	Page 1 of 38	33
Incident ID	nOY1809252064	
District RP	1RP-5004	
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?	> 55 (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 ver contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	tical extents of soil

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
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

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.

Received by OCD: 11/2/2023 1:35:17 PM Form C-141 State of New Mexico Page 4 Oil Conservation Division

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Incident ID	nOY1809252064
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Application ID	

I hereby certify that the information given above is true and complete to the beregulations all operators are required to report and/or file certain release notific public health or the environment. The acceptance of a C-141 report by the OC failed to adequately investigate and remediate contamination that pose a threat addition, OCD acceptance of a C-141 report does not relieve the operator of resand/or regulations.	ations and perform corrective actions for releases which may endanger D does not relieve the operator of liability should their operations have to groundwater, surface water, human health or the environment. In
Printed Name: Melodie Sanjari	Title: Environmental Professional
Signature: <u>Melodie Sanjari</u>	Date: 11/2/2023
email:msanjari@marathonoil.com	Telephone: <u>575-988-8753</u>
OCD Only	
Received by: Shelly Wells	Date: <u>11/2/2023</u>

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Incident ID	nOY1809252064
District RP	1RP-5004
Facility ID	
Application ID	

Closure

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

Closure Report Attachment Checklist: Each of the following item	s must be included in the closure report.										
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 tand regulations all operators are required to report and/or file certain remay endanger public health or the environment. The acceptance of a Cashould their operations have failed to adequately investigate and remediation human health or the environment. In addition, OCD acceptance of a Cacompliance with any other federal, state, or local laws and/or regulation restore, reclaim, and re-vegetate the impacted surface area to the conditaccordance with 19.15.29.13 NMAC including notification to the OCD Printed Name: Melodie Sanjari	C-141 report by the OCD does not relieve the operator of liability liate contamination that pose a threat to groundwater, surface water, -141 report does not relieve the operator of responsibility for ns. The responsible party acknowledges they must substantially tions that existed prior to the release or their final land use in										
Signature: <u>Melodie Sanjari</u>	Date 11/2/2023										
Signature	Date 11/2/2023										
email: <u>msanjari@marathonoil.com</u>	Telephone: <u>575-988-8753</u>										
OCD Only											
Received by: Shelly Wells	Date: 11/2/2023										
	liability should their operations have failed to adequately investigate and er, human health, or the environment nor does not relieve the responsible egulations.										
Closure Approved by:	Date:										
Printed Name:	Title:										



November 1, 2023

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

Re: Amendment to Closure Report
Nighthawk State Com 3H
Marathon Oil Corporation
NOY1809252064 & NOY1816556237
1RP-5004 & 1RP-5094
Site Location: Unit O, S20, T18S, R35E
(Lat 32.7266235°, Long -103.4785538°)
Lea County, New Mexico

To Whom It May Concern:

On behalf of Marathon Oil Corporation (Marathon), Carmona Resource, LLC has prepared this letter to document additional site activities for the Nighthawk State Com 3H. The site is located at the GPS 32.7266235°, -103.4785538° within Unit O, S20, T18S, R35E in Lea County, New Mexico.

1.0 Site Information and Background

1RP-5004 / NOY1809252064 & NOY1816556237/1RP-5094

On May 26, 2023, and June 8, 2023, the New Mexico OCD denied the closure report for the following reason: "When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided. If evidence of depth to groundwater within a ½ mile radius of the site cannot be provided, impacted soils will need to meet Table 1 Closure Criteria for groundwater at a depth of 50 feet or less. A deferral cannot be granted on a release if the depth to water is <50' depth to groundwater. The point in question for NOY1816556237 (1RP-5094) is BH18-01 on the map (Figure 2). This point returned results above the most stringent closure standards/reclamation standards that drive horizontal delineation. Please submit a revised closure report by 9/6/2023."

On September 26, 2023, for incident number NOY1809252064 (1RP-5004) the New Mexico OCD denied the closure report for the following reason: "The report does not address the reason for rejection sent to the operator on 3/15/2023. When using the closure standards according to 19.15.29 NMAC the release must be laterally delineated to the most stringent closure criteria as discussed in 19.15.29.13 D. (1) NMAC." Horizontal delineation submitted was incomplete for BH15-03 and did not meet the requirements of 19.15.29.11 NMAC. The values for determination of horizontal impact are derived by either approved "background" values or Table I Closure Criteria for releases where groundwater is at a depth of 50 feet or less. Laboratory data must be provided as evidence of delineation efforts. Any sample exceeding approved

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



"background" values or Table I Closure Criteria for releases where groundwater is at a depth of 50 feet or less requires additional samples for horizontal delineation. Clarify whether BH18-02 was fully encompassed by the excavation. If it was not further horizontal delineation at BH18-02 will need to be completed. The February 2019 report written by Vertex states "The liner within the heater treater containment area was inspected for integrity and found to be ripped in two (2) places." Pictures included in the report also show liner integrity was not intact. Per 19.15.29.11 A.(5)(b) If the responsible party is unable to demonstrate liner integrity or the release occurred outside of a lined containment area, the responsible party must delineate the release horizontally and vertically using Table I of 19.15.29.12 NMAC constituents or as required by Subparagraph (e) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC based on the type of release. Submit a complete report through the OCD Permitting website by 12/27/2023."

On September 26, 2023, for incident number NOY1816556237 (1RP-5094), the New Mexico OCD denied the closure report for the following reason: "The rejection sent for this incident number on 6/8/2023 stated "The point in question for NOY1816556237 (1RP-5094) is BH18-01 on the map (Figure 2). This point returned results above the most stringent closure standards/reclamation standards that drive horizontal delineation." BH18-01 was not addressed under this submission. Clarify that the samples listed in Table 5 correspond to the samples in Table 1 of the workplan that is uploaded to the Incident file of NOY1816556237. Include the samples on Table 5 on the scaled site map. There is a discrepancy between sample location names. There are 2 samples identified as BH18-01. One of these samples is illustrated on the map in the workplan and was collected on 7/7/2018. The other is located on the tables of the workplan and the closure report and was collected on 5/30/2018. The sample collected on 5/30/2018 is not in the same location as BH18-01 collected on 7/7/2018. This discrepancy will need to be address in the next submittal. The OCD cannot determine if horizontal delineation submitted was completed based on the information provided. The values for determination of horizontal impact are derived by either approved "background" values or Table I Closure Criteria for releases where groundwater is at a depth of 50 feet or less. A visual footprint on the surface is not sufficient to assess the horizontal extent of the release. Laboratory data must be provided as evidence of delineation efforts. Any sample exceeding approved "background" values or Table I Closure Criteria for releases where groundwater is at a depth of 50 feet or less requires additional samples for horizontal delineation. Submit a complete report though the OCD Permitting website by 12/27/2023."

2.0 Site Characterization and Groundwater

The site is located within a low karst area. Based on a review of the New Mexico Office of State Engineers and USGS databases, two known water sources are within a 0.50-mile radius of the location. The nearest identified well is located approximately 0.45 miles North of the site in S20, T18S, R35E and was drilled in 1953. The well has a reported depth to groundwater of 78' below ground surface (ft bgs). A copy of the associated Summary report is attached in Appendix D of the amended report. The nearest identified well is located approximately 0.45 miles North of the site in S20, T18S, R35E and was drilled in 1996. The well has a reported depth to groundwater of 82.10' below ground surface (ft bgs). A copy of the associated Summary report is attached in Appendix D of the amended report. On August 15, 2023, Carmona Resources, LLC was onsite to drill a groundwater determination bore to 55' below ground surface within a 0.50-mile radius of



the location. The groundwater determination bore is located approximately 0.04 miles southeast of the site at 32.726286°, -103.479090° in S20, T18S, and R35E. The bore was left open for 72 hours and tagged with a water level meter. The bore has shown no signs of water at a depth of 55' below the ground surface (bgs). A copy of the groundwater determination bore log is attached in Appendix D of the amended report. The location of the groundwater determination bore can be seen in Figure 3C.

3.0 NMAC Regulatory Criteria

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

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

4.0 Site Assessment Activities

On August 15, 2023, Carmona Resources, LLC performed site assessment activities to evaluate soil impacts stemming from the release. Two (2) sample points (BH-1 and BH-4) were advanced to a depth ranging from the surface to 4.0' bgs inside the release area at BH 18-01 (05/30/2018) and BH 18-05 (05/30/2018) to assess the vertical extent. See Figure 3A and Figure 3B 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 of the amended report.

On October 4, 2023, Carmona Resources, LLC returned to the site and performed site assessment activities to evaluate soil impacts stemming from the release. Two (2) sample points (BH-2 and BH-5) were advanced to a depth ranging from the surface to 4.0' bgs outside the release area at BH 18-01 (07/07/2018) and BH 18-03 (05/30/2018) to assess the vertical extent. Additionally, twelve (12) horizontal samples (H-1 through H-12) were collected surrounding both releases to laterally delineate the extent of both incidents. See Figure 3A and Figure 3B 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 of the amended report. The text of the original report can be found in Appendix F of this report. Labs and photologs can be found in the original report.



In order to address all concerns stemming from the rejection on September 26, 2023, Carmona Resources has found the following:

- All horizontal samples collected on October 4, 2023 were below the most stringent closure criteria for both incidents.
- Horizontal and vertical delineation was achieved for BH 18-03 (5/30/2018) with the
 installation of BH-5 on October 4, 2023. The sample point of BH 18-03 has undergone
 natural attenuation from precipitation and weather events from the initial sampling
 conducted on May 30, 2018, to the present.
- The sample point BH 18-02 (05/30/2018) was encompassed by the excavation conducted on November 14, 2018. See Figure 3A.
- Liner integrity was restored at the time of remediation conducted November 14,2018.
- The sample point BH 18-01 (07/07/2018) that was submitted under Vertex's work plan with incident number NOY1816556237 was encompassed by remediation activities conducted on November 14, 2018. See Figure 3B.
- The sample results in Table 5, on page 5 of the original report, are identical to the sample results that were submitted via work plan under incident number POY1816556459. See Figure 3B for sample locations that correspond to the samples in Table 1 of the work plan that was uploaded to Incident file NOY1816556237.
- All samples that were collected during the initial site assessment on May 30, 2018, with the exception of BH 18-01 (05/30/2018), were below the regulatory requirements for TPH, BTEX, and chloride. The sample point of BH 18-01 (05/30/2018) has undergone natural attenuation from precipitation and weather events from the initial sampling conducted on May 30, 2018, to the present day.
- All samples that were collected during remediation activities on November 14, 2018
 (North Wall, South Wall, West Wall, and East Wall) in Figure 2 of the original closure
 report submitted by Vertex were below the regulatory requirements for TPH, BTEX,
 and chloride.
- All samples collected during the site reassessment on August 15, 2023, and October 4, 2023, were below the regulatory requirements for TPH, BTEX, and chloride. Refer to Table 1.



