LCS 880-67761/2-A	Lab Control Sample	Soluble	Solid	300.0	67761
LCSD 880-67761/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	67761
880-36059-4 MS	BH-3 (3')	Soluble	Solid	300.0	67761
880-36059-4 MSD	BH-3 (3')	Soluble	Solid	300.0	67761

Lab Chronicle

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-36059-1

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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	67866	11/28/23 12:57	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67898	11/30/23 01:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68154	11/30/23 01:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			67939	11/28/23 10:39	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	67796	11/27/23 18:02	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67803	11/28/23 10:39	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	67761	11/27/23 14:34	SA	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	67823	11/29/23 05:19	CH	EET MID

Client Sample ID: BH-3 (1.5')

Lab Sample ID: 880-36059-2

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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	67866	11/28/23 12:57	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67898	11/30/23 02:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68154	11/30/23 02:14	SM	EET MID
Total/NA	Analysis	8015 NM		1			67939	11/28/23 11:45	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	67796	11/27/23 18:02	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67803	11/28/23 11:45	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	67761	11/27/23 14:34	SA	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	67823	11/29/23 05:25	CH	EET MID

Client Sample ID: BH-3 (2')

Lab Sample ID: 880-36059-3

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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	67866	11/28/23 12:57	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67898	11/30/23 02:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68154	11/30/23 02:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			67939	11/28/23 12:08	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	67796	11/27/23 18:02	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67803	11/28/23 12:08	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	67761	11/27/23 14:34	SA	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	67823	11/29/23 05:31	CH	EET MID

Client Sample ID: BH-3 (3')

Lab Sample ID: 880-36059-4

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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	67866	11/28/23 12:57	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67898	11/30/23 03:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68154	11/30/23 03:05	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-3 (3')

Lab Sample ID: 880-36059-4

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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			67939	11/28/23 12:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	67796	11/27/23 18:02	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67803	11/28/23 12:30	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	67761	11/27/23 14:34	SA	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	67823	11/29/23 05:36	CH	EET MID

Client Sample ID: BH-3 (4')

Lab Sample ID: 880-36059-5

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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	67866	11/28/23 12:57	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67898	11/30/23 03:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68154	11/30/23 03:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			67939	11/28/23 12:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	67796	11/27/23 18:02	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67803	11/28/23 12:52	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	67761	11/27/23 14:34	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67823	11/29/23 12:06	CH	EET MID

Client Sample ID: BH-3 (5')

Lab Sample ID: 880-36059-6

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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	67866	11/28/23 12:57	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67898	11/30/23 03:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68154	11/30/23 03:57	SM	EET MID
Total/NA	Analysis	8015 NM		1			67939	11/28/23 13:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	67796	11/27/23 18:02	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67803	11/28/23 13:14	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	67761	11/27/23 14:34	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67823	11/29/23 12:12	CH	EET MID

Client Sample ID: BH-3 (6')

Lab Sample ID: 880-36059-7

Date Collected: 11/20/23 00:00

Matrix: Solid

Date Received: 11/21/23 10:01

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	67866	11/28/23 12:57	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67898	11/30/23 04:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68154	11/30/23 04:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			67939	11/28/23 13:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	67796	11/27/23 18:02	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67803	11/28/23 13:36	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-3 (6')
Date Collected: 11/20/23 00:00
Date Received: 11/21/23 10:01

Lab Sample ID: 880-36059-7
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			4.99 g	50 mL	67761	11/27/23 14:34	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67823	11/29/23 12:17	CH	EET MID

Client Sample ID: BH-3 (7')
Date Collected: 11/20/23 00:00
Date Received: 11/21/23 10:01

Lab Sample ID: 880-36059-8
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	67866	11/28/23 12:57	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67898	11/30/23 04:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68154	11/30/23 04:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			67939	11/28/23 13:59	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	67796	11/27/23 18:02	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67803	11/28/23 13:59	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	67761	11/27/23 14:34	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67823	11/29/23 12:23	CH	EET MID

Client Sample ID: BH-3 (8')
Date Collected: 11/20/23 00:00
Date Received: 11/21/23 10:01

Lab Sample ID: 880-36059-9
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	67866	11/28/23 12:57	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67898	11/30/23 05:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68154	11/30/23 05:14	SM	EET MID
Total/NA	Analysis	8015 NM		1			67939	11/28/23 14:21	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	67796	11/27/23 18:02	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67803	11/28/23 14:21	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	67761	11/27/23 14:34	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67823	11/29/23 12:29	CH	EET MID

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

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
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	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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

Method Summary

Client: Carmona Resources

Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36059-1

SDG: Eddy County, New Mexico

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Carmona Resources
Project/Site: Southern Comfort 5 6 10 12