5.0 Conclusions

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

Sincerely,

Carmona Resources, LLC

Mike Carmona

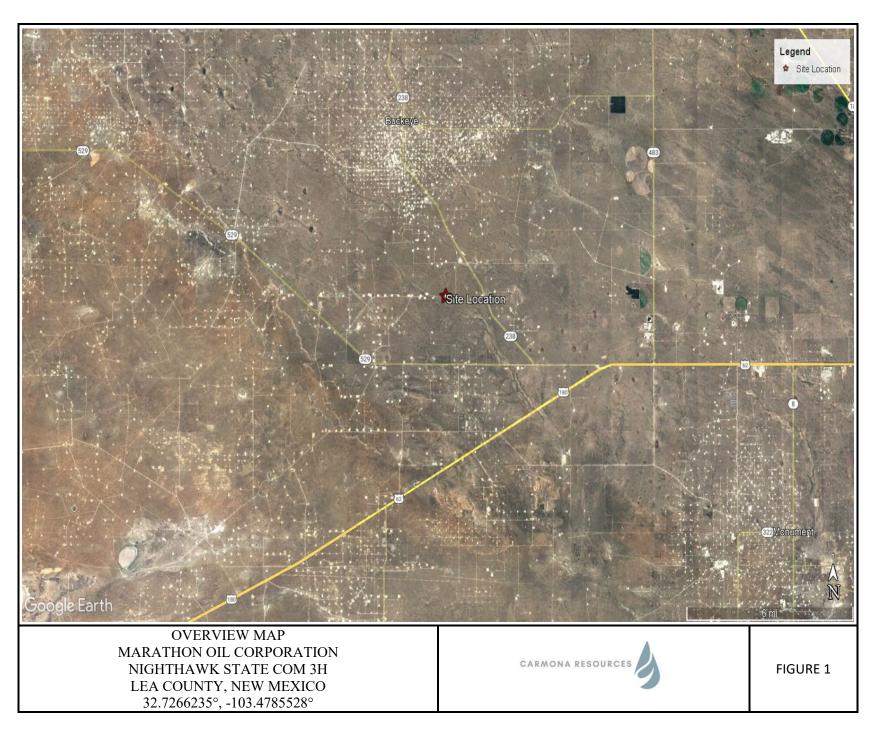
Environmental Manager

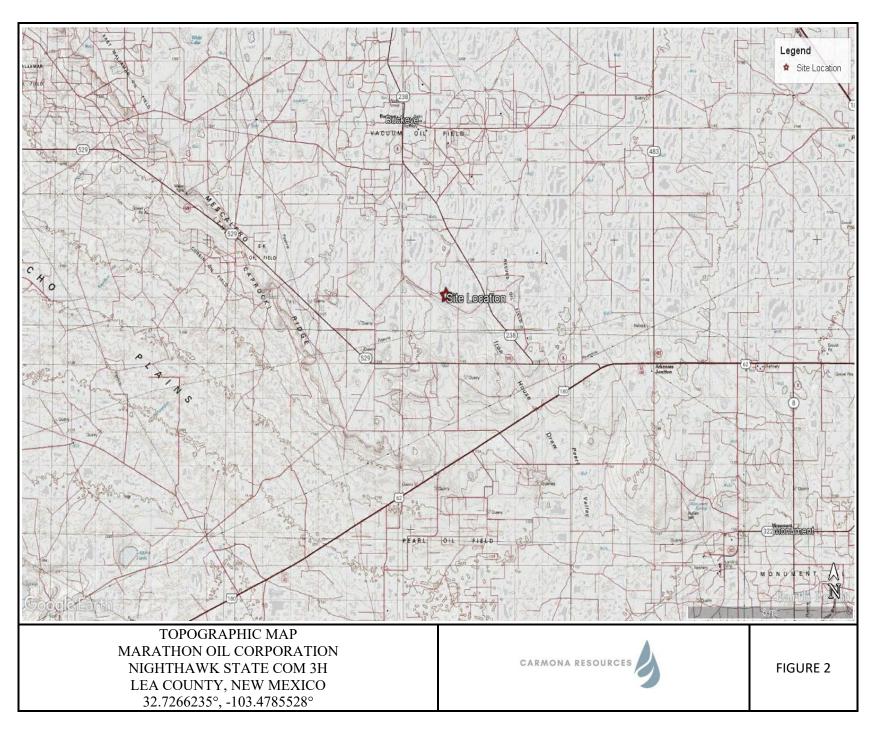
Clinton Merritt

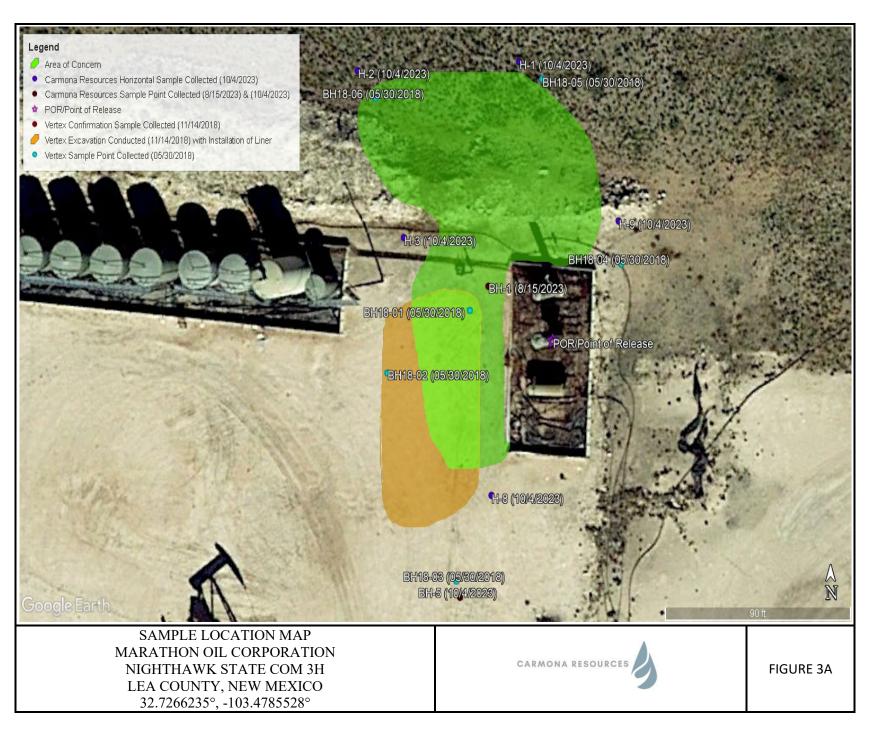
Sr. Project Manager

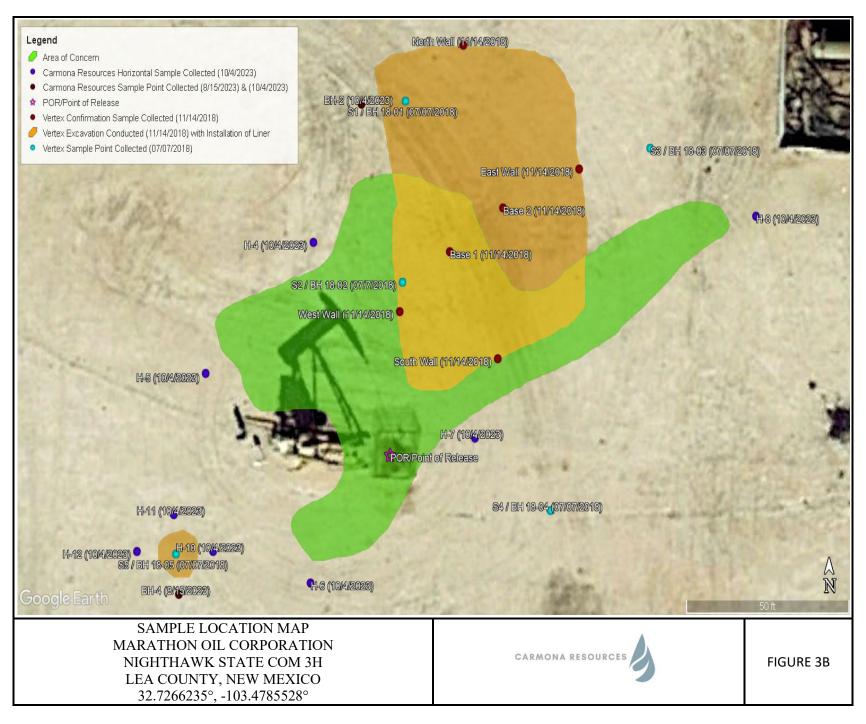
FIGURES

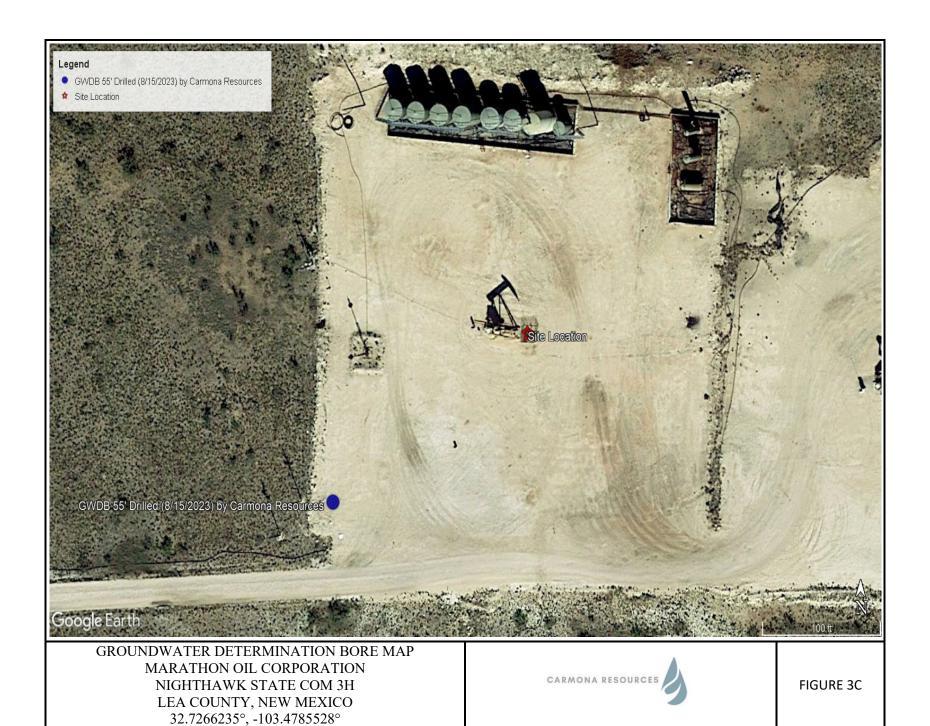
CARMONA RESOURCES











APPENDIX B

CARMONA RESOURCES

Table 1 **Marathon Oil Corporation** Night Hawk 3H Lea County, New Mexico

Commis ID	Data	Dougth (ft)		TPH	(mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Date	Depth (ft)	GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
	8/15/2023	0-1	<50.1	51.1	<50.1	51.1	<0.00201	0.00708	<0.00201	<0.00402	0.00708	8,880
BH-1	"	2	<50.2	<50.2	<50.2	<50.2	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	455
	"	4	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	142
	5/30/2023	0	-	-	-	<15.0	<0.00199	-	-	-	<0.00199	23,900
*BH 18-01	"	2	-	-	-	<15.0	<0.00200	-	-	-	<0.00200	387
	"	4	-	-	-	-	-	-	-	-	-	2,480
	10/4/2023	0-1	<49.6	<49.6	<49.6	<49.6	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	206
BH-2	"	2	<50.3	<50.3	<50.3	<50.3	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	101
	ıı	4	<50.5	<50.5	<50.5	<50.5	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	106
	7/7/2018	0	<15.0	68.9	<15.0	68.9	<0.00202	-	-	-	<0.00202	5,910
*BH 18-01	"	2	<14.9	<14.9	<14.9	<14.9	<0.00201	-	-	-	<0.00201	1,700
	II .	4	<15.0	40.2	<15.0	40.2	<0.00199	-	-	-	<0.00199	1,630
	8/15/2023	0-1	-	-	-	-	-	-	-	-	-	130
BH-4	"	2	-	-	-	-	-	-	-	-	-	75.5
	"	4	-	-	-	-	-	-	-	-	-	285
*BU 40 05	5/30/2023	0	-	-	-	-	<0.00201	-	-	-	<0.00201	89.0
*BH 18-05	"	2	-	-	1	-	<0.00200	-	-	-	<0.00200	48.4
BH-5	10/4/2023	0-1	<49.6	<49.6	<49.6	<49.6	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	261
*BU 40.00	5/30/2023	0	-	-	-	-	<0.00199	-	-	-	<0.00199	4,360
*BH 18-03	"	2	-	-	-	-	<0.00200	-	-	-	<0.00200	518
Regulator	y Criteria ^A		1,000	ng/kg		2,500 mg/kg	10 mg/kg				50 mg/kg	10,000 mg/kg

(-) Not Analyzed

A – Table 1 - 19.15.29 NMAC mg/kg - milligram per kilogram TPH- Total Petroleum Hydrocarbons ft-feet (BH) - Bore Hole

*Sample Point Collected by Vertex

Removed

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Table 1
Marathon Oil Corporation
Night Hawk 3H
Lea County, New Mexico

Commis ID	Data	Donath (ft)		TPH (mg/		TPH (mg/kg)			Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Date	Depth (ft)	GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)		
H-1	10/4/2023	0 - 0.5	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	136		
H-2	10/4/2023	0 - 0.5	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	334		
H-3	10/4/2023	0 - 0.5	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	246		
H-4	10/4/2023	0 - 0.5	<50.5	<50.5	<50.5	<50.5	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	290		
H-5	10/4/2023	0 - 0.5	<50.5	<50.5	<50.5	<50.5	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	287		
H-6	10/4/2023	0 - 0.5	<50.3	<50.3	<50.3	<50.3	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	186		
H-7	10/4/2023	0 - 0.5	<49.6	<49.6	<49.6	<49.6	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	174		
H-8	10/4/2023	0 - 0.5	<49.7	<49.7	<49.7	<49.7	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	192		
H-9	10/4/2023	0 - 0.5	<49.7	<49.7	<49.7	<49.7	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	111		
H-10	10/4/2023	0 - 0.5	<50.5	<50.5	<50.5	<50.5	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	90.4		
H-11	10/4/2023	0 - 0.5	<50.3	<50.3	<50.3	<50.3	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	218		
H-12	10/4/2023	0 - 0.5	<50.3	<50.3	<50.3	<50.3	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	256		
	ry Criteria A	1,000	mg/kg		2,500 mg/kg	10 mg/kg				50 mg/kg	10,000 mg/kg			

(-) Not Analyzed

A – Table 1 - 19.15.29 NMAC mg/kg - milligram per kilogram TPH- Total Petroleum Hydrocarbons ft-feet (H) Horizontals

APPENDIX C

CARMONA RESOURCES

PHOTOGRAPHIC LOG

Marathon Oil Corporation

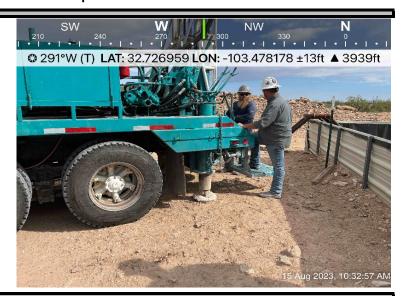
Photograph No. 1

Facility: Nighthawk State Com 3H

County: Lea County, New Mexico

Description:

View West of sample point BH-1.



Photograph No. 2

Facility: Nighthawk State Com 3H

County: Lea County, New Mexico

Description:

View South of the groundwater determination bore.



Photograph No. 3

Facility: Nighthawk State Com 3H

County: Lea County, New Mexico

Description:

View Southwest of the groundwater determination bore.



PHOTOGRAPHIC LOG

Marathon Oil Corporation

Photograph No. 4

Facility: Nighthawk State Com 3H

County: Lea County, New Mexico

Description:

View Southeast of lined facility at heater treaters.



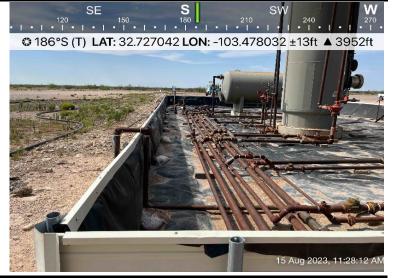
Photograph No. 5

Facility: Nighthawk State Com 3H

County: Lea County, New Mexico

Description:

View South of lined facility at heater treaters.



Photograph No. 6

Facility: Nighthawk State Com 3H

County: Lea County, New Mexico

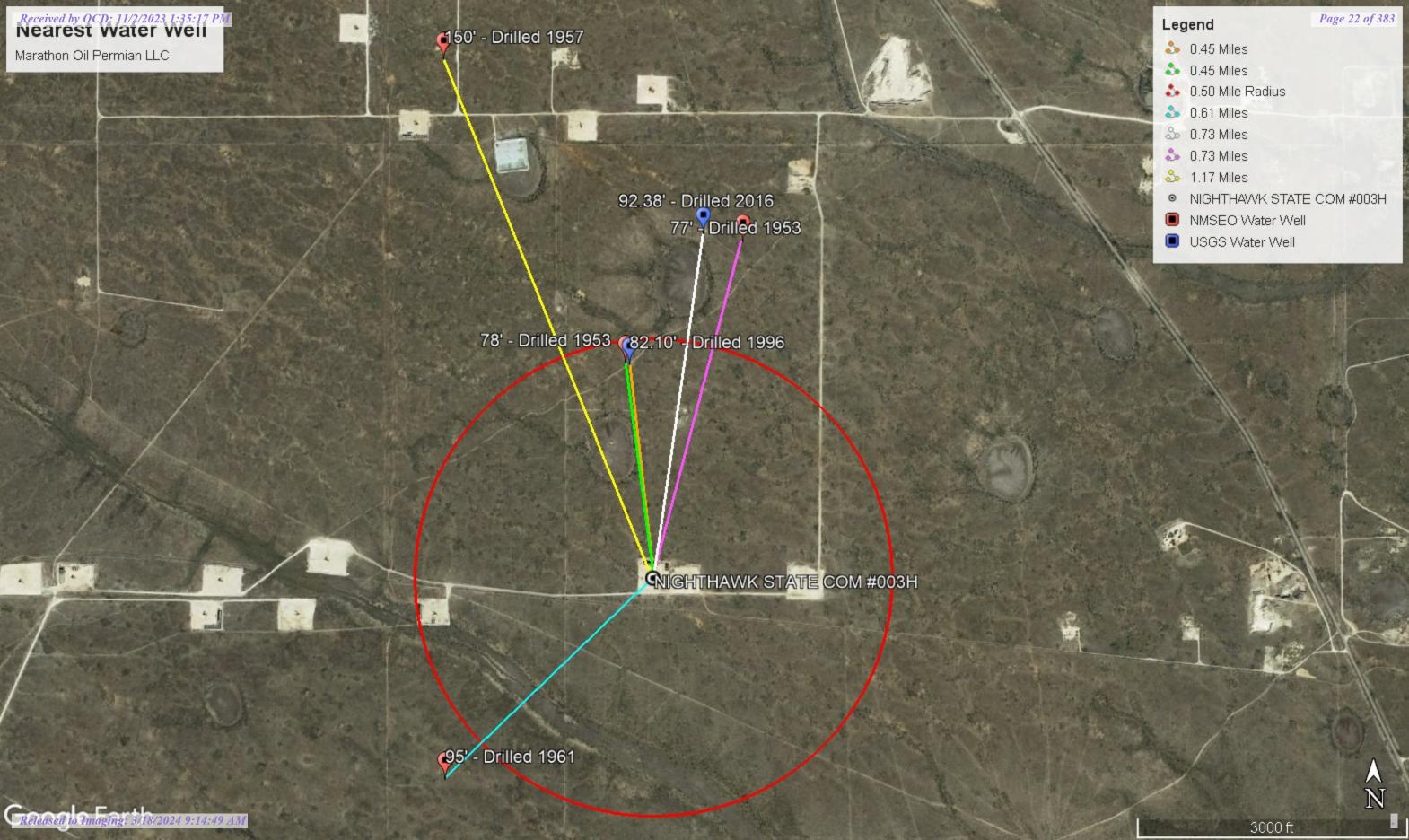
Description:

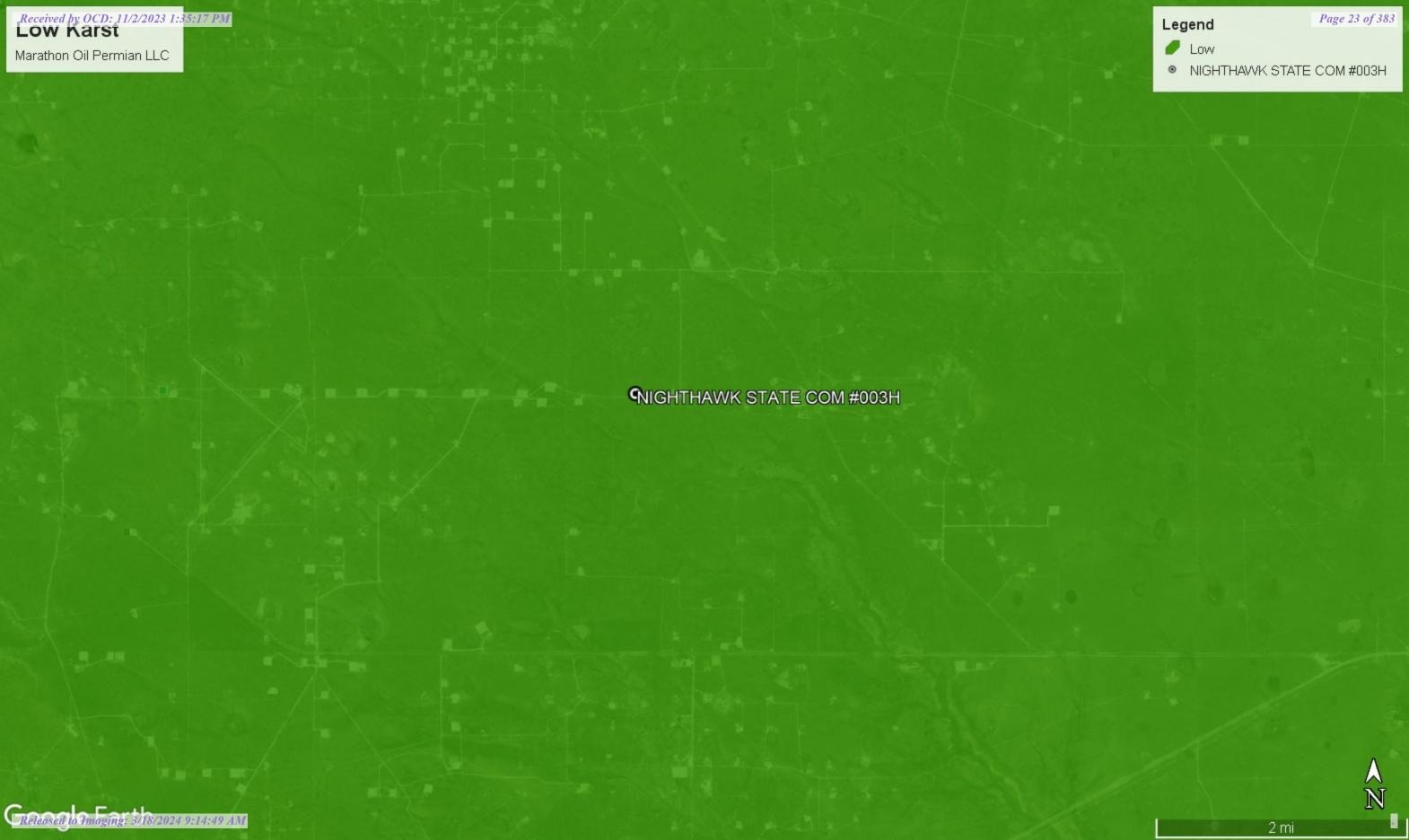
View Southeast of lined facility at heater treaters.



APPENDIX D

CARMONA RESOURCES







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)

water right file.)	close	d)	((quar	ters	s ar	e sr	nalles	st to larg	gest) (NAD83 U	JIM in me	ters)	(1	In feet)	
		POD Sub-		Q	Q	Q								Depth	Depth	Water
POD Number	Code	basin	County	64	16	4 5	Sec	Tws	Rng)		Υ	Distance	Well	Water	Column
L 02053		L	LE				20	18S	35E	64246	4 3622	723* 🎒	726	175	78	97
<u>L 04562</u>		L	LE		3	1	29	18S	35E	64187	4 3621	315* 🎒	979	156	95	61
<u>L 02357</u>		L	LE			2	20	18S	35E	64285	5 3623	137* 🎒	1168	170	77	93
L 03171		L	LE		3	3	17	18S	35E	64183	5 3623	734* 🎒	1879	170	150	20
L 02679		L	LE		4	4	21	18S	35E	64468	0 3622	151* 🎒	2115	200	68	132
L 02679	R	L	LE		4	4	21	18S	35E	64468	0 3622	151* 🌍	2115	200	68	132
L 07928		L	LE	4	4	1	19	18S	35E	64063	9 3622	2915 🌍	2135	175		
L 02680		L	LE		1	2	21	18S	35E	64425	7 3623	357* 🎒	2162	190	59	131
L 09742		L	LE		1	4	17	18S	35E	64247	4 3624	4312 🌍	2310	200		
L 02052		L	LE				17	18S	35E	64243	8 3624	337* 🌍	2336	190	72	118
L 09588		L	LE	4	3	4	16	18S	35E	64434	9 3623	659* 🎒	2429	155	84	71
L 03888		L	LE		3	1	19	18S	35E	64025	3 3622	912* 🎒	2488	107	70	37
L 03772		L	LE		2	2	21	18S	35E	64465	9 3623	361* 🎒	2491	130	60	70
L 03866		L	LE		3	3	22	18S	35E	64508	2 3622	155* 🎒	2516	127	65	62
L 04399		L	LE		3	3	22	18S	35E	64508	2 3622	155* 🎒	2516	90	75	15
L 05156		L	LE		4	1	17	18S	35E	64222	4 3624	545* 🎒	2564	150	90	60
L 12926 POD1		L	LE	2	2	3	25	18S	34E	63983	9 362	1631 🎒	2755	182	117	65
L 03721		L	LE		3	3	18	18S	35E	64024	1 3623	717* 🎒	2891	161	90	71
L 15235 POD1		L	LE	2	4	1	31	18S	35E	64069	6 3619	9795 🎒	2896	162	75	87
L 05810		L	LE		2	3	22	18S	35E	64547	9 3622	564* 🎒	2962	145	95	50
L 05444		L	LE		4	3	32	18S	35E	64231	9 3618	899* 🎒	3115	80	58	22
L 09762		L	LE		3	3	33	18S	35E	64352	6 3618	913* 🎒	3235	160	80	80
L 03783		L	LE				27	18S	35E	64571	0 3621	138* 🎒	3257	115	65	50
L 02678		L	LE		3	4	22	18S	35E	64589	0 3622	166* 🎒	3323	200	58	142
L 02678	R	L	LE		3	4	22	18S	35E	64589	0 3622	166* 🎒	3323	200	58	142
L 02678 POD2	R	L	LE		3	4	22	18S	35E	64589	0 3622	166* 🌍	3323	185	58	127
*LITM leastion was dealered to	D! C		Halm													