Job ID: 880-36059-1
SDG: Eddy County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-36059-1	BH-3 (0-1')	Solid	11/20/23 00:00	11/21/23 10:01
880-36059-2	BH-3 (1.5')	Solid	11/20/23 00:00	11/21/23 10:01
880-36059-3	BH-3 (2')	Solid	11/20/23 00:00	11/21/23 10:01
880-36059-4	BH-3 (3')	Solid	11/20/23 00:00	11/21/23 10:01
880-36059-5	BH-3 (4')	Solid	11/20/23 00:00	11/21/23 10:01
880-36059-6	BH-3 (5')	Solid	11/20/23 00:00	11/21/23 10:01
880-36059-7	BH-3 (6')	Solid	11/20/23 00:00	11/21/23 10:01
880-36059-8	BH-3 (7')	Solid	11/20/23 00:00	11/21/23 10:01
880-36059-9	BH-3 (8')	Solid	11/20/23 00:00	11/21/23 10:01



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

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

Program: UST/ST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	Work Order Comments
State of Project:	
Reporting Level I ☐ Level II ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other	

880-36059 Chain of Custody



Page 1 of 1

Project Name	Southern Comfort 5 6 10 12	Turn Around	☒ Routine ☐ Rush	Pres. Code		ANALYSIS REQUEST												Preservative Codes			
Project Number	2173	Due Date	5 day	Parameters														None NO	DI Water H ₂ O		
Project Location	Eddy County, New Mexico	Due Date	5 day															Cool Cool	MeOH Me		
Sampler's Name	CCM	Due Date	5 day															HCL HC	HNO ₃ HN		
PO #		Due Date	5 day															H ₂ SO ₄ H ₂	NaOH Na		
SAMPLE RECEIPT	Temp Blank	Yes ☒ No ☐	Thermometer ID	Yes ☒ No ☐	Wet Ice	Yes ☒ No ☐												H ₃ PO ₄ HP			
	Received Intact	Yes ☒ No ☐	Correction Factor	Yes ☒ No ☐														NaHSO ₄ NABIS			
	Cooler Custody Seals	Yes ☒ No ☐	Temperature Reading	Yes ☒ No ☐														Na ₂ S ₂ O ₃ NaSO ₃			
	Sample Custody Seals	Yes ☒ No ☐	Corrected Temperature	Yes ☒ No ☐														Zn Acetate+NaOH Zn			
	Total Containers																	NaOH+Ascorbic Acid SAPC			
Sample Identification																					
Sample Identification	Date	Time	Soil	Water	Grab/Comp	# of Cont	BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 300 0												
BH-3 (0-1')	11/20/2023		X		G	1	X	X	X												
BH-3 (1-5')	11/20/2023		X		G	1	X	X	X												
BH-3 (2')	11/20/2023		X		G	1	X	X	X												
BH-3 (3')	11/20/2023		X		G	1	X	X	X												
BH-3 (4')	11/20/2023		X		G	1	X	X	X												
BH-3 (5')	11/20/2023		X		G	1	X	X	X												
BH-3 (6')	11/20/2023		X		G	1	X	X	X												
BH-3 (7')	11/20/2023		X		G	1	X	X	X												
BH-3 (8')	11/20/2023		X		G	1	X	X	X												

Comments Email results to Mike Carmona mcarmona@carmonaresources.com, Conner Moehring cmoehring@carmonaresources.com, Clint Merritt merrittc@carmonaresources.com

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
<i>Sharon Hays</i>	11-21-23	<i>[Signature]</i>	1001

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-36059-1

SDG Number: Eddy County, New Mexico

Login Number: 36059

List Source: Eurofins Midland

List Number: 1

Creator: Rodriguez, Leticia

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	

APPENDIX F

CARMONA RESOURCES





Project Name :	Souther Comfor 5 6 10 12 (BH-1)	Date :	Monday, November 20, 2023
Project No. :	2173	Sampler :	Ivan Ramos
Location :	Eddy County, New Mexico	Driller :	HR Enterprises
Coordinates :	32.187359°, -104.038782°	Method :	Air Rotary
Elevation :	2,897'		

Depth (ft.)	WL	Soil Description	Lithology	Depth (ft.)	WL	Soil Description	Lithology
0		White to Light brown, soft, loose, sandy clay with >25% small gypsum fragements. Dry, no odor, no organics (SC).		50			
5		White to Light brown, soft, loose, sandy clay with >25% small gypsum fragements. Dry, no odor, no organics (SC).		55			
10				60			
15				65			
20				70			
25				75			
30				80			
35				85			
40				90			
45				95			
50				105			

Comments : Boring terminated at 5'.