*UTM location was derived from PLSS - see Help

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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

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

(quarters are smallest to largest)

(In feet) closed) (NAD83 UTM in meters)

	POD Sub-		^	Q Q							Donth	Depth	Water
POD Number	Code basin C	ounty				Tws	Rng	Х	Υ	Distance	-	-	Column
L 03963	L	LE				18S	35E	645896	3621762* 🎒	3334	127	70	57
L 02678 POD3	L	LE		3 4	22	18S	35E	645902	3622214 🌕	3338	190	154	36
L 14371 POD1	L	LE	1	1 2	05	19S	35E	642616	3618661 🌑	3342	172	60	112
<u>L 06047</u>	L	LE	2	2 1	16	18S	35E	643927	3625066* 🌑	3349	122	65	57
<u>L 00493</u>	L	LE	1	2 1	05	19S	35E	642290	3618663 🌑	3352	100		
L 14200 POD1	L	LE	2	2 2	05	198	35E	642952	3618657 🌑	3368	180	60	120
L 02676	L	LE		1 2	16	18S	35E	644231	3624972* 🌑	3401	175	60	115
L 02679 POD2	L	LE		3 2	22	18S	35E	645876	3622973* 🌕	3445	187	65	122
L 14200 POD2	L	LE	2	2 2	05	198	35E	643291	3618631 🌑	3448	180	60	120
L 02350	L	LE	4	1 3	08	18S	35E	641897	3625650*	3707	216	105	111
L 02677	L	LE		3 4	15	18S	35E	645863	3623780*	3741	194	54	140
<u>L 04794</u>	L	LE		4	07	18S	35E	641200	3625540*	3792	150	95	55
L 02349 POD3	L	LE	4	1 4	07	18S	35E	641225	3625573 🌍	3814	220	142	78
L 02349 POD2	L	LE	4	1 4	07	18S	35E	641091	3625641* 🌕	3926	214	85	129
<u>L 02348</u>	L	LE	3	1 4	09	18S	35E	644116	3625679* 🌍	3986	215	105	110
<u>L 10304</u>	L	LE	1	4 4	09	18S	35E	644526	3625479* 🌍	3987	170	72	98
L 05178	L	LE	4	4 2	05	198	35E	643185	3618063 🌍	3988	142	85	57
									A	D	147.		e1

Average Depth to Water: 80 feet

> Minimum Depth: 54 feet

Maximum Depth: 154 feet

Record Count: 43

UTMNAD83 Radius Search (in meters):

Radius: 4000 Easting (X): 642570 Northing (Y): 3622004

*UTM location was derived from PLSS - see Help

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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

20 18S 35E

X Y

3* 🌍

Driller License: 17

L 02053

Driller Company:

A.M. BRININSTOOL

642464

Driller Name: M.I. SIGNER

THE STOTE SET

01/27/1953 **Drill Finish Date:**

02/13/1953 P

Plug Date:

Log File Date:

Drill Start Date:

02/24/1953

PCW Rcv Date:

Source:

Shallow

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size:

12.00 **Depth Well:**

175 feet

Depth Water:

78 feet

Water Bearing Stratifications:

Top Bottom

Bottom Description

120 130

130 Sandstone/Gravel/Conglomerate

Casing Perforations:

107

Top

Bottom 172

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POINT OF DIVERSION SUMMARY

^{*}UTM location was derived from PLSS - see Help



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- Full News

Groundwater levels for New Mexico

Click to hide state-specific text

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

Search Results -- 1 sites found

Agency code = usgs site_no list =

324420103281501

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 324420103281501 18S.35E.20.41111

Lea County, New Mexico

1954-01-11

1954-03-02

1954-03-02

Latitude 32°43'59", Longitude 103°28'46" NAD27

Land-surface elevation 3,937.00 feet above NGVD29

The depth of the well is 175 feet below land surface.

This well is completed in the High Plains aguifer (N100HGHPLN) national aguifer.

This well is completed in the Ogallala Formation (1210GLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data

Reselect perio	<u>od</u>									
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
1953-09-11		D	62610		3861.18	NGVD29	1	Z		
1953-09-11		D	62611		3862.74	NAVD88	1	Z		
1953-09-11		D	72019	75.82			1	Z		
1953-10-07		D	62610		3861.23	NGVD29	1	Z		
1953-10-07		D	62611		3862.79	NAVD88	1	Z		
1953-10-07		D	72019	75.77			1	Z		
1953-11-20		D	62610		3861.24	NGVD29	1	Z		
1953-11-20		D	62611		3862.80	NAVD88	1	Z		
1953-11-20		D	72019	75.76			1	Z		
1954-01-11		D	62610		3861.23	NGVD29	1	Z		
1954-01-11		D	62611		3862.79	NAVD88	1	Z		

3861.15

3862.71

72019

62610

62611

75.77

D

D

D

Z

Z

Z

1

1

NGVD29

NAVD88

Date	Time	? Water-level date-time accuracy	Pa	rameter de	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum
954-03-02	D	72019	75.85			1	Z
954-05-05	D	62610	75.05	3861.13	NGVD29	1	Z
954-05-05	D	62611	75.07	3862.69	NAVD88	1	Z
954-05-05	D D	72019	75.87	2061 22	NCVD20	1	Z Z
954-07-13	D	62610		3861.23	NGVD29	1	Z
954-07-13		62611	75 77	3862.79	NAVD88	1	
954-07-13	D D	72019	75.77	2061 10	NCVD20	1	Z Z
954-09-14		62610		3861.18	NGVD29	1	
954-09-14	D	62611	75.00	3862.74	NAVD88	1	Z
954-09-14	D	72019	75.82	2064.45	NOV/DOG	1	Z
954-11-09	D	62610		3861.15	NGVD29	1	Z
954-11-09	D	62611		3862.71	NAVD88	1	Z
954-11-09	D	72019	75.85			1	Z
955-01-06	D	62610		3861.19	NGVD29	1	Z
955-01-06	D	62611		3862.75	NAVD88	1	Z
955-01-06	D	72019	75.81			1	Z
955-03-19	D	62610		3861.24	NGVD29	1	Z
955-03-19	D	62611		3862.80	NAVD88	1	Z
955-03-19	D	72019	75.76			1	Z
955-05-28	D	62610		3861.15	NGVD29	1	Z
955-05-28	D	62611		3862.71	NAVD88	1	Z
955-05-28	D	72019	75.85			1	Z
955-07-15	D	62610		3861.17	NGVD29	1	Z
955-07-15	D	62611		3862.73	NAVD88	1	Z
955-07-15	D	72019	75.83			1	Z
955-09-22	D	62610		3861.21	NGVD29	1	Z
955-09-22	D	62611		3862.77	NAVD88	1	Z
955-09-22	D	72019	75.79			1	Z
955-11-28	D	62610		3861.21	NGVD29	1	Z
955-11-28	D	62611		3862.77	NAVD88	1	Z
955-11-28	D	72019	75.79			1	Z
956-01-05	D	62610		3861.27	NGVD29	1	Z
956-01-05	D	62611		3862.83	NAVD88	1	Z
956-01-05	D	72019	75.73			1	Z
956-03-14	D	62610		3861.30	NGVD29	1	Z
956-03-14	D	62611		3862.86	NAVD88	1	Z
956-03-14	D	72019	75.70			1	Z
956-05-09	D	62610		3861.22	NGVD29	1	Z
956-05-09	D	62611		3862.78	NAVD88	1	Z
956-05-09	D	72019	75.78			1	Z
956-07-26	D	62610		3861.21	NGVD29	1	Z
956-07-26	D	62611		3862.77	NAVD88	1	Z
956-07-26	D	72019	75.79			1	Z
956-09-06	D	62610		3861.26	NGVD29	1	Z
956-09-06	D	62611		3862.82	NAVD88	1	Z
956-09-06	D	72019	75.74		30	1	Z
956-11-30	D	62610	, 5.7 ¬	3861.22	NGVD29	1	Z
956-11-30	D	62611		3862.78	NAVD88	1	Z
			75 70	J002./0	NAV DOO		
956-11-30	D	72019	75.78			1	Z

8/23, 12:46 PM	11/2/2023 1.33.17	1 1/1	USGS	Froundwater for	New Mexico: Wate	r Levels 1 sites	1 48	e 27 0j 3
Date	Time	? Water-level date-time accuracy		rameter de	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? S
1057 01 12	D	62611		2062 70	NAVD88	1	7	
1957-01-12 1957-01-12	D D	62611 72019	75.77	3862.79	NAVDOO	1	Z Z	
1958-01-14	D	62610	73.77	3861.15	NGVD29	1	Z	
1958-01-14	D	62611		3862.71	NAVD88	1	Z	
1958-01-14	D	72019	75.85	3002.71	NAVDOO	1	Z	
1960-01-15	D	62610	73.03	3861.20	NGVD29	1	Z	
1960-01-15	D	62611		3862.76	NAVD88	1	Z	
1960-01-15	D	72019	75.80	3602.76	NAVDOO	1	Z	
1961-01-17	D	62610	73.80	3861.30	NGVD29	1	Z	
	D	62611			NAVD88		Z	
1961-01-17 1961-01-17	D	72019	75.70	3862.86	INAVDOO	1	Z	
	D	62610	75.70	3861.14	NGVD29	1	Z	
1962-01-16 1962-01-16	D	62611		3862.70	NAVD88		Z	
1962-01-16	D	72019	75.86	3802.70	NAVDOO	1	Z	
			73.80	2060.01	NCVD20	1	Z	
1967-09-20	D	62610		3860.81	NGVD29	1		
1967-09-20	D	62611	76 10	3862.37	NAVD88	1	Z Z	
1967-09-20	D	72019	76.19	20C0 F1	NCVD20	1		
1971-01-20	D	62610		3860.51	NGVD29	1	Z	
1971-01-20	D	62611	76.40	3862.07	NAVD88	1	Z	
1971-01-20	D	72019	76.49	2060.45	NOVE	1	Z	
1976-02-12	D	62610		3860.15	NGVD29	1	Z	
1976-02-12	D	62611	76.05	3861.71	NAVD88	1	Z	
1976-02-12	D	72019	76.85	2050.40	NOVERSO	1	Z	
1981-03-13	D	62610		3859.10	NGVD29	1	Z	
1981-03-13	D	62611	77.00	3860.66	NAVD88	1	Z	
1981-03-13	D	72019	77.90			1	Z	
1986-04-02	D	62610		3857.65	NGVD29	1	Z	
1986-04-02	D	62611		3859.21	NAVD88	1	Z	
1986-04-02	D	72019	79.35	2057.00	10/7	1	Z	
1991-03-15	D	62610		3857.80	NGVD29	1	Z	
1991-03-15	D	62611	70.00	3859.36	NAVD88	1	Z	
1991-03-15	D	72019	79.20			1	Z	
1996-01-12	D	62610		3854.90	NGVD29	1	S	
1996-01-12	D	62611		3856.46	NAVD88	1	S	
1996-01-12	D	72019	82.10			1	S	

Exp	lanati	OI

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

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	
------	------	---	------------------------	---	---	---------------------------------	--

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URL: https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?

Page Contact Information: New Mexico Water Data Maintainer Page Last Modified: 2023-07-18 13:44:56 EDT

0.3 0.27 nadww02

USA.gov



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

35E

641874 3621315*

Driller License: 111 **Driller Company:** BURKE, EDWARD B.

Driller Name:

Drill Start Date: 12/20/1960 **Drill Finish Date:** 12/21/1960 **Plug Date:** 01/17/1961 Log File Date: 12/29/1960 **PCW Rcv Date:** Shallow Source:

Pump Type:

L 04562

Estimated Yield:

Pipe Discharge Size: **Casing Size:** 7.00 Depth Well: 156 feet Depth Water:

Water Bearing Stratifications: **Bottom Description** Top 98 156 Sandstone/Gravel/Conglomerate **Casing Perforations: Bottom** Top

110 154

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POINT OF DIVERSION SUMMARY

95 feet

^{*}UTM location was derived from PLSS - see Help



New Mexico Office of the State Engineer

Point of Diversion Summary

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag **POD Number**

Q64 Q16 Q4 Sec Tws Rng

X

L 02357

18S 35E 642855 3623137*

Driller License: 30

Driller Company:

BARRON, EMMETT

Driller Name:

E. BARRON

Drill Start Date:

11/02/1953

Drill Finish Date:

12/02/1953

Plug Date:

Log File Date:

12/17/1953

PCW Rcv Date:

Depth Well:

Source:

Shallow

Pump Type: Casing Size:

Pipe Discharge Size:

170 feet

Estimated Yield: Depth Water:

77 feet

Water Bearing Stratifications:

12.00

Bottom Description

Top 125

135 Sandstone/Gravel/Conglomerate

Casing Perforations:

Bottom Top 100

165

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POINT OF DIVERSION SUMMARY

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- Full News

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Click to hide state-specific text

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

Search Results -- 1 sites found

Agency code = usgs site_no list =

324415103281501

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 324415103281501 18S.35E.20.21434

Lea County, New Mexico

Latitude 32°44'13.3", Longitude 103°28'36.4" NAD83

Land-surface elevation 3,933.00 feet above NGVD29

The depth of the well is 170 feet below land surface.

This well is completed in the High Plains aguifer (N100HGHPLN) national aguifer.

This well is completed in the Ogallala Formation (1210GLL) local aquifer.

Output formats

T- I	 	data

<u>ab-separated data</u>

Graph of data

Table of data

Reselect period											
Date	Time	? Water- level date- time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu	
1953-12-09		D	62610		3860.81	NGVD29	1	Z			
1953-12-09		D	62611		3862.36	NAVD88	1	Z			
1953-12-09		D	72019	72.19			1	Z			
1954-01-11		D	62610		3860.75	NGVD29	1	Z			
1954-01-11		D	62611		3862.30	NAVD88	1	Z			
1954-01-11		D	72019	72.25			1	Z			
1954-03-02		D	62610		3860.74	NGVD29	1	Z			
1954-03-02		D	62611		3862.29	NAVD88	1	Z			
1954-03-02		D	72019	72.26			1	Z			
1954-05-05		D	62610		3860.74	NGVD29	1	Z			
1954-05-05		D	62611		3862.29	NAVD88	1	Z			
1954-05-05		D	72019	72.26			1	Z			
1954-07-13		D	62610		3860.79	NGVD29	1	Z			
1954-07-13		D	62611		3862.34	NAVD88	1	Z			

Date	Time ?		?		Water level,	Water level,	Referenced vertical
		Water-level date-time accuracy		arameter ode	feet below land surface	feet above specific vertical datum	datum
1954-07-13	D	72019	72.21			1	Z
1954-07-13	D	62610	/2.21	3860.78	NGVD29	1	Z
	D					1	Z
1954-09-14		62611	72.22	3862.33	NAVD88		
1954-09-14	D	72019	72.22		NCVD30	1	Z
1954-11-09	D	62610		3860.75	NGVD29	1	Z
1954-11-09	D	62611	72.25	3862.30	NAVD88	1	Z
1954-11-09	D	72019	72.25		NCVD30	1	Z
1955-01-06	D	62610		3860.77	NGVD29	1	Z
1955-01-06	D	62611		3862.32	NAVD88	1	Z -
1955-01-06	D	72019	72.23			1	Z
1955-03-19	D	62610		3860.80	NGVD29	1	Z -
1955-03-19	D	62611		3862.35	NAVD88	1	Z
1955-03-19	D	72019	72.20			1	Z
1955-05-28	D	62610		3860.74	NGVD29	1	Z
1955-05-28	D	62611		3862.29	NAVD88	1	Z
1955-05-28	D	72019	72.26			1	Z
1955-07-15	D	62610		3860.75	NGVD29	1	Z
1955-07-15	D	62611		3862.30	NAVD88	1	Z
1955-07-15	D	72019	72.25			1	Z
1955-09-22	D	62610		3860.79	NGVD29	1	Z
1955-09-22	D	62611		3862.34	NAVD88	1	Z
1955-09-22	D	72019	72.21			1	Z
1955-11-28	D	62610		3860.79	NGVD29	1	Z
1955-11-28	D	62611		3862.34	NAVD88	1	Z
1955-11-28	D	72019	72.21			1	Z
1956-01-05	D	62610		3860.82	NGVD29	1	Z
1956-01-05	D	62611		3862.37	NAVD88	1	Z
1956-01-05	D	72019	72.18			1	Z
1956-03-14	D	62610		3860.82	NGVD29	1	Z
1956-03-14	D	62611		3862.37	NAVD88	1	Z
1956-03-14	D	72019	72.18			1	Z
1956-05-09	D	62610		3860.78	NGVD29	1	Z
1956-05-09	D	62611		3862.33	NAVD88	1	Z
1956-05-09	D	72019	72.22			1	Z
1956-07-26	D	62610		3860.79	NGVD29	1	Z
1956-07-26	D	62611		3862.34	NAVD88	1	Z
1956-07-26	D	72019	72.21			1	Z
1956-09-06	D	62610	, 2,21	3860.79	NGVD29	1	Z
1956-09-06	D	62611		3862.34	NAVD88	1	Z
1956-09-06	D	72019	72.21		MAYDOO	1	Z
1956-11-30	D	62610	/ 2.21	3860.77	NGVD29	1	Z
	D					1	Z
1956-11-30		62611	72.22	3862.32	NAVD88		
1956-11-30	D	72019	72.23		NCVD30	1	Z
1957-01-12	D	62610		3860.76	NGVD29	1	Z
1957-01-12	D	62611		3862.31	NAVD88	1	Z
1957-01-12	D	72019	72.24		110100	1	Z
1958-01-14	D	62610		3860.73	NGVD29	1	Z
1958-01-14	D	62611		3862.28	NAVD88	1	Z
1958-01-14	D	72019	72.27			1	Z
1960-01-15	D	62610		3860.83	NGVD29	1	Z