Project Name :	Souther Comfor 5 6 10 12 (BH-2)	Date :	Monday, November 20, 2023
Project No. :	2173	Sampler :	Ivan Ramos
Location :	Eddy County, New Mexico	Driller :	HR Enterprises
Coordinates :	32.187301°, -104.038791°	Method :	Air Rotary
Elevation :	2,897'		

Depth (ft.)	WL	Soil Description	Lithology	Depth (ft.)	WL	Soil Description	Lithology
0		White to Light brown, soft, loose, sandy clay with >25% small gypsum fragementes. Dry, no odor, no organics (SC).		50			
5		White to Light brown, soft, loose, sandy clay with >25% small gypsum fragementes. Dry, no odor, no organics (SC).		55			
10				60			
15				65			
20				70			
25				75			
30				80			
35				85			
40				90			
45				95			
50				105			

Comments : Boring terminated at 6'.



Project Name :	Souther Comfor 5 6 10 12 (BH-3)	Date :	Monday, November 20, 2023
Project No. :	2173	Sampler :	Ivan Ramos
Location :	Eddy County, New Mexico	Driller :	HR Enterprises
Coordinates :	32.187304°, -104.038879°	Method :	Air Rotary
Elevation :	2,897'		

Depth (ft.)	WL	Soil Description	Lithology	Depth (ft.)	WL	Soil Description	Lithology
0		White to Light brown, soft, loose, sandy clay with >25% small gypsum fragementes. Dry, no odor, no organics (SC).		50			
5		White to Light brown, soft, loose, sandy clay with >25% small gypsum fragementes. Dry, no odor, no organics (SC).		55			
10				60			
15				65			
20				70			
25				75			
30				80			
35				85			
40				90			
45				95			
50				105			

Comments : Boring terminated at 8'.

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QUESTIONS

Action 293178

QUESTIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID:
	372098
	Action Number:
	293178
Action Type:	
[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2329764387
Incident Name	NAPP2329764387 SOUTHERN COMFORT 561012 TB @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Received
Incident Facility	[fAPP2126039206] SOUTHERN COMFORT 561012 TB

Location of Release Source	
Please answer all the questions in this group.	
Site Name	SOUTHERN COMFORT 561012 TB
Date Release Discovered	10/21/2023
Surface Owner	State

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Corrosion Flow Line - Production Produced Water Released: 24 BBL Recovered: 0 BBL Lost: 24 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 293178

QUESTIONS (continued)

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID:	372098
	Action Number:	293178
	Action Type:	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

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

Initial Response

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

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

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

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

I hereby agree and sign off to the above statement	Name: Isaac Castro Email: icastro@marathonoil.com Date: 12/11/2023
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QUESTIONS, Page 3

Action 293178

QUESTIONS (continued)

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 293178
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS**Site Characterization**

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

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 75 and 100 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between ½ and 1 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between ½ and 1 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 1 and 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Medium
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan

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

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride	(EPA 300.0 or SM4500 Cl B)	7740
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	59.3
GRO+DRO	(EPA SW-846 Method 8015M)	59.3
BTEX	(EPA SW-846 Method 8021B or 8260B)	0
Benzene	(EPA SW-846 Method 8021B or 8260B)	0

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

On what estimated date will the remediation commence	01/21/2024
On what date will (or did) the final sampling or liner inspection occur	01/23/2024
On what date will (or was) the remediation complete(d)	01/21/2024
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	1454
What is the estimated volume (in cubic yards) that will be remediated	250

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

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

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QUESTIONS, Page 4

Action 293178

QUESTIONS (continued)

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID:	372098
	Action Number:	293178
	Action Type:	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS**Remediation Plan (continued)**

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

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

(Select all answers below that apply.)

(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	HALFWAY DISPOSAL AND LANDFILL [fEEM0112334510]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.

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

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

I hereby agree and sign off to the above statement	Name: Isaac Castro Email: icaastro@marathonoil.com Date: 12/11/2023
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The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 5

Action 293178

QUESTIONS (continued)

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 293178
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

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

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QUESTIONS, Page 6

Action 293178

QUESTIONS (continued)

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 293178
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	314701
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	02/20/2024
What was the (estimated) number of samples that were to be gathered	14
What was the sampling surface area in square feet	1454

Remediation Closure Request

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

Requesting a remediation closure approval with this submission	No
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CONDITIONS

Action 293178

CONDITIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID:
	372098
	Action Number:
	293178
Action Type:	
[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	

CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is Conditionally Approved. All samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Floor confirmation samples should be delineated/excavated to meet closure criteria standards from Table 1 of the OCD Spill Rule for site assessment/characterization/proven depth to water determination. Sidewall/Edge samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. Please collect confirmation samples, representing no more than 200 ft2. All sidewall samples should be taken from the sidewall of the excavation. Please make sure that the edge of the release extent is accurately defined. All off pad areas must meet reclamation standards set forth in the OCD Spill Rule. The work will need to occur in 90 days after the report has been reviewed.	3/7/2024