Date	Time	? Water-level date-time accuracy	? Par	rameter le	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum
1960-01-15	D	62611		3862.38	NAVD88	1	Z
1960-01-15	D	72019	72.17			1	Z
1961-01-17	D	62610	, 2.1.	3860.84	NGVD29	1	Z
1961-01-17	D	62611		3862.39	NAVD88	1	Z
1961-01-17	D	72019	72.16	3002.33	10110000	1	Z
1962-01-16	D	62610	72.120	3860.74	NGVD29	1	Z
1962-01-16	D	62611		3862.29	NAVD88	1	Z
1962-01-16	D	72019	72.26	3002.23	1011200	1	Z
1963-02-18	D	62610	72.20	3860.84	NGVD29	1	Z
1963-02-18	D	62611		3862.39	NAVD88	1	Z
1963-02-18	D	72019	72.16	3002.33	10110000	1	Z
1964-02-10	D	62610	, 2.10	3860.71	NGVD29	1	Z
1964-02-10	D	62611		3862.26	NAVD88	1	Z
1964-02-10	D	72019	72.29	3302.20	1474 200	1	Z
1965-02-10	D	62610	. 2.23	3860.61	NGVD29	1	Z
1965-02-10	D	62611		3862.16	NAVD88	1	Z
1965-02-10	D	72019	72.39	5502.10	1474 200	1	Z
1966-02-07	D	62610	72.33	3860.51	NGVD29	1	Z
.966-02-07	D	62611		3862.06	NAVD88	1	Z
966-02-07	D	72019	72.49	3002.00	NAVDOO	1	Z
.967-01-03	D	62610	72.43	3860.42	NGVD29	1	Z
1967-01-03	D	62611		3861.97	NAVD88	1	Z
1967-01-03	D	72019	72.58	3001.37	WAVDOO	1	Z
1968-01-02	D	62610	72.30	3860.24	NGVD29	1	Z
1968-01-02	D	62611		3861.79	NAVD88	1	Z
1968-01-02	D	72019	72.76	3001.73	NAVDOO	1	Z
1969-01-14	D	62610	72.70	3860.00	NGVD29	1	Z
1969-01-14	D	62611		3861.55	NAVD88	1	Z
1969-01-14	D	72019	73.00	3001.33	WAVDOO	1	Z
1970-01-05	D	62610	75.00	3859.73	NGVD29	1	Z
1970-01-05	D	62611		3861.28	NAVD88	1	Z
1970-01-05	D	72019	73.27	5501.20		1	Z
1971-01-12	D	62610	. 5.27	3859.69	NGVD29	1	Z
1971-01-12	D	62611		3861.24	NAVD88	1	Z
1971-01-12	D	72019	73.31			1	Z
.971-01-20	D	62610		3859.70	NGVD29	1	Z
1971-01-20	D	62611		3861.25	NAVD88	1	Z
1971-01-20	D	72019	73.30			1	Z
1972-01-12	D	62610		3859.55	NGVD29	1	Z
1972-01-12	D	62611		3861.10	NAVD88	1	Z
972-01-12	D	72019	73.45		30	1	Z
.973-01-09	D	62610		3859.42	NGVD29	1	Z
1973-01-09	D	62611		3860.97	NAVD88	1	Z
.973-01-09	D	72019	73.58			1	Z
1974-01-08	D	62610	. 5.50	3859.27	NGVD29	1	Z
974-01-08	D	62611		3860.82	NAVD88	1	Z
.974-01-08	D	72019	73.73	5500.02		1	Z
975-01-08	D	62610	. 5.75	3859.64	NGVD29	1	Z
.975-01-08	D	62611		3861.19	NAVD88	1	Z
212-01-00	D	02011		2001.13	MANDOO	±	<u> </u>

Date	Time	? Water-level	? Pa	rameter	Water level, feet	Water level, feet	Referenced vertical datum
		date-time accuracy	COO		below land surface	above specific vertical datum	
1976-01-13	D	62610		3859.32	NGVD29	1	Z
1976-01-13	D	62611		3860.87	NAVD88	1	Z
1976-01-13	D	72019	73.68			1	Z
1976-02-12	D	62610		3859.27	NGVD29	1	Z
1976-02-12	D	62611		3860.82	NAVD88	1	Z
1976-02-12	D	72019	73.73			1	Z
1977-01-08	D	62610		3859.13	NGVD29	1	Z
1977-01-08	D	62611		3860.68	NAVD88	1	Z
1977-01-08	D	72019	73.87			1	Z
1981-01-06	D	62610		3857.88	NGVD29	1	Z
1981-01-06	D	62611		3859.43	NAVD88	1	Z
1981-01-06	D	72019	75.12			1	Z
1982-01-06	D	62610		3857.57	NGVD29	1	Z
1982-01-06	D	62611		3859.12	NAVD88	1	Z
1982-01-06	D	72019	75.43			1	Z
1983-01-04	D	62610		3857.09	NGVD29	1	Z
1983-01-04	D	62611		3858.64	NAVD88	1	Z
1983-01-04	D	72019	75.91			1	Z
1984-01-05	D	62610		3856.62	NGVD29	1	Z
1984-01-05	D	62611		3858.17	NAVD88	1	Z
1984-01-05	D	72019	76.38			1	Z
1985-01-08	D	62610		3856.22	NGVD29	1	Z
1985-01-08	D	62611		3857.77	NAVD88	1	Z
1985-01-08	D	72019	76.78			1	Z
1986-01-08	D	62610		3855.93	NGVD29	1	Z
1986-01-08	D	62611		3857.48	NAVD88	1	Z
1986-01-08	D	72019	77.07			1	Z
1987-01-06	D	62610		3855.72	NGVD29	1	Z
1987-01-06	D	62611		3857.27	NAVD88	1	Z
1987-01-06	D	72019	77.28	3037.27	WAVDOO	1	Z
1988-01-07	D	62610	77.20	3855.49	NGVD29	1	Z
	D					1	Z
1988-01-07		62611	77 51	3857.04	NAVD88		
1988-01-07	D	72019	77.51	2055 10	NCVD30	1	Z
1989-01-07	D	62610		3855.18	NGVD29	1	Z
1989-01-07	D	62611	77.00	3856.73	NAVD88	1	Z
1989-01-07	D	72019	77.82	2055.22	NO. (5.5.)	1	Z
1990-01-02	D	62610		3855.20	NGVD29	1	Z
1990-01-02	D	62611	7- 00	3856.75	NAVD88	1	Z
1990-01-02	D	72019	77.80			1	Z
1991-01-02	D	62610		3854.48	NGVD29	1	Z
1991-01-02	D	62611		3856.03	NAVD88	1	Z
1991-01-02	D	72019	78.52			1	Z
1991-03-15	D	62610		3854.69	NGVD29	1	Z
1991-03-15	D	62611		3856.24	NAVD88	1	Z
1991-03-15	D	72019	78.31			1	Z
1992-01-06 18:18 UT	C m	62610		3854.43	NGVD29	1	Z
1992-01-06 18:18 UT	C m	62611		3855.98	NAVD88	1	Z
1992-01-06 18:18 UT	C m	72019	78.57			1	Z
1993-01-04	D	62610		3854.01	NGVD29	1	Z
1993-01-04	D	62611		3855.56	NAVD88	1	Z

Date	Time	? Water-level	? Pai	rameter	Water level, feet	Water level, feet	Refe vert dati	
		date-time accuracy	cod		below land surface	above specific vertical datum		
993-01-04	D	72019	78.99			1	Z	
1994-01-08	D	62610	70.33	3853.45	NGVD29	1	Z	
1994-01-08	D	62611		3855.00	NAVD88	1	Z	
1994-01-08	D	72019	79.55			1	Z	
1995-01-03	D	62610		3853.09	NGVD29	1	S	
1995-01-03	D	62611		3854.64	NAVD88	1	S	
1995-01-03	D	72019	79.91			1	S	
1996-01-12	D	62610		3852.53	NGVD29	1	S	
1996-01-12	D	62611		3854.08	NAVD88	1	S	
.996-01-12	D	72019	80.47			1	S	
2000-01-03	D	62610		3850.21	NGVD29	1	S	
2000-01-03	D	62611		3851.76	NAVD88	1	S	
2000-01-03	D	72019	82.79			1	S	
2001-01-03	D	62610		3849.70	NGVD29	1	S	USGS
2001-01-03	D	62611		3851.25	NAVD88	1	S	USGS
2001-01-03	D	72019	83.30			1	S	USGS
2002-01-03	D	62610		3849.13	NGVD29	1	S	USGS
2002-01-03	D	62611		3850.68	NAVD88	1	S	USGS
2002-01-03	D	72019	83.87			1	S	USGS
2003-01-05	D	62610		3848.52	NGVD29	1	S	USGS
2003-01-05	D	62611		3850.07	NAVD88	1	S	USGS
2003-01-05	D	72019	84.48			1	S	USGS
2004-01-08	D	62610		3847.83	NGVD29	1	S	USGS
2004-01-08	D	62611		3849.38	NAVD88	1	S	USGS
2004-01-08	D	72019	85.17			1	S	USGS
2005-01-04 17:48 UT	C m	62610		3847.43	NGVD29	1	S	USGS
2005-01-04 17:48 UT	C m	62611		3848.98	NAVD88	1	S	USGS
2005-01-04 17:48 UT	C m	72019	85.57			1	S	USGS
2006-01-09 17:40 UT	C m	62610		3847.09	NGVD29	1	S	USGS
2006-01-09 17:40 UT	C m	62611		3848.64	NAVD88	1	S	USGS
2006-01-09 17:40 UT	C m	72019	85.91			1	S	USGS
2007-12-17 21:25 UT	C m	62610		3846.50	NGVD29	P	S	USGS
2007-12-17 21:25 UT	C m	62611		3848.05	NAVD88	P	S	USGS
2007-12-17 21:25 UT	C m	72019	86.50			P	S	USGS
2008-12-16 17:40 UT	C m	62610		3845.97	NGVD29	1	S	USGS
2008-12-16 17:40 UT	C m	62611		3847.52	NAVD88	1	S	USGS
2008-12-16 17:40 UT	C m	72019	87.03			1	S	USGS
2011-12-20 23:00 UT	C m	62610		3844.63	NGVD29	1	S	USGS
2011-12-20 23:00 UT	C m	62611		3846.18	NAVD88	1	S	USGS
011-12-20 23:00 UT	C m	72019	88.37			1	S	USGS
013-12-12 16:30 UT	C m	62610		3834.66	NGVD29	1	S	USGS
013-12-12 16:30 UT	C m	62611		3836.21	NAVD88	1	S	USGS
013-12-12 16:30 UT	C m	72019	98.34			1	S	USGS
015-01-07 17:50 UT	C m	62610		3834.48	NGVD29	1	S	USGS
015-01-07 17:50 UT	C m	62611		3836.03	NAVD88	1	S	USGS
015-01-07 17:50 UT	C m	72019	98.52			1	S	USGS
016-01-08 17:48 UT	C m	62610		3840.62	NGVD29	1	V	USGS
016-01-08 17:48 UT	C m	62611		3842.17	NAVD88	1	V	USGS
016-01-08 17:48 UT	C m	72019	92.38			1	V	USGS

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	?
Parameter code	,	62610	Groundwater level at	ove NGVD 1929, feet			
Parameter code		62611	Groundwater level at	ove NAVD 1988, feet			
Parameter code		72019	Depth to water level,	feet below land surface	e		
Referenced vertical dat	tum	NAVD88	North American Verti	cal Datum of 1988			
Referenced vertical dat	tum	NGVD29	National Geodetic Ve	rtical Datum of 1929			
Status		1	Static				
Status		P	Pumping				
Method of measuremen	nt	S	Steel-tape measurem	nent.			
Method of measuremen	nt	V	Calibrated electric-ta	pe measurement.			
Method of measuremen	nt	Z	Other.				
Measuring agency			Not determined				
Measuring agency		USGS	U.S. Geological Surve	ey			
Source of measuremer	nt		Not determined				
Source of measuremer	nt	S	Measured by personr	el of reporting agency.			
Water-level approval st	tatus	Α	Approved for publicat	tion Processing and	review completed.		

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Page Contact Information: New Mexico Water Data Maintainer
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0.3 0.25 nadww02





New Mexico Office of the State Engineer

Point of Diversion Summary

18S

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

641835

Well Tag POD Number Q64 Q16 Q4 Se

Q64 Q16 Q4 Sec Tws Rng

X Y

3623734*

Driller License: 46 Driller Company: ABBOTT BROTHERS COMPANY

Driller Name: ABBOTT, MURRELL

L 03171

 Drill Start Date:
 03/30/1956
 Drill Finish Date:
 03/30/1956
 Plug Date:
 04/30/1957

 Log File Date:
 05/31/1956
 PCW Rcv Date:
 Source:
 Shallow

Pump Type: Pipe Discharge Size: Estimated Yield:

Casing Size: 7.00 Depth Well: 170 feet Depth Water: 150 feet

	Water Bearing Stratifications:	Top	Bottom	Description
		150	170	Sandstone/Gravel/Conglomerate
Х	Casing Perforations:	Тор	Bottom	
		150	170	

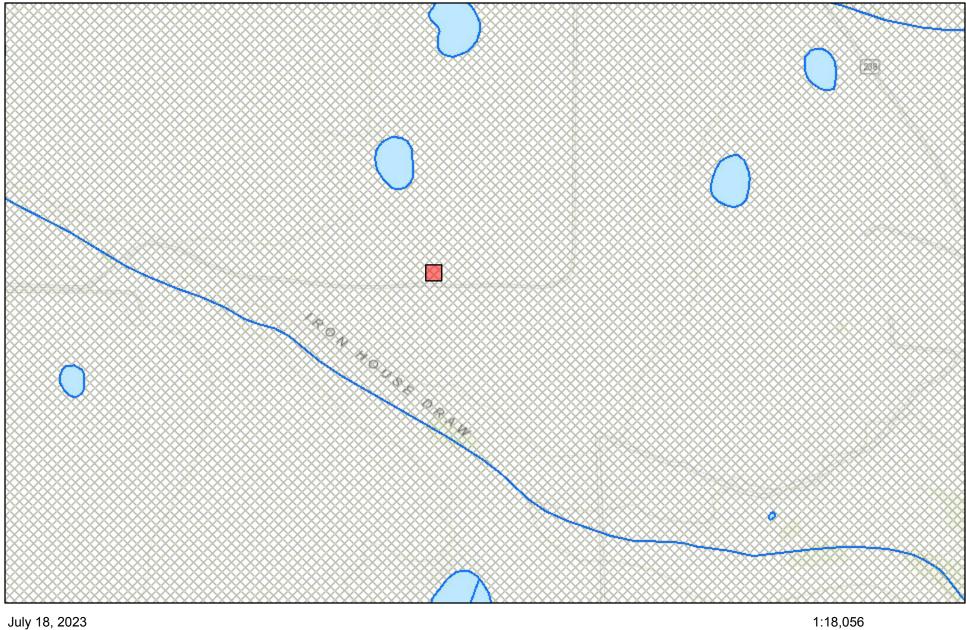
^{*}UTM location was derived from PLSS - see Help

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7/18/23 11:40 AM

POINT OF DIVERSION SUMMARY

New Mexico NFHL Data



1:18, 2023 0 0 0.13 0.25

0 0.2 0.4 0.8 km

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

nmflood.org is made possible through a collaboration with NMDHSEM,

0.5 mi

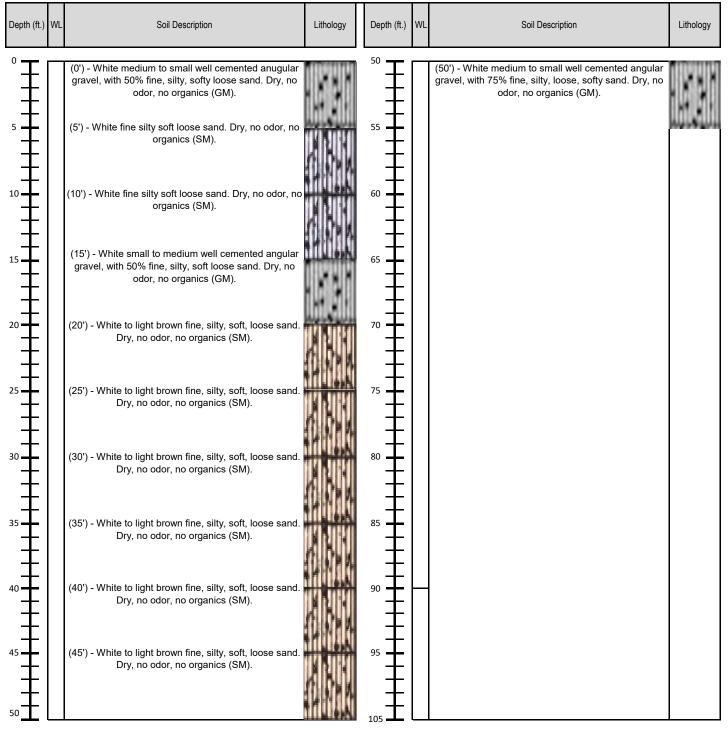


Project Name : Nighthawk State Com 3H Date : Tuesday, August 15, 2023

Project No. : 2090 Sampler : Jim Hawley
Location : Lea County, New Mexico

Coordinates: 32.726286°, -103.479090° Driller: H&R Enterprises, LLC

Elevation (ft): 3,946 Method: Air Rotary



Comments: (8/15/23) Boring terminated at 55.0' with no presence of groundwater or moisture. (8/21/23) Bore measured at 55.0' using Heron Groundwater Meter, no detection of moisture inside bore.

APPENDIX E

CARMONA RESOURCES

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/25/2023 11:54:15 AM

JOB DESCRIPTION

Nighthawk 3H SDG NUMBER Lea County New Mexico

JOB NUMBER

880-32290-1

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 8/25/2023 11:54:15 AM

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

Client: Carmona Resources Project/Site: Nighthawk 3H Laboratory Job ID: 880-32290-1 SDG: Lea County New Mexico

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2

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6

R

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11

12

Definitions/Glossary

Client: Carmona Resources

Job ID: 880-32290-1

Project/Site: Nighthawk 3H

SDG: Lea County New Mexico

2

Qualifiers

GC VOA

 Qualifier
 Qualifier Description

 F1
 MS and/or MSD recovery 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

 S1+
 Surrogate recovery exceeds control limits, high biased.

 U
 Indicates the analyte was analyzed for but not detected.

HPLC/IC Qualifier

 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 (no

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

Job ID: 880-32290-1

Case Narrative

Client: Carmona Resources Project/Site: Nighthawk 3H SDG: Lea County New Mexico

Job ID: 880-32290-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-32290-1

Receipt

The samples were received on 8/18/2023 1:32 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 -2.8°C

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: (MB 880-60968/5-A) and (MB 880-61017/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (880-32121-A-1-D MS) and (880-32121-A-1-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-32121-A-1-F). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH-1 (0-1') (880-32290-1) and BH-1 (2') (880-32290-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-61017 and analytical batch 880-60962 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD NM: The surrogate recovery for the blank associated with preparation batch 880-61009 and analytical batch 880-60956 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-60956/31) and (CCV 880-60956/47). Evidence of matrix interferences is not obvious.

Method 8015MOD NM: The continuing calibration verification (CCV) associated with batch 880-60956 recovered above the upper control limit for Diesel Range Organics (Over C10-C28). An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-60956/47).

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

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

Job ID: 880-32290-1

Project/Site: Nighthawk 3H

SDG: Lea County New Mexico

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

Date Collected: 08/15/23 00:00 Date Received: 08/18/23 13:32 Lab Sample ID: 880-32290-1

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/24/23 13:56	08/25/23 05:11	1
Toluene	0.00708		0.00201		mg/Kg		08/24/23 13:56	08/25/23 05:11	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/24/23 13:56	08/25/23 05:11	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/24/23 13:56	08/25/23 05:11	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/24/23 13:56	08/25/23 05:11	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/24/23 13:56	08/25/23 05:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130				08/24/23 13:56	08/25/23 05:11	1
1,4-Difluorobenzene (Surr)	93		70 - 130				08/24/23 13:56	08/25/23 05:11	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation							
Amaluta	Regult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result	Qualifici	IXL						
Analyte Total BTEX	0.00708	<u>quamer</u>	0.00402		mg/Kg			08/25/23 09:31	1
Total BTEX	0.00708		0.00402					08/25/23 09:31	1
Total BTEX Method: SW846 8015 NM - Diese	0.00708 el Range Organ	ics (DRO) (0.00402 GC)		mg/Kg			08/25/23 09:31	
Total BTEX	0.00708 el Range Organ		0.00402 GC)				Prepared	08/25/23 09:31 Analyzed	1 Dil Fac
Total BTEX Method: SW846 8015 NM - Diese	0.00708 el Range Organ	ics (DRO) (0.00402 GC)		mg/Kg				
Total BTEX Method: SW846 8015 NM - Diese Analyte	0.00708 el Range Organ Result 51.1	ics (DRO) (0.00402 GC) RL 50.1		mg/Kg	<u>D</u>		Analyzed	Dil Fac
Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH	0.00708 PI Range Organ Result 51.1 sel Range Orga	ics (DRO) (0.00402 GC) RL 50.1	MDL	mg/Kg			Analyzed	Dil Fac
Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese	0.00708 PI Range Organ Result 51.1 sel Range Orga	ics (DRO) (Qualifier	0.00402 GC) RL 50.1	MDL	mg/Kg Unit mg/Kg		Prepared	Analyzed 08/25/23 11:26	Dil Fac
Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte	0.00708 PI Range Organ Result 51.1 Sel Range Orga Result	ics (DRO) (Qualifier	0.00402 GC) RL 50.1 (GC) RL	MDL	mg/Kg Unit mg/Kg Unit		Prepared Prepared	Analyzed 08/25/23 11:26 Analyzed	Dil Fac
Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics	0.00708 PI Range Organ Result 51.1 Sel Range Orga Result	ics (DRO) (Qualifier	0.00402 GC) RL 50.1 (GC) RL	MDL	mg/Kg Unit mg/Kg Unit		Prepared Prepared	Analyzed 08/25/23 11:26 Analyzed	Dil Fac
Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	0.00708 PI Range Organ Result 51.1 Sel Range Orga Result <50.1 51.1	ics (DRO) (Qualifier nics (DRO) Qualifier U	0.00402 GC) RL 50.1 (GC) RL 50.1	MDL	mg/Kg Unit mg/Kg Unit mg/Kg mg/Kg		Prepared Prepared 08/24/23 12:53 08/24/23 12:53	Analyzed 08/25/23 11:26 Analyzed 08/24/23 23:21 08/24/23 23:21	Dil Fac Dil Fac
Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	0.00708 PI Range Organ Result 51.1 Sel Range Orga Result Result < 50.1	ics (DRO) (Qualifier nics (DRO) Qualifier U	0.00402 GC) RL 50.1 (GC) RL 50.1	MDL	mg/Kg Unit mg/Kg Unit mg/Kg		Prepared Prepared 08/24/23 12:53	Analyzed 08/25/23 11:26 Analyzed 08/24/23 23:21	Dil Fac Dil Fac 1
Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	0.00708 PI Range Organ Result 51.1 Sel Range Orga Result <50.1 51.1	ics (DRO) (Qualifier nics (DRO) Qualifier U	0.00402 RL 50.1 (GC) RL 50.1 50.1 Limits	MDL	mg/Kg Unit mg/Kg Unit mg/Kg mg/Kg		Prepared Prepared 08/24/23 12:53 08/24/23 12:53 08/24/23 12:53 Prepared	Analyzed 08/25/23 11:26 Analyzed 08/24/23 23:21 08/24/23 23:21 08/24/23 23:21 Analyzed	Dil Fac Dil Fac
Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	0.00708 Pl Range Organ Result 51.1 Sel Range Orga Result <50.1 51.1 <50.1	ics (DRO) (Qualifier nics (DRO) Qualifier U	0.00402 RL 50.1 (GC) RL 50.1 50.1	MDL	mg/Kg Unit mg/Kg Unit mg/Kg mg/Kg		Prepared Prepared 08/24/23 12:53 08/24/23 12:53	Analyzed 08/25/23 11:26 Analyzed 08/24/23 23:21 08/24/23 23:21 08/24/23 23:21	Dil Fac Dil Fac 1 1 1

Client Sample ID: BH-1 (2')

Date Collected: 08/15/23 00:00

Lab Sample ID: 880-32290-2

Matrix: Solid

RL

50.1

MDL Unit

mg/Kg

D

Prepared

Analyzed

08/23/23 00:13

Dil Fac

Date Received: 08/18/23 13:32

Analyte

Chloride

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Result Qualifier

8880

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/24/23 13:56	08/25/23 05:37	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/24/23 13:56	08/25/23 05:37	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/24/23 13:56	08/25/23 05:37	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/24/23 13:56	08/25/23 05:37	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/24/23 13:56	08/25/23 05:37	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/24/23 13:56	08/25/23 05:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	146	S1+	70 - 130				08/24/23 13:56	08/25/23 05:37	1
1,4-Difluorobenzene (Surr)	99		70 - 130				08/24/23 13:56	08/25/23 05:37	1

Client: Carmona Resources Project/Site: Nighthawk 3H

Job ID: 880-32290-1

SDG: Lea County New Mexico

Client Sample ID: BH-1 (2')

Date Collected: 08/15/23 00:00 Date Received: 08/18/23 13:32 Lab Sample ID: 880-32290-2

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			08/25/23 09:31	1
Method: SW846 8015 NM - Diesel	Range Organ	ics (DRO) (GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			08/25/23 11:26	1
Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.2	U	50.2		mg/Kg		08/24/23 12:53	08/24/23 23:42	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.2	U	50.2		mg/Kg		08/24/23 12:53	08/24/23 23:42	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		08/24/23 12:53	08/24/23 23:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				08/24/23 12:53	08/24/23 23:42	1
o-Terphenyl	109		70 - 130				08/24/23 12:53	08/24/23 23:42	1
Method: EPA 300.0 - Anions, Ion	Chromatogran	hv - Solubl	e						
Analyte	• •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	455		5.00		mg/Kg			08/23/23 00:33	

Client Sample ID: BH-1 (4') Lab Sample ID: 880-32290-3

Date Collected: 08/15/23 00:00

Date Received: 08/18/23 13:32

rtoouit	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00201	U	0.00201		mg/Kg		08/24/23 13:56	08/25/23 06:02	
<0.00201	U	0.00201		mg/Kg		08/24/23 13:56	08/25/23 06:02	•
<0.00201	U	0.00201		mg/Kg		08/24/23 13:56	08/25/23 06:02	•
<0.00402	U	0.00402		mg/Kg		08/24/23 13:56	08/25/23 06:02	
<0.00201	U	0.00201		mg/Kg		08/24/23 13:56	08/25/23 06:02	
<0.00402	U	0.00402		mg/Kg		08/24/23 13:56	08/25/23 06:02	
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
126		70 - 130				08/24/23 13:56	08/25/23 06:02	1
92		70 ₋ 130				08/24/23 13:56	08/25/23 06:02	1
resuit			MDI	Hnit	_ n	Droparod	Analyzod	Dil Ea
Result			MDI	l lmié	_ n	Dropored	Analyzad	Dil Ea
<0.00402		0.00402	MDL	mg/Kg	<u>D</u>	Prepared	Analyzed 08/25/23 09:31	Dil Fac
sel Range Organ	ics (DRO) (0.00402 GC)		mg/Kg			08/25/23 09:31	1
sel Range Organ Result	ics (DRO) (Qualifier	0.00402 GC)	MDL	mg/Kg	<u>D</u>	Prepared Prepared	08/25/23 09:31 Analyzed	
sel Range Organ	ics (DRO) (Qualifier	0.00402 GC)		mg/Kg			08/25/23 09:31	
sel Range Organ Result	ics (DRO) ((Qualifier	0.00402 GC) RL 49.8		mg/Kg			08/25/23 09:31 Analyzed	
sel Range Organ Result <49.8 esel Range Orga	ics (DRO) ((Qualifier	0.00402 GC) RL 49.8	MDL	mg/Kg			08/25/23 09:31 Analyzed	
sel Range Organ Result <49.8 esel Range Orga	ics (DRO) ((Qualifier U)	0.00402 GC) RL 49.8 (GC)	MDL	mg/Kg Unit mg/Kg	<u>D</u>	Prepared	08/25/23 09:31 Analyzed 08/25/23 11:26	Dil Fa
	<0.00201 <0.00402 <0.00201 <0.00402 %Recovery 126 92 Total BTEX Calc	<0.00201 U <0.00402 U <0.00201 U <0.00402 U <0.00402 U **Recovery Qualifier 126	<0.00201 U 0.00201 <0.00402 U 0.00402 <0.00201 U 0.00201 <0.00402 U 0.00402 $**Recovery Qualifier Limits 126 70 - 130 92 70 - 130 **Total BTEX Calculation$	<0.00201 U 0.00201 <0.00402 U 0.00402 <0.00201 U 0.00201 <0.00402 U 0.00402 $*Recovery Qualifier Limits 126 70 - 130 92 70 - 130 *Total BTEX Calculation$	<0.00201 U 0.00201 mg/Kg <0.00402 U 0.00402 mg/Kg <0.00201 U 0.00201 mg/Kg <0.00402 U 0.00402 mg/Kg <0.00402 U 0.00402 mg/Kg *Recovery Qualifier Limits 126 70 - 130 92 70 - 130 *Total BTEX Calculation	<0.00201	<0.00201	<0.00201

Eurofins Midland

Matrix: Solid

Client Sample Results

Client: Carmona Resources Job ID: 880-32290-1 Project/Site: Nighthawk 3H SDG: Lea County New Mexico

Client Sample ID: BH-1 (4')

Lab Sample ID: 880-32290-3 Date Collected: 08/15/23 00:00 Date Received: 08/18/23 13:32

Matrix: Solid

Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC) (Continue	ed)				
Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		08/24/23 12:53	08/25/23 00:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane			70 - 130			08/24/23 12:53	08/25/23 00:04	1
o-Terphenyl	116		70 - 130			08/24/23 12:53	08/25/23 00:04	1

Method: EPA 300.0 - Anions, Ion C	thod: EPA 300.0 - Anions, Ion Chromatography - Soluble								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	142		5.00		mg/Kg			08/23/23 00:40	1

Surrogate Summary

Client: Carmona Resources

Job ID: 880-32290-1

Project/Site: Nighthawk 3H

SDG: Lea County New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

Percent Surro
BFB1 DFBZ1
Lab Sample ID Client Sample ID (70-130) (70-130)
880-32121-A-1-D MS Matrix Spike 141 S1+ 109
880-32121-A-1-E MSD Matrix Spike Duplicate 140 S1+ 106
880-32290-1 BH-1 (0-1') 132 S1+ 93
880-32290-2 BH-1 (2') 146 S1+ 99
880-32290-3 BH-1 (4') 126 92
LCS 880-61017/1-A Lab Control Sample 119 95
LCSD 880-61017/2-A Lab Control Sample Dup 130 116
MB 880-60968/5-A Method Blank 69 S1- 84
MB 880-61017/5-A Method Blank 66 S1- 82
Surrogate Legend

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-32290-1	BH-1 (0-1')	106	107	
880-32290-2	BH-1 (2')	105	109	
880-32290-3	BH-1 (4')	111	116	
890-5084-A-1-D MS	Matrix Spike	108	98	
890-5084-A-1-E MSD	Matrix Spike Duplicate	103	98	
LCS 880-61009/2-A	Lab Control Sample	97	105	
LCSD 880-61009/3-A	Lab Control Sample Dup	103	117	
MB 880-61009/1-A	Method Blank	153 S1+	167 S1+	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Carmona Resources Job ID: 880-32290-1 SDG: Lea County New Mexico Project/Site: Nighthawk 3H

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-60968/5-A

Matrix: Solid

Analysis Batch: 60962

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 60968

	MB	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/24/23 09:15	08/24/23 12:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/24/23 09:15	08/24/23 12:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/24/23 09:15	08/24/23 12:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/24/23 09:15	08/24/23 12:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/24/23 09:15	08/24/23 12:12	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/24/23 09:15	08/24/23 12:12	1

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepar	red Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	69	S1-	70 - 130	08/24/23	09:15 08/24/23 12:1	2
1,4-Difluorobenzene (Surr)	84		70 - 130	08/24/23 (09:15 08/24/23 12:1:	2

Lab Sample ID: MB 880-61017/5-A Client Sample ID: Method Blank Matrix: Solid Prep Type: Total/NA

Analysis Batch: 60962 Prep Batch: 61017

мв мв

Analyte	Result	Qualifier	RL	MDL	_ Unit D		Prepared	Analyzed	Dil Fac	
Benzene	<0.00200		0.00200		mg/Kg	— <u> </u>	08/24/23 13:56	08/25/23 02:14	1	
Toluene	<0.00200	U	0.00200		mg/Kg		08/24/23 13:56	08/25/23 02:14	1	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/24/23 13:56	08/25/23 02:14	1	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/24/23 13:56	08/25/23 02:14	1	
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/24/23 13:56	08/25/23 02:14	1	
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/24/23 13:56	08/25/23 02:14	1	

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	66	S1-	70 - 130	08/24/23 13:56	08/25/23 02:14	1
1,4-Difluorobenzene (Surr)	82		70 - 130	08/24/23 13:56	08/25/23 02:14	1

Lab Sample ID: LCS 880-61017/1-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 60962

-	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08221		mg/Kg		82	70 - 130	
Toluene	0.100	0.08060		mg/Kg		81	70 - 130	
Ethylbenzene	0.100	0.08072		mg/Kg		81	70 - 130	
m-Xylene & p-Xylene	0.200	0.1578		mg/Kg		79	70 - 130	
o-Xylene	0.100	0.08364		mg/Kg		84	70 - 130	

LCS LCS

Surrogate	%Recovery Qu	ıalifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: LCSD 880-61017/2-A

Matrix: Solid

Analysis Batch: 60962						Prep	rep Batch: 61017		
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09448		mg/Kg		94	70 - 130	14	35

Eurofins Midland

Prep Type: Total/NA

Client Sample ID: Lab Control Sample Dup

Prep Batch: 61017

QC Sample Results

Job ID: 880-32290-1 Client: Carmona Resources Project/Site: Nighthawk 3H SDG: Lea County New Mexico

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

Lab Sample ID: LCSD 880-61017/2-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 60962 Prep Batch: 61017 Spike LCSD LCSD %Rec **RPD** Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit D Toluene 0.100 0.08469 70 - 130 35 mg/Kg 85 5 Ethylbenzene 0.100 0.09550 mg/Kg 95 70 - 130 17 35 m-Xylene & p-Xylene 0.200 0.1798 90 70 - 130 35 mg/Kg 13 o-Xylene 0.100 0.09758 mg/Kg 98 70 - 130 15 35 LCSD LCSD

Qualifier Limits Surrogate %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 130 1,4-Difluorobenzene (Surr) 116 70 - 130

Lab Sample ID: 880-32121-A-1-D MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 60962

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.0996	0.09056		mg/Kg		91	70 - 130	
Toluene	<0.00199	U	0.0996	0.08150		mg/Kg		82	70 - 130	
Ethylbenzene	<0.00199	U	0.0996	0.08046		mg/Kg		81	70 - 130	
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1390		mg/Kg		70	70 - 130	
o-Xylene	<0.00199	U F1	0.0996	0.06482	F1	mg/Kg		65	70 - 130	

MS MS Surrogate Qualifier %Recovery Limits S1+ 70 - 130 4-Bromofluorobenzene (Surr) 141 1,4-Difluorobenzene (Surr) 109 70 - 130

Lab Sample ID: 880-32121-A-1-E MSD

Matrix: Solid

Analysis Batch: 60962

Client Sample	ID:	Matrix	Spike	Duplicate
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Prep Type: Total/NA Prep Batch: 61017

Prep Batch: 61017

Sample Sample MSD MSD %Rec RPD Spike Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit Benzene <0.00199 0.101 0.1005 mg/Kg 100 70 - 130 10 35 Toluene <0.00199 U 0.101 0.08550 mg/Kg 85 70 - 130 5 35 Ethylbenzene < 0.00199 0.101 0.08450 mg/Kg 84 70 - 130 5 35 0.202 0.1473 73 70 - 130 m-Xylene & p-Xylene <0.00398 U mg/Kg 6 35 o-Xylene <0.00199 UF1 0.101 0.07031 mg/Kg 70 70 - 130 35

MSD MSD Qualifier Limits Surrogate %Recovery 4-Bromofluorobenzene (Surr) 140 S1+ 70 - 130 1,4-Difluorobenzene (Surr) 106 70 - 130

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

Matrix: Solid

Analysis Batch: 60956

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

Prep Batch: 61009

мв мв Analyte Result Qualifier RL MDL Unit Prepared <50.0 Ū 50.0 08/24/23 12:51 08/24/23 19:47 Gasoline Range Organics mg/Kg (GRO)-C6-C10

Eurofins Midland

Lab Sample ID: MB 880-61009/1-A

Job ID: 880-32290-1

SDG: Lea County New Mexico

Prep Type: Total/NA

Prep Batch: 61009

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

70 - 130

Client Sample ID: Lab Control Sample Dup

85

Client: Carmona Resources Project/Site: Nighthawk 3H

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

Lab Sample ID: MB 880-61009/1-A **Matrix: Solid**

Analysis Batch: 60956

MB MB Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Analyte <50.0 U 50.0 08/24/23 12:51 08/24/23 19:47 Diesel Range Organics (Over mg/Kg C10-C28) 50.0 Oll Range Organics (Over C28-C36) <50.0 U 08/24/23 12:51 08/24/23 19:47 mg/Kg

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1-Chlorooctane 153 S1+ 70 - 130 08/24/23 12:51 08/24/23 19:47 167 S1+ 70 - 130 08/24/23 12:51 08/24/23 19:47 o-Terphenyl

Lab Sample ID: LCS 880-61009/2-A

Matrix: Solid

Prep Type: Total/NA Analysis Batch: 60956 Prep Batch: 61009 LCS LCS Spike Analyte Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics 1000 924.4 92 70 - 130 mg/Kg (GRO)-C6-C10

850.1

mg/Kg

1000

Diesel Range Organics (Over C10-C28)

LCS LCS

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 70 - 130 97 o-Terphenyl 105 70 - 130

Lab Sample ID: LCSD 880-61009/3-A

Matrix: Solid

Analysis Batch: 60956

Prep Batch: 61009 Spike LCSD LCSD %Rec **RPD** Result Qualifier Limits RPD Limit Analyte Added Unit D %Rec 1000 969.2 97 70 - 130 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 861.8 mg/Kg 86 70 - 130 20

C10-C28)

LCSD LCSD

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 103 70 - 130 o-Terphenyl 117 70 - 130

Lab Sample ID: 890-5084-A-1-D MS

Matrix: Solid

Analysis Batch: 60956

Client Sample ID: Matrix Spike

Prep Type: Total/NA Prep Batch: 61009

Prep Type: Total/NA

MS MS %Rec Sample Sample Spike Result Qualifier Added Qualifier Analyte Result Unit %Rec Limits U 1010 Gasoline Range Organics <50.0 1303 127 70 - 130mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 1010 978.3 mg/Kg 95 70 - 130

C10-C28)

MS MS Surrogate %Recovery Qualifier Limits 108 70 - 130 1-Chlorooctane 70 - 130 98 o-Terphenyl

Client: Carmona Resources Project/Site: Nighthawk 3H

Job ID: 880-32290-1

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

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

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

SDG: Lea County New Mexico

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

Lab Sample ID: 890-5084-A-1-E MSD

Matrix: Solid

Analysis Batch: 60956

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA Prep Batch: 61009

Sample Sample Spike MSD MSD RPD Result Qualifier RPD Limit Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics <50.0 U 1010 1245 mg/Kg 121 70 - 130 5 20 (GRO)-C6-C10 1010 Diesel Range Organics (Over <50.0 U 959 7 mg/Kg 70 - 130 93 2

C10-C28)

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	98		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-60752/1-A

Matrix: Solid

Analysis Batch: 60836

MB MB

MDL Unit Result Qualifier Analyte RL Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 08/22/23 22:20

Lab Sample ID: LCS 880-60752/2-A

Matrix: Solid

Analysis Batch: 60836

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	255.9	-	mg/Kg		102	90 - 110	

Lab Sample ID: LCSD 880-60752/3-A

Matrix: Solid

Analysis Batch: 60836

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	258.6		ma/Ka		103	90 - 110	1	20	

Lab Sample ID: 880-32290-1 MS

Matrix: Solid

Analysis Batch: 60836

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	8880		2510	11600		mg/Kg		109	90 - 110	

Lab Sample ID: 880-32290-1 MSD

Matrix: Solid									Prep	Type: So	oluble
Analysis Batch: 60836											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	8880		2510	11610		ma/Ka		109	90 110		20

QC Association Summary

Client: Carmona Resources

Job ID: 880-32290-1
Project/Site: Nighthawk 3H

SDG: Lea County New Mexico

GC VOA

Analysis Batch: 60962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32290-1	BH-1 (0-1')	Total/NA	Solid	8021B	61017
880-32290-2	BH-1 (2')	Total/NA	Solid	8021B	61017
880-32290-3	BH-1 (4')	Total/NA	Solid	8021B	61017
MB 880-60968/5-A	Method Blank	Total/NA	Solid	8021B	60968
MB 880-61017/5-A	Method Blank	Total/NA	Solid	8021B	61017
LCS 880-61017/1-A	Lab Control Sample	Total/NA	Solid	8021B	61017
LCSD 880-61017/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	61017
880-32121-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	61017
880-32121-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	61017

Prep Batch: 60968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-60968/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 61017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32290-1	BH-1 (0-1')	Total/NA	Solid	5035	<u> </u>
880-32290-2	BH-1 (2')	Total/NA	Solid	5035	
880-32290-3	BH-1 (4')	Total/NA	Solid	5035	
MB 880-61017/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-61017/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-61017/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-32121-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
880-32121-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 61103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32290-1	BH-1 (0-1')	Total/NA	Solid	Total BTEX	
880-32290-2	BH-1 (2')	Total/NA	Solid	Total BTEX	
880-32290-3	BH-1 (4')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 60956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32290-1	BH-1 (0-1')	Total/NA	Solid	8015B NM	61009
880-32290-2	BH-1 (2')	Total/NA	Solid	8015B NM	61009
880-32290-3	BH-1 (4')	Total/NA	Solid	8015B NM	61009
MB 880-61009/1-A	Method Blank	Total/NA	Solid	8015B NM	61009
LCS 880-61009/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	61009
LCSD 880-61009/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	61009
890-5084-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	61009
890-5084-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	61009

Prep Batch: 61009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32290-1	BH-1 (0-1')	Total/NA	Solid	8015NM Prep	
880-32290-2	BH-1 (2')	Total/NA	Solid	8015NM Prep	
880-32290-3	BH-1 (4')	Total/NA	Solid	8015NM Prep	
MB 880-61009/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-61009/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Carmona Resources

Job ID: 880-32290-1

Project/Site: Nighthawk 3H

SDG: Lea County New Mexico

GC Semi VOA (Continued)

Prep Batch: 61009 (Continued)

	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
	LCSD 880-61009/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
١	890-5084-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
l	890-5084-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 61131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32290-1	BH-1 (0-1')	Total/NA	Solid	8015 NM	
880-32290-2	BH-1 (2')	Total/NA	Solid	8015 NM	
880-32290-3	BH-1 (4')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 60752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32290-1	BH-1 (0-1')	Soluble	Solid	DI Leach	_
880-32290-2	BH-1 (2')	Soluble	Solid	DI Leach	
880-32290-3	BH-1 (4')	Soluble	Solid	DI Leach	
MB 880-60752/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-60752/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-60752/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-32290-1 MS	BH-1 (0-1')	Soluble	Solid	DI Leach	
880-32290-1 MSD	BH-1 (0-1')	Soluble	Solid	DI Leach	

Analysis Batch: 60836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32290-1	BH-1 (0-1')	Soluble	Solid	300.0	60752
880-32290-2	BH-1 (2')	Soluble	Solid	300.0	60752
880-32290-3	BH-1 (4')	Soluble	Solid	300.0	60752
MB 880-60752/1-A	Method Blank	Soluble	Solid	300.0	60752
LCS 880-60752/2-A	Lab Control Sample	Soluble	Solid	300.0	60752
LCSD 880-60752/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	60752
880-32290-1 MS	BH-1 (0-1')	Soluble	Solid	300.0	60752
880-32290-1 MSD	BH-1 (0-1')	Soluble	Solid	300.0	60752

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SDG: Lea County New Mexico

Project/Site: Nighthawk 3H Client Sample ID: BH-1 (0-1')

Lab Sample ID: 880-32290-1

Matrix: Solid

Date Collected: 08/15/23 00:00 Date Received: 08/18/23 13:32

Client: Carmona Resources

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	61017	08/24/23 13:56	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60962	08/25/23 05:11	SM	EET MID
Total/NA	Analysis	Total BTEX		1			61103	08/25/23 09:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			61131	08/25/23 11:26	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	61009	08/24/23 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60956	08/24/23 23:21	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	60752	08/21/23 15:17	SMC	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	60836	08/23/23 00:13	CH	EET MID

Client Sample ID: BH-1 (2') Lab Sample ID: 880-32290-2 Date Collected: 08/15/23 00:00 Matrix: Solid

Date Received: 08/18/23 13:32

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	61017	08/24/23 13:56	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60962	08/25/23 05:37	SM	EET MID
Total/NA	Analysis	Total BTEX		1			61103	08/25/23 09:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			61131	08/25/23 11:26	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	61009	08/24/23 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60956	08/24/23 23:42	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	60752	08/21/23 15:17	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	60836	08/23/23 00:33	CH	EET MID

Client Sample ID: BH-1 (4') Lab Sample ID: 880-32290-3

Date Collected: 08/15/23 00:00 Date Received: 08/18/23 13:32

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	61017	08/24/23 13:56	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60962	08/25/23 06:02	SM	EET MID
Total/NA	Analysis	Total BTEX		1			61103	08/25/23 09:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			61131	08/25/23 11:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	61009	08/24/23 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60956	08/25/23 00:04	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	60752	08/21/23 15:17	SMC	EET MIC
Soluble	Analysis	300.0		1	50 mL	50 mL	60836	08/23/23 00:40	CH	EET MID

Laboratory References:

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

Eurofins Midland

Matrix: Solid

Accreditation/Certification Summary

Client: Carmona Resources

Job ID: 880-32290-1

Project/Site: Nighthawk 3H

SDG: Lea County New Mexico

Laboratory: Eurofins Midland

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

Authority Texas		ogram	Identification Number	Expiration Date 06-30-24	
		ELAP	T104704400-23-26		
The following analytes	are included in this report by	it the leberatory is not contiffi	iad butba gaugeming authority. This list ma		
the agency does not of	. ,	it the laboratory is not certifi	ied by the governing authority. This list ma	ay include analytes for v	
,	. ,	Matrix	Analyte	ay include analytes for v	
the agency does not of	fer certification.	•	, , ,	ay include analytes for v	

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Method Summary

Client: Carmona Resources Project/Site: Nighthawk 3H

Method

8021B

Total BTEX

8015 NM

8015B NM

8015NM Prep

DI Leach

300.0

5035

Job ID: 880-32290-1

Protocol

SDG: Lea County New Mexico

Laboratory	
EET MID	
EET MID	
EET MID	E
FET MID	

SW846 TAL SOP SW846 SW846 EET MID EPA EET MID SW846 **EET MID** SW846 EET MID ASTM **EET MID**

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

Microextraction

Method Description

Total BTEX Calculation

Volatile Organic Compounds (GC)

Diesel Range Organics (DRO) (GC)

Diesel Range Organics (DRO) (GC)

Deionized Water Leaching Procedure

Anions, Ion Chromatography

Closed System Purge and Trap

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: Nighthawk 3H

Job ID: 880-32290-1

SDG: Lea County New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-32290-1	BH-1 (0-1')	Solid	08/15/23 00:00	08/18/23 13:32
880-32290-2	BH-1 (2')	Solid	08/15/23 00:00	08/18/23 13:32
880-32290-3	BH-1 (4')	Solid	08/15/23 00:00	08/18/23 13:32

Chain of Custody

13 14

8/25/2023

Project Manager: Comments: Email results to Mike Carmona mcarmona@carmonaresources.com, Conner Moehring cmoehring@carmonaresources.com, Clint Merritt MerrittC@carmonaresources.com SAMPLE RECEIPT Project Name: Phone: City, State ZIP: Company Name: Sampler's Name: roject Location roject Number: eceived Intact: ample Custody Seals: xoler Custody Seals: Sample Identification BH-1 (4') BH-1 (2") BH-1 (0-1") BH-1 (5') Clinton Merritt Carmona Resources Midland, TX 79701 310 W Wall St Ste 500 Yes No Lea County, New Mexico es No Lemp Blank: Yes Relinquished by: (Signature) Nighthawk 3H 8/15/2023 8/15/2023 8/15/2023 8/15/2023 CCM N/A 2090 Date AKA A Temperature Reading: Correction Factor: Corrected Temperature Thermometer ID: Yes No Time Due Date: Routine Wet Ice: Soil × × × × Turn Around msanjari@marathonoil.com Company Name: City, State ZIP: Bill to: (if different) Water Rush 5 day Comp Grab G G G G # of Code **Parameters** Date/Time Houston, TX 77024 Marathon Oil Corporation 990 Town and Country Blvd Melodie Sanjari BTEX 8021B × TPH 8015M (GRO + DRO + MRO) × Chloride 300.0 × × ANALYSIS REQUEST Received by: (Signature) Reporting:Level II Level III ST/UST Deliverables: EDD State of Project: Program: UST/PST PRP Prownfields RC 880-32290 Chain of Custody **Work Order Comments** ADaPT Hold Cool: Cool HCL: HC NaOH+Ascorbic Acid: SAPC Zn Acetate+NaOH: Zn Na2S2O3: NaSO3 NaHSO₄: NABIS H3PO4: HP H2SO4: H2 None: NO Page_ Sample Comments Preservative Codes RRP Date/Time MeOH: Me HNO3: HN DI Water: H₂O □Level IV □ perfund NaOH: Na 으

Page 20 of 21

Login Sample Receipt Checklist

Client: Carmona Resources Job Number: 880-32290-1 SDG Number: Lea County New Mexico

List Source: Eurofins Midland

List Number: 1

Creator: Kramer, Jessica

Login Number: 32290

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.	True	
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	

Released to Imaging: 3/18/2024 9:14:49 AM

ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/22/2023 12:44:07 PM

JOB DESCRIPTION

Nighthawk 3H SDG NUMBER Lea County New Mexico

JOB NUMBER

880-32291-1

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 8/22/2023 12:44:07 PM

Authorized for release by Jessica Kramer, Project Manager <u>Jessica.Kramer@et.eurofinsus.com</u> (432)704-5440 3

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Client: Carmona Resources Project/Site: Nighthawk 3H Laboratory Job ID: 880-32291-1 SDG: Lea County New Mexico

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Definitions/Glossary

Client: Carmona Resources

Job ID: 880-32291-1

Project/Site: Nighthawk 3H

SDG: Lea County New Mexico

2

Qualifiers

HPLC/IC

 Qualifier
 Qualifier Description

 F1
 MS and/or MSD recovery exceeds control limits.

 U
 Indicates the analyte was analyzed for but not detected.

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Glossary

Giossary	
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)

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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 Job ID: 880-32291-1 Project/Site: Nighthawk 3H

SDG: Lea County New Mexico

Job ID: 880-32291-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-32291-1

Receipt

The samples were received on 8/18/2023 1:32 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 -2.8°C

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-60624 and analytical batch 880-60770 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.

Job ID: 880-32291-1

Client: Carmona Resources Project/Site: Nighthawk 3H SDG: Lea County New Mexico

Client Sample ID: BH-4 (0-1') Lab Sample ID: 880-32291-1 Date Collected: 08/15/23 00:00

Matrix: Solid Date Received: 08/18/23 13:32

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 5.02 Chloride 130 mg/Kg 08/22/23 06:14

Lab Sample ID: 880-32291-2 Client Sample ID: BH-4 (2')

Date Collected: 08/15/23 00:00 **Matrix: Solid**

Date Received: 08/18/23 13:32

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL MDL Unit D Analyzed Dil Fac Prepared Chloride 4.95 08/22/23 06:21 75.5 mg/Kg

Client Sample ID: BH-4 (4') Lab Sample ID: 880-32291-3

Date Collected: 08/15/23 00:00 Matrix: Solid

Date Received: 08/18/23 13:32

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble Result Qualifier Analyte RL MDL Unit D Prepared Analyzed Dil Fac Chloride 285 5.01 08/22/23 06:29 mg/Kg

Dil Fac

QC Sample Results

Client: Carmona Resources Project/Site: Nighthawk 3H SDG: Lea County New Mexico

RPD

Limit

20

20

Client Sample ID: Method Blank

Analyzed

08/22/23 03:02

Client Sample ID: Lab Control Sample

%Rec

Limits

90 - 110

%Rec

Limits

90 - 110

%Rec

Limits

Client Sample ID: Matrix Spike

Client Sample ID: Lab Control Sample Dup

Job ID: 880-32291-1

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

RPD

Prep Type: Soluble

Method: 300.0 - Anions, Ion Chromatography Lab Sample ID: MB 880-60624/1-A

Matrix: Solid

Analysis Batch: 60770

мв мв

Sample Sample

Sample Sample

Result Qualifier

809 F1

Result Qualifier

Analyte Result Qualifier Chloride <5.00 U

Lab Sample ID: LCS 880-60624/2-A **Matrix: Solid**

Analysis Batch: 60770

Analyte

Chloride

Analyte

Chloride

Lab Sample ID: LCSD 880-60624/3-A **Matrix: Solid**

Analysis Batch: 60770

Chloride

Lab Sample ID: 880-32288-A-4-B MS **Matrix: Solid**

Analysis Batch: 60770

Analyte

Lab Sample ID: 880-32288-A-4-C MSD **Matrix: Solid**

Analysis Batch: 60770 Analyte

Chloride 809 F1

RL

5.00

Spike

Added

250

Spike

Added

250

Spike

Added

248

Spike

Added

248

LCS LCS

MS MS

1026 F1

MSD MSD

1030 F1

Result Qualifier

Result Qualifier

Result Qualifier 249.2

MDL Unit

mg/Kg

mg/Kg

LCSD LCSD Result Qualifier 249.9

Unit

mg/Kg

Unit

mg/Kg

Unit

Unit

D

D

Prepared

%Rec

%Rec

100

100

%Rec mg/Kg

90 - 110 Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

%Rec RPD %Rec Limits RPD Limit 89 90 - 110 0

QC Association Summary

Client: Carmona Resources

Job ID: 880-32291-1

Project/Site: Nighthawk 3H

SDG: Lea County New Mexico

HPLC/IC

Leach Batch: 60624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32291-1	BH-4 (0-1')	Soluble	Solid	DI Leach	
880-32291-2	BH-4 (2')	Soluble	Solid	DI Leach	
880-32291-3	BH-4 (4')	Soluble	Solid	DI Leach	
MB 880-60624/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-60624/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-60624/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-32288-A-4-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-32288-A-4-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 60770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32291-1	BH-4 (0-1')	Soluble	Solid	300.0	60624
880-32291-2	BH-4 (2')	Soluble	Solid	300.0	60624
880-32291-3	BH-4 (4')	Soluble	Solid	300.0	60624
MB 880-60624/1-A	Method Blank	Soluble	Solid	300.0	60624
LCS 880-60624/2-A	Lab Control Sample	Soluble	Solid	300.0	60624
LCSD 880-60624/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	60624
880-32288-A-4-B MS	Matrix Spike	Soluble	Solid	300.0	60624
880-32288-A-4-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	60624

Eurofins Midland

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Client: Carmona Resources Project/Site: Nighthawk 3H Job ID: 880-32291-1 SDG: Lea County New Mexico

SDG. Lea County New Mexico

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

Date Collected: 08/15/23 00:00 Date Received: 08/18/23 13:32 Lab Sample ID: 880-32291-1

Matrix: Solid

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	60624	08/19/23 11:24	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	60770	08/22/23 06:14	CH	EET MID

Client Sample ID: BH-4 (2')

Date Collected: 08/15/23 00:00

Lab Sample ID: 880-32291-2

Matrix: Solid

Date Collected: 08/15/23 00:00 Date Received: 08/18/23 13:32

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	60624	08/19/23 11:24	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	60770	08/22/23 06:21	CH	EET MID

Client Sample ID: BH-4 (4')

Lab Sample ID: 880-32291-3

Date Collected: 08/15/23 00:00

Released to Imaging: 3/18/2024 9:14:49 AM

Date Received: 08/18/23 13:32

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	60624	08/19/23 11:24	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	60770	08/22/23 06:29	CH	EET MID

Laboratory References:

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

Eurofins Midland

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Accreditation/Certification Summary

Client: Carmona Resources

Job ID: 880-32291-1

Project/Site: Nighthawk 3H

SDG: Lea County New Mexico

Laboratory: Eurofins Midland

The accreditations/certifications listed below are applicable to this report.

١	Authority	Program	Identification Number	Expiration Date
١	Texas	NELAP	T104704400-23-26	06-30-24

Method Summary

Client: Carmona Resources Project/Site: Nighthawk 3H

Job ID: 880-32291-1

SDG: Lea County New Mexico

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

Laboratory References:

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

Sample Summary

Client: Carmona Resources Project/Site: Nighthawk 3H

Job ID: 880-32291-1 SDG: Lea County New Mexico

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-32291-1	BH-4 (0-1')	Solid	08/15/23 00:00	08/18/23 13:32
880-32291-2	BH-4 (2')	Solid	08/15/23 00:00	08/18/23 13:32
880-32291-3	BH-4 (4')	Solid	08/15/23 00:00	08/18/23 13:32

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Project Manager:

Clinton Merritt

Company Name: Bill to: (if different) Chain of Custody Marathon Oil Corporation Melodie Sanjari

				Comments: Ema				BH-4 (4')	BH-4 (2')	BH-4 (0-1')	Sample Identification	Total Containers:	Sample Custody Seals:	Cooler Custody Seals:	Received Intact:	SAMPLE RECEIPT	PO#:	Sampler's Name:	Project Location	Project Number:	Project Name:	Phone:	e ZIP:		Company Name:
0			Relin	Comments: Email results to Mike Carmona mcarmona@carmonaresources.com, Conner Moehring cmoehring@carmonaresources.com, Clint Merritt MerrittC@carmonaresources.com									ils: Yes No	Yes No	/ Yes >	PT Tepap Black:			Lea Count		Night		Midland, TX 79701	310 W Wall St Ste 500	Carmona Resources
			Relinquished by: (Signature)	rmona mcarm				8/15/2023	8/15/2023	8/15/2023	Date 1	Сопес	N/A Tempe	Ď/		gk: Ye€		CCM	Lea County, New Mexico	2090	Nighthawk 3H			00	
	/		gnature)	ona@carmor		-					Time	Corrected Temperature:	Temperature Reading:	Correction Factor:	Thermometer ID:	No O)		Due						
				naresources.				×	×	×	Soil	.e.	2			Wet Ice:			Due Date:	✓ Routine [Turn Around	Email: ms	Cit	Ad	င္ပ
				com, Conner				G	G	G	Water Comp	25	2 p	-0.3	5	(Yes No)		5 day	Rush	und	Email: msanjari@marathonoil.com	City, State ZIP:	Address:	Company Name:
	X1-X	5	Date	Moehring cn					_	_	# of Cont	the	B		ara:	nete	ers			Code		honoil.com	Houst	990 T	Marat
	3-123		Date/Time	noehring@ca				×	×	×		H 80	-	_		DR(0+1	MRC)) 				Houston, TX 77024	990 Town and Country Blvd	Marathon Oil Corporation
	-			rmonaresoui			-	-	-									_			AN			y Blvd	tion
	Mark		Rec	ces.com, Cli		+		+		+											ANALYSIS REQUEST				
	WA		Received by: (Signature)	nt Merritt Me												_					UEST	Deliverables: EDD	Reporting:Lev	State of Project:	Program: US
			jnature)	rrittC@carmo					-	-					_						-	L	Reporting:Level III LIST/UST)]	T/PST PRP
				onaresource		-				+		Nac	Zn A	Na ₂ S	NaH	Н ₃ РС	H ₂ SC	HCL: HC	Cool	None		Abari	I LIST/UST]	Program: UST/PST PRP rownfields RC
1	5		Dat	s.com							Sample Comments	NaUH+Ascorbic Acid: SAPC	Zn Acetate+NaOH: Zn	Na ₂ S ₂ O ₃ NaSO ₃	NaHSO ₄ : NABIS	H₃PO₄: HP	H ₂ SO ₄ : H ₂ N		<u>u</u>	None: NO D	Preservative Codes	Other		_	
122	CLB		Date/Time								nments						NaOH: Na	HNO ₃ : HN	MeOH: Me	DI Water: H ₂ O	Codes		Level IV	1	□perfund □

880-32291 Chain of Custody

Program: UST/PST PRP prownfields RC

Work Order Comments

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8/22/2023

Login Sample Receipt Checklist

Client: Carmona Resources Job Number: 880-32291-1 SDG Number: Lea County New Mexico

List Source: Eurofins Midland

Login Number: 32291 List Number: 1

Creator: Kramer, Jessica

Question Answer Comment The cooler's custody seal, if present, is intact. N/A N/A Sample custody seals, if present, are intact. The cooler or samples do not appear to have been compromised or True tampered with. Samples were received on ice. True True Cooler Temperature is acceptable. 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 True HTs) 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. True There is sufficient vol. for all requested analyses, incl. any requested True MS/MSDs Containers requiring zero headspace have no headspace or bubble is N/A

<6mm (1/4").

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/12/2023 9:05:41 PM

JOB DESCRIPTION

Nighthawk 3H SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34209-1

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 10/12/2023 9:05:41 PM

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

Client: Carmona Resources Project/Site: Nighthawk 3H Laboratory Job ID: 880-34209-1 SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources

Job ID: 880-34209-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

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Qualifiers

GC VOA

Qualifier Description

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

GC Semi VOA

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.

Eisted 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

Job ID: 880-34209-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Job ID: 880-34209-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-34209-1

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 10/9/2023~4:20~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 $2.6^{\circ}C$

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: BH-2 (0-1') (880-34209-1), BH-2 (2') (880-34209-2), BH-2 (4') (880-34209-3) and BH-2 (5') (880-34209-4).

GC VOA

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-64332 and analytical batch 880-64432 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: BH-2 (0-1') (880-34209-1). 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.

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Client Sample Results

Client: Carmona Resources Job ID: 880-34209-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Client Sample ID: BH-2 (0-1') Lab Sample ID: 880-34209-1

Date Collected: 10/04/23 00:00 Matrix: Solid Date Received: 10/09/23 16:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 18:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 18:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 18:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 18:39	
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 18:39	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 18:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130				10/10/23 10:38	10/11/23 18:39	1
1,4-Difluorobenzene (Surr)	110		70 - 130				10/10/23 10:38	10/11/23 18:39	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			10/11/23 18:39	
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (9/.19				
Method: SW846 8015 NM - Diese Analyte		ics (DRO) (MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte		Qualifier	GC)	MDL		<u>D</u>	Prepared		
Analyte Total TPH	Result <49.6	Qualifier U	RL 49.6	MDL	Unit	<u>D</u>	Prepared	Analyzed	
Analyte Total TPH	Result <49.6	Qualifier U	RL 49.6	MDL	Unit			Analyzed	1
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte	Result <49.6 sel Range Orga Result	Qualifier U unics (DRO) Qualifier	RL 49.6 (GC)		Unit mg/Kg	<u>D</u>	Prepared	Analyzed 10/10/23 23:57 Analyzed	1
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result <49.6	Qualifier U unics (DRO) Qualifier	RL 49.6 (GC)		Unit mg/Kg			Analyzed 10/10/23 23:57	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.6 sel Range Orga Result	Qualifier U unics (DRO) Qualifier U	RL 49.6 (GC)		Unit mg/Kg Unit mg/Kg		Prepared	Analyzed 10/10/23 23:57 Analyzed	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result <49.6 Sel Range Orga Result <49.6	Qualifier U unics (DRO) Qualifier U	(GC) RL 49.6 RL 49.6		Unit mg/Kg		Prepared 10/10/23 09:30	Analyzed 10/10/23 23:57 Analyzed 10/10/23 23:57	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.6 Sel Range Orga Result <49.6	Qualifier U unics (DRO) Qualifier U	(GC) RL 49.6 RL 49.6		Unit mg/Kg Unit mg/Kg		Prepared 10/10/23 09:30	Analyzed 10/10/23 23:57 Analyzed 10/10/23 23:57	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U unics (DRO) Qualifier U U	GC) RL 49.6 (GC) RL 49.6 49.6		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30	Analyzed 10/10/23 23:57 Analyzed 10/10/23 23:57 10/10/23 23:57	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U unics (DRO) Qualifier U U	GC) RL 49.6 (GC) RL 49.6 49.6 49.6		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30	Analyzed 10/10/23 23:57 Analyzed 10/10/23 23:57 10/10/23 23:57 10/10/23 23:57	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <49.6	Qualifier U unics (DRO) Qualifier U U Qualifier	GC) RL 49.6 (GC) RL 49.6 49.6 49.6 Limits		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30 Prepared	Analyzed 10/10/23 23:57 Analyzed 10/10/23 23:57 10/10/23 23:57 10/10/23 23:57 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <49.6	Qualifier U Inics (DRO) Qualifier U U Qualifier S1+ S1+	GC) RL 49.6 (GC) RL 49.6 49.6 49.6 Limits 70 - 130 70 - 130		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30 Prepared 10/10/23 09:30	Analyzed 10/10/23 23:57 Analyzed 10/10/23 23:57 10/10/23 23:57 10/10/23 23:57 Analyzed 10/10/23 23:57	Dil Fac 1 1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result <49.6	Qualifier U Inics (DRO) Qualifier U U Qualifier S1+ S1+	GC) RL 49.6 (GC) RL 49.6 49.6 49.6 Limits 70 - 130 70 - 130	MDL	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30 Prepared 10/10/23 09:30	Analyzed 10/10/23 23:57 Analyzed 10/10/23 23:57 10/10/23 23:57 10/10/23 23:57 Analyzed 10/10/23 23:57	Dil Fac 1 1 1 Dil Fac 1

Client Sample ID: BH-2 (2') Lab Sample ID: 880-34209-2 **Matrix: Solid**

Date Collected: 10/04/23 00:00 Date Received: 10/09/23 16:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		10/10/23 10:38	10/11/23 19:00	1
Toluene	<0.00201	U	0.00201		mg/Kg		10/10/23 10:38	10/11/23 19:00	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/10/23 10:38	10/11/23 19:00	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		10/10/23 10:38	10/11/23 19:00	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/10/23 10:38	10/11/23 19:00	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/10/23 10:38	10/11/23 19:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130				10/10/23 10:38	10/11/23 19:00	1
1,4-Difluorobenzene (Surr)	106		70 - 130				10/10/23 10:38	10/11/23 19:00	1

Date Collected: 10/04/23 00:00

Date Received: 10/09/23 16:20

Client: Carmona Resources Project/Site: Nighthawk 3H

129

Job ID: 880-34209-1

SDG: Lea County, New Mexico

10/11/23 00:19

10/10/23 09:30

Client Sample ID: BH-2 (2') Lab Sample ID: 880-34209-2

Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation Dil Fac Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Total BTEX <0.00402 U 0.00402 10/11/23 19:00 mg/Kg

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC) MDL Unit Result Qualifier RL Prepared D Analyzed Dil Fac Total TPH <50.3 U 50.3 10/11/23 00:19 mg/Kg

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) Result Qualifier RL MDL Unit Analyte D Prepared Dil Fac Analyzed <50.3 U 50.3 10/10/23 09:30 10/11/23 00:19 Gasoline Range Organics mg/Kg (GRO)-C6-C10 50.3 Diesel Range Organics (Over <50.3 U mg/Kg 10/10/23 09:30 10/11/23 00:19 C10-C28) Oll Range Organics (Over C28-C36) <50.3 U 50.3 mg/Kg 10/10/23 09:30 10/11/23 00:19 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 126 70 - 130 10/10/23 09:30 1-Chlorooctane 10/11/23 00:19

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble Result Qualifier Analyte RL MDL Unit D Prepared Analyzed Dil Fac Chloride 101 5.00 mg/Kg 10/11/23 21:06

70 - 130

Client Sample ID: BH-2 (4') Lab Sample ID: 880-34209-3 Date Collected: 10/04/23 00:00 **Matrix: Solid**

Date Received: 10/09/23 16:20

Released to Imaging: 3/18/2024 9:14:49 AM

o-Terphenyl

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00202	U	0.00202		mg/Kg		10/10/23 10:38	10/11/23 19:20	
Toluene	<0.00202	U	0.00202		mg/Kg		10/10/23 10:38	10/11/23 19:20	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/10/23 10:38	10/11/23 19:20	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		10/10/23 10:38	10/11/23 19:20	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/10/23 10:38	10/11/23 19:20	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		10/10/23 10:38	10/11/23 19:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				10/10/23 10:38	10/11/23 19:20	1
1,4-Difluorobenzene (Surr) Method: TAL SOP Total BTEX			70 - 130				10/10/23 10:38	10/11/23 19:20	
Method: TAL SOP Total BTEX Analyte	- Total BTEX Cald	Qualifier	RL	MDL	Unit ma/Ka	<u>D</u>	10/10/23 10:38 Prepared	10/11/23 19:20 Analyzed 10/11/23 19:20	
Method: TAL SOP Total BTEX Analyte Total BTEX	- Total BTEX Calc Result <0.00404	Qualifier U	RL 0.00404	MDL	Unit mg/Kg	<u>D</u>		Analyzed	·
Method: TAL SOP Total BTEX Analyte Total BTEX Method: SW846 8015 NM - Die	- Total BTEX Cald Result <0.00404 sel Range Organ	Qualifier U	RL 0.00404			<u>D</u>		Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte	- Total BTEX Cald Result <0.00404 sel Range Organ	Qualifier U ics (DRO) (Qualifier	RL 0.00404		mg/Kg	=	Prepared	Analyzed 10/11/23 19:20	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX Method: SW846 8015 NM - Die Analyte Total TPH	- Total BTEX Calc Result <0.00404 sel Range Organ Result <50.5	Qualifier U ics (DRO) (Qualifier U	RL 0.00404 ———————————————————————————————		mg/Kg	=	Prepared	Analyzed 10/11/23 19:20 Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX Method: SW846 8015 NM - Die Analyte Total TPH Method: SW846 8015B NM - D	- Total BTEX Calc Result <0.00404 sel Range Organ Result <50.5	Qualifier U ics (DRO) (Qualifier U	RL 0.00404 ———————————————————————————————	MDL	mg/Kg	=	Prepared	Analyzed 10/11/23 19:20 Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX Method: SW846 8015 NM - Die Analyte	- Total BTEX Calc Result <0.00404 sel Range Organ Result <50.5	Qualifier U ics (DRO) (Qualifier U inics (DRO) Qualifier	RL 0.00404 GC) RL 50.5	MDL	mg/Kg Unit mg/Kg	<u></u>	Prepared Prepared	Analyzed 10/11/23 19:20 Analyzed 10/11/23 00:41	Dil Fac

Client Sample Results

Client: Carmona Resources Job ID: 880-34209-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Client Sample ID: BH-2 (4')

Date Received: 10/09/23 16:20

Lab Sample ID: 880-34209-3 Date Collected: 10/04/23 00:00

Matrix: Solid

	Method: SW846 8015B NM	- Diesel Range Organics (DRO) (GO	C) (Continued)
ı	Analysta	Popult Qualifier	DI

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		10/10/23 09:30	10/11/23 00:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130				10/10/23 09:30	10/11/23 00:41	1
o-Terphenyl	115		70 - 130				10/10/23 09:30	10/11/23 00:41	1

Method: EPA 300.0 - Anions, Ion C	Chromatography - Soluble	e						
Analyte	Result Qualifier	RL	MDL U	nit	D	Prepared	Analyzed	Dil Fac
Chloride	106	4.97	m	g/Kg			10/11/23 21:12	1

Surrogate Summary

Client: Carmona Resources

Job ID: 880-34209-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acce
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34196-A-1-B MS	Matrix Spike	102	102	
880-34196-A-1-C MSD	Matrix Spike Duplicate	112	102	
880-34209-1	BH-2 (0-1')	95	110	
880-34209-2	BH-2 (2')	93	106	
880-34209-3	BH-2 (4')	97	109	
LCS 880-64332/1-A	Lab Control Sample	111	104	
LCSD 880-64332/2-A	Lab Control Sample Dup	99	101	
MB 880-64332/5-A	Method Blank	108	122	
Surrogate Legend				
BFB = 4-Bromofluorobenzene	(Surr)			

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34209-1	BH-2 (0-1')	133 S1+	138 S1+	
880-34209-2	BH-2 (2')	126	129	
880-34209-3	BH-2 (4')	115	115	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Surrogate Legend

Eurofins Midland

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QC Sample Results

Client: Carmona Resources Job ID: 880-34209-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64332/5-A

Matrix: Solid Analysis Batch: 64432 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64332

	MR	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1

MB MB

Surrogate	%Recover	y Qualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzen	ne (Surr) 10	8 70 - 130	10/10/23 10:38	10/11/23 12:35	1
1,4-Difluorobenzene ((Surr) 12		10/10/23 10:38	10/11/23 12:35	1

Lab Sample ID: LCS 880-64332/1-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 64432

Prep Type: Total/NA

Prep Batch: 64332

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1166		mg/Kg		117	70 - 130	
Toluene	0.100	0.09644		mg/Kg		96	70 - 130	
Ethylbenzene	0.100	0.09544		mg/Kg		95	70 - 130	
m-Xylene & p-Xylene	0.200	0.1878		mg/Kg		94	70 - 130	
o-Xylene	0.100	0.09012		mg/Kg		90	70 - 130	

LCS LCS

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

Lab Sample ID: LCSD 880-64332/2-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 64332

RPD LCSD LCSD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Limit Benzene 0.100 0.1117 mg/Kg 112 70 - 130 35 Toluene 0.100 0.09300 mg/Kg 93 70 - 130 35 Ethylbenzene 0.100 0.09384 mg/Kg 94 70 - 130 2 35 0.200 m-Xylene & p-Xylene 0.1837 mg/Kg 92 70 - 130 35 0.100 0.08378 70 - 130 o-Xylene mg/Kg 35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1.4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-34196-A-1-B MS

Matrix: Solid

Analysis Batch: 64432

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

Prep Batch: 64332

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.101	0.09018		mg/Kg		89	70 - 130	
Toluene	<0.00201	U	0.101	0.07128		mg/Kg		71	70 - 130	

Eurofins Midland

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Prep Batch: 64332

Prep Type: Total/NA

67

70 - 130

Client: Carmona Resources Job ID: 880-34209-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

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

<0.00201 UF1

Lab Sample ID: 880-34196-A-1-B MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid Analysis Batch: 64432

o-Xylene

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Ethylbenzene <0.00201 U F1 0.101 0.06697 F1 66 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00402 UF1 0.202 0.1343 F1 mg/Kg 66 70 - 130

0.06838 F1

mg/Kg

0.101

MS MS

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

Lab Sample ID: 880-34196-A-1-C MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 64432

Prep Batch: 64332 MSD MSD Sample Sample Spike RPD Result Qualifier Result Qualifier RPD Limit Analyte babbA Unit %Rec Limits 0.0996 Benzene <0.00201 U 0.09951 mg/Kg 100 70 - 130 10 35 Toluene <0.00201 U 0.0996 0.08277 mg/Kg 83 70 - 130 15 35 Ethylbenzene <0.00201 UF1 0.0996 0.08667 87 70 - 130 26 35 mg/Kg 0.199 70 - 130 m-Xylene & p-Xylene <0.00402 U F1 0.1785 mq/Kq 28 35 0.0996 <0.00201 UF1 0.08121 81 70 - 130 o-Xylene mg/Kg 17

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64405/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 64500

۱		MB	MB							
۱	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	<5.00	U	5.00		mg/Kg			10/11/23 18:28	1

Lab Sample ID: LCS 880-64405/2-A Client Sample ID: Lab Control Sample Matrix: Solid **Prep Type: Soluble**

Analysis Batch: 64500

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	251.4		mg/Kg		101	90 - 110	

Lab Sample ID: LCSD 880-64405/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	251.8		mg/Kg	_	101	90 - 110		20

QC Sample Results

Client: Carmona Resources

Job ID: 880-34209-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-34204-A-1-D MS

Client Sample ID: Matrix Spike
Matrix: Solid

Prep Type: Soluble

Matrix: Solid Analysis Batch: 64500

Sample Sample Spike MS MS %Rec Result Qualifier Added Result Qualifier Analyte Unit %Rec Limits Chloride 290 248 540.9 mg/Kg 101 90 - 110

Lab Sample ID: 880-34204-A-1-E MSD

Matrix: Solid

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analysis Batch: 64500

Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec Chloride 290 248 541.5 mg/Kg 101 90 - 110 0 20

Eurofins Midland

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QC Association Summary

Client: Carmona Resources

Job ID: 880-34209-1
Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34209-1	BH-2 (0-1')	Total/NA	Solid	5035	
880-34209-2	BH-2 (2')	Total/NA	Solid	5035	
880-34209-3	BH-2 (4')	Total/NA	Solid	5035	
MB 880-64332/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34209-1	BH-2 (0-1')	Total/NA	Solid	8021B	64332
880-34209-2	BH-2 (2')	Total/NA	Solid	8021B	64332
880-34209-3	BH-2 (4')	Total/NA	Solid	8021B	64332
MB 880-64332/5-A	Method Blank	Total/NA	Solid	8021B	64332
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	8021B	64332
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64332
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	64332
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64332

Analysis Batch: 64594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34209-1	BH-2 (0-1')	Total/NA	Solid	Total BTEX	
880-34209-2	BH-2 (2')	Total/NA	Solid	Total BTEX	
880-34209-3	BH-2 (4')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 64320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34209-1	BH-2 (0-1')	Total/NA	Solid	8015B NM	64329
880-34209-2	BH-2 (2')	Total/NA	Solid	8015B NM	64329
880-34209-3	BH-2 (4')	Total/NA	Solid	8015B NM	64329

Prep Batch: 64329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34209-1	BH-2 (0-1')	Total/NA	Solid	8015NM Prep	
880-34209-2	BH-2 (2')	Total/NA	Solid	8015NM Prep	
880-34209-3	BH-2 (4')	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64471

Lab Sample ID 880-34209-1	Client Sample ID BH-2 (0-1')	Prep Type Total/NA	Matrix Solid	Method 8015 NM	Prep Batch
880-34209-2	BH-2 (2')	Total/NA	Solid	8015 NM	
880-34209-3	BH-2 (4')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34209-1	BH-2 (0-1')	Soluble	Solid	DI Leach	
880-34209-2	BH-2 (2')	Soluble	Solid	DI Leach	

Eurofins Midland

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QC Association Summary

Client: Carmona Resources

Job ID: 880-34209-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

HPLC/IC (Continued)

Leach Batch: 64405 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34209-3	BH-2 (4')	Soluble	Solid	DI Leach	
MB 880-64405/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-34204-A-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-34204-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 64500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34209-1	BH-2 (0-1')	Soluble	Solid	300.0	64405
880-34209-2	BH-2 (2')	Soluble	Solid	300.0	64405
880-34209-3	BH-2 (4')	Soluble	Solid	300.0	64405
MB 880-64405/1-A	Method Blank	Soluble	Solid	300.0	64405
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	300.0	64405
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64405
880-34204-A-1-D MS	Matrix Spike	Soluble	Solid	300.0	64405
880-34204-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	64405

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Client: Carmona Resources Project/Site: Nighthawk 3H

Lab Sample ID: 880-34209-1

Matrix: Solid

Matrix: Solid

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

Date Collected: 10/04/23 00:00 Date Received: 10/09/23 16:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	64332	10/10/23 10:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64432	10/11/23 18:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64594	10/11/23 18:39	SM	EET MID
Total/NA	Analysis	8015 NM		1			64471	10/10/23 23:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	64329	10/10/23 09:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64320	10/10/23 23:57	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	64405	10/10/23 15:31	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64500	10/11/23 21:00	CH	EET MID

Lab Sample ID: 880-34209-2 Client Sample ID: BH-2 (2') Date Collected: 10/04/23 00:00

Date Received: 10/09/23 16:20

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 5035 Total/NA Prep 4.97 g 5 mL 64332 10/10/23 10:38 MNR EET MID 8021B Total/NA 5 mL 10/11/23 19:00 **EET MID** Analysis 1 5 mL 64432 MNR Total/NA Total BTEX 64594 10/11/23 19:00 Analysis SM **EET MID** 1 Total/NA Analysis 8015 NM 64471 10/11/23 00:19 SM **EET MID** Total/NA Prep 8015NM Prep 9.94 g 10 mL 64329 10/10/23 09:30 TKC EET MID Total/NA Analysis 8015B NM 1 uL 1 uL 64320 10/11/23 00:19 SM **EET MID** Soluble 10/10/23 15:31 Leach DI Leach 5 g 50 mL 64405 AG EET MID Soluble Analysis 300.0 50 mL 50 mL 64500 10/11/23 21:06 СН **EET MID**

Client Sampl

Date Collected Date Received:

ole ID: BH-2 (4')	Lab Sample ID: 880-34209-3
d: 10/04/23 00:00	Matrix: Solid
d: 10/09/23 16:20	

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	64332	10/10/23 10:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64432	10/11/23 19:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64594	10/11/23 19:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			64471	10/11/23 00:41	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	64329	10/10/23 09:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64320	10/11/23 00:41	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	64405	10/10/23 15:31	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64500	10/11/23 21:12	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Carmona Resources

Job ID: 880-34209-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Progra	am	Identification Number	Expiration Date
Texas	NELA	NELAP		06-30-24
	are included in this report, bu	ut the laboratory is not certif	fied by the governing authority. This lis	t may include analytes
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: Nighthawk 3H

Method

8021B

Total BTEX 8015 NM

8015B NM

8015NM Prep

DI Leach

300.0

5035

Job ID: 880-34209-1

SDG: Lea County, New Mexico

EET MID

EET MID

		3
Protocol	Laboratory	
SW846	EET MID	
TAL SOP	EET MID	
SW846	EET MID	5
SW846	EET MID	J
EPA	EET MID	
SW846	EET MID	

SW846

ASTM

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

Microextraction

Method Description

Total BTEX Calculation

Volatile Organic Compounds (GC)

Diesel Range Organics (DRO) (GC)

Diesel Range Organics (DRO) (GC)

Deionized Water Leaching Procedure

Anions, Ion Chromatography

Closed System Purge and Trap

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

Eurofins Midland

Page 17 of 20 Released to Imaging: 3/18/2024 9:14:49 AM

Sample Summary

Client: Carmona Resources Project/Site: Nighthawk 3H

Job ID: 880-34209-1

SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34209-1	BH-2 (0-1')	Solid	10/04/23 00:00	10/09/23 16:20
880-34209-2	BH-2 (2')	Solid	10/04/23 00:00	10/09/23 16:20
880-34209-3	BH-2 (4')	Solid	10/04/23 00:00	10/09/23 16:20

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Castoak

880-34209 Chain of Custody

			70	6					0000		000000
			3	9-7	1/1/			Y		1	
Date/Time	Received by (Signature)	Receive	e	Date/Time			iture)	by (Signa	Relinquished by (Signature)		87
	(
rces.com	Email results to Mike Carmona mcarmona@carmonaresources.com, Conner Moehring cmoehring@carmonaresources.com, Clint Merritt MerrittC@carmonaresources.com	onaresources.com, Clint N	ring@carmo	ng cmoek	r Moehrii	s.com, Conne	a@carmonaresource	mcarmon	Mike Carmona	il results to	Comments Ema
	>			1							
	×				_	G	×		10/4/2023	? (5')	BH-2 (5')
			×	×		9	×		10/4/2023	(4')	BH-2 (4')
			×	×	1	G	×		10/4/2023	? (2")	BH-2 (2')
			×	×		G	X		10/4/2023	(0-1')	BH-2 (0-1')
Sample Comments				TE	Cont	Water Comp	ne Soil	Time	Date	ntification	Sample Identification
NaOH+Ascorbic Acid SAPC	7			HR		(
Zn Acetate+NaOH Zn	2			015		なった	Corrected Temperature	Corrected	- 1		Total Containers.
Na ₂ S ₂ O ₃ NaSO ₃						2	Temperature Reading	Temperat	8		Sample Custody Seals
NaHSO ₄ NABIS	Holo				Par	† * * * * * * * * * * * * * * * * * * *	n Factor	Correction Factor	Yes No NA		Cooler Custody Seals
H ₃ PO ₄ HP			300	021E	ame	400	Ī		(Yes) No		Received Intact:
n ₂ So ₄ n ₂ NaOH Na					ter		(No) Wet Ice	Yes	Temp Blank	IPT	SAMPLE RECEIPT
			- INIC	- MF	S		}				PO#:
<u>v</u>				20)		o day			CCM		Sampler's Name
				1		5 day	Due Date	Mexico	Lea County, New Mexico	_	Project Location
CI VOL					Pres.	Rush	✓ Routine		2090		Project Number
Prosperiative Codes	ST	ANALYSIS REQUEST		· · · · · · · · · · · · · · · · · · ·		Turn Around	Turn	Ī	Nighthawk 3H		Project Name.
Other	Deliverables EDD	ō		com	athonoil (msanjan@marathonoil com	Email				Phone
JST RRP Level IV	Reporting Level II Level III ST/UST	7.	Houston TX 77024	Houston		City State ZIP			X 79701	Midland TX 79701	City, State ZIP
	State of Project:		990 Town and Country Blvd	990 Towr		Address			310 W Wall St Ste 500	310 W Wa	Address.
ields	Program UST/PST ☐PRP ☐ rownfields ☐ RRC		Marathon Oil Corporation	Marathon		Company Name			Resources	Carmona Resources	Company Name
omments	Work Order Comments		Sanjan	Melodie Sanjan		Bill to (if different)	***************************************		rritt	Clinton Merritt	Project Manager
Page1 of1_									111	Clinton Mo	7

Login Sample Receipt Checklist

Client: Carmona Resources Job Number: 880-34209-1 SDG Number: Lea County, New Mexico

List Source: Eurofins Midland

Login Number: 34209 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

ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/12/2023 9:04:28 PM

JOB DESCRIPTION

Nighthawk 3H SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34208-1

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 10/12/2023 9:04:28 PM

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

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Client: Carmona Resources Project/Site: Nighthawk 3H Laboratory Job ID: 880-34208-1 SDG: Lea County, New Mexico

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Definitions/Glossary

Job ID: 880-34208-1 Client: Carmona Resources Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier **Qualifier Description** LCS and/or LCSD is outside acceptance limits, high biased. LCS/LCSD RPD exceeds control limits S1+ Surrogate recovery exceeds control limits, high biased.

HPLC/IC

U

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Indicates the analyte was analyzed for but not detected.

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

Decision Level Concentration (Radiochemistry) DLC

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" Minimum Detectable Activity (Radiochemistry) MDA Minimum Detectable Concentration (Radiochemistry) MDC

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**

Presumptive **PRES** QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin) TEF Toxicity Equivalent Quotient (Dioxin) TFO

TNTC Too Numerous To Count

Case Narrative

Client: Carmona Resources

Job ID: 880-34208-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Job ID: 880-34208-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-34208-1

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 10/9/2023~4:20~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 $2.6^{\circ}C$

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: BH-5 (0-1') (880-34208-1).

GC VOA

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-64332 and analytical batch 880-64432 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: BH-5 (0-1') (880-34208-1). 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 880-64404 and analytical batch 880-64423 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH-5 (0-1') (880-34208-1), (CCV 880-64423/5), (LCS 880-64404/2-A), (LCSD 880-64404/3-A), (880-34208-A-1-D MS) and (880-34208-A-1-E MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (CCV 880-64423/30). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-64404 and analytical batch 880-64423 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

HPLC/IC

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

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Client Sample Results

Client: Carmona Resources

Job ID: 880-34208-1
Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

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

Date Collected: 10/04/23 00:00 Date Received: 10/09/23 16:20 Lab Sample ID: 880-34208-1

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/10/23 10:38	10/11/23 18:19	1
Toluene	< 0.00199	U	0.00199		mg/Kg		10/10/23 10:38	10/11/23 18:19	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		10/10/23 10:38	10/11/23 18:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/10/23 10:38	10/11/23 18:19	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		10/10/23 10:38	10/11/23 18:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/10/23 10:38	10/11/23 18:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	369	S1+	70 - 130				10/10/23 10:38	10/11/23 18:19	1
1,4-Difluorobenzene (Surr)	146	S1+	70 - 130				10/10/23 10:38	10/11/23 18:19	1
Method: TAL SOP Total BTEX - T	otal BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/11/23 18:19	1
Method: SW846 8015 NM - Diese			•						
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			10/11/23 12:09	1
Method: SW846 8015B NM - Dies	sel Range Orga	nics (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		10/10/23 15:31	10/11/23 12:09	1
Diesel Range Organics (Over C10-C28)	<49.6	U *+ *1	49.6		mg/Kg		10/10/23 15:31	10/11/23 12:09	1
Oll Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		10/10/23 15:31	10/11/23 12:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	145	S1+	70 - 130				10/10/23 15:31	10/11/23 12:09	1
o-Terphenyl	135	S1+	70 - 130				10/10/23 15:31	10/11/23 12:09	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Eurofins Midland

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Surrogate Summary

Client: Carmona Resources Job ID: 880-34208-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

-				Percent Surrogate Re
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34196-A-1-B MS	Matrix Spike	102	102	
880-34196-A-1-C MSD	Matrix Spike Duplicate	112	102	
880-34208-1	BH-5 (0-1')	369 S1+	146 S1+	
LCS 880-64332/1-A	Lab Control Sample	111	104	
LCSD 880-64332/2-A	Lab Control Sample Dup	99	101	
MB 880-64332/5-A	Method Blank	108	122	
Surrogate Legend				
BFB = 4-Bromofluoroben	zene (Surr)			
DFBZ = 1,4-Difluorobenz	ene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate F	Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	70-130)	
880-34208-1	BH-5 (0-1')	145 S1+	35 S1+	
880-34208-1 MS	BH-5 (0-1')	170 S1+	38 S1+	
880-34208-1 MSD	BH-5 (0-1')	171 S1+	38 S1+	
LCS 880-64404/2-A	Lab Control Sample	137 S1+	48 S1+	
LCSD 880-64404/3-A	Lab Control Sample Dup	151 S1+	44 S1+	
MB 880-64404/1-A	Method Blank	200 S1+	96 S1+	
Surrogate Legend				

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Carmona Resources Job ID: 880-34208-1 SDG: Lea County, New Mexico Project/Site: Nighthawk 3H

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64332/5-A

Matrix: Solid Analysis Batch: 64432 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64332

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1

MB MB

MD MD

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	10/10/23 10:38	10/11/23 12:35	1
1,4-Difluorobenzene (Surr)	122		70 - 130	10/10/23 10:38	10/11/23 12:35	1

Lab Sample ID: LCS 880-64332/1-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64332

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1166		mg/Kg		117	70 - 130	
Toluene	0.100	0.09644		mg/Kg		96	70 - 130	
Ethylbenzene	0.100	0.09544		mg/Kg		95	70 - 130	
m-Xylene & p-Xylene	0.200	0.1878		mg/Kg		94	70 - 130	
o-Xylene	0.100	0.09012		mg/Kg		90	70 - 130	

LCS LCS

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

Lab Sample ID: LCSD 880-64332/2-A

Matrix: Solid

Analysis Batch: 64432

	Client Sam	ple ID: Lab	Control Sam	ple Dup
--	------------	-------------	--------------------	---------

Prep Type: Total/NA

Prep Batch: 64332

RPD Spike LCSD LCSD %Rec Analyte Added Result Qualifier Unit %Rec Limits Limit Benzene 0.100 0.1117 mg/Kg 112 70 - 130 35 Toluene 0.100 0.09300 mg/Kg 93 70 - 130 35 Ethylbenzene 0.100 0.09384 mg/Kg 94 70 - 130 2 35 0.200 0.1837 m-Xylene & p-Xylene mg/Kg 92 70 - 130 35 0.100 0.08378 70 - 130 o-Xylene mg/Kg 35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1.4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-34196-A-1-B MS

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64332

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.101	0.09018		mg/Kg		89	70 - 130	
Toluene	< 0.00201	U	0.101	0.07128		mg/Kg		71	70 - 130	

Eurofins Midland

Page 8 of 19

QC Sample Results

Client: Carmona Resources Job ID: 880-34208-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34196-A-1-C MSD

Matrix: Solid

Matrix: Solid

Analysis Batch: 64432

Lab Sample ID: 880-34196-A-1-B MS	Client Sample ID: Matrix Spike
Matrix: Solid	Pren Type: Total/NA

Prep Type: Total/NA

Prep Batch: 64332

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00201	U F1	0.101	0.06697	F1	mg/Kg		66	70 - 130	
m-Xylene & p-Xylene	<0.00402	U F1	0.202	0.1343	F1	mg/Kg		66	70 - 130	
o-Xylene	<0.00201	U F1	0.101	0.06838	F1	mg/Kg		67	70 - 130	

MS MS

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

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 64332

RPD

Analysis Batch: 64432 Sample Sample Spike MSD MSD Result Qualifier Added Result Qualifier %Rec RPD Limit Analyte Limits Unit Benzene <0.00201 U 0.0996 0.09951 mg/Kg 100 70 - 130 10 35 Toluene <0.00201 U 0.0996 0.08277 mg/Kg 83 70 - 130 15 35 Ethylbenzene <0.00201 UF1 0.0996 0.08667 87 70 - 130 26 35 mg/Kg 0.199 m-Xylene & p-Xylene <0.00402 UF1 0.1785 mg/Kg 89 70 - 130 28 35 <0.00201 UF1 0.0996 0.08121 81 70 - 130 o-Xylene mg/Kg 17

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

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

Lab Sample ID: MB 880-64404/1-A

Matrix: Solid

Analysis Batch: 64423

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64404

MB MB Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Analyte 50.0 10/10/23 15:30 <50.0 U 10/11/23 09:15 Gasoline Range Organics mg/Kg (GRO)-C6-C10 10/11/23 09:15 Diesel Range Organics (Over <50.0 U 50.0 10/10/23 15:30 mg/Kg C10-C28) Oll Range Organics (Over C28-C36) <50.0 U 50.0 10/10/23 15:30 10/11/23 09:15 mg/Kg

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	200	S1+	70 - 130	10/10/23 15:30	10/11/23 09:15	1
o-Terphenyl	196	S1+	70 - 130	10/10/23 15:30	10/11/23 09:15	1

Lab Sample ID: LCS 880-64404/2-A

Matrix: Solid Analysis Batch: 64423 **Client Sample ID: Lab Control Sample**

Prep Type: Total/NA Prep Batch: 64404

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	922.1		mg/Kg		92	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1019		mg/Kg		102	70 - 130	
C10-C28)								

Lab Sample ID: LCS 880-64404/2-A

Job ID: 880-34208-1 SDG: Lea County, New Mexico

Project/Site: Nighthawk 3H

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

LCS LCS

Matrix: Solid

Analysis Batch: 64423

Client: Carmona Resources

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64404

Surrogate %Recovery Qualifier

Limits 1-Chlorooctane 137 S1+ 70 - 130 o-Terphenyl 148 S1+ 70 - 130

Lab Sample ID: LCSD 880-64404/3-A

Matrix: Solid

Analysis Batch: 64423

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64404

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 1000 997.7 100 70 - 1308 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1371 *+ *1 137 mg/Kg 70 - 13029 20

C10-C28)

LCSD LCSD Surrogate %Recovery Qualifier Limits 151 S1+ 70 - 130 1-Chlorooctane 144 S1+ 70 - 130 o-Terphenyl

Lab Sample ID: 880-34208-1 MS

Matrix: Solid

Analysis Batch: 64423

Client Sample ID: BH-5 (0-1') Prep Type: Total/NA

Prep Batch: 64404

Sample Sample MS MS Spike Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits Gasoline Range Organics <49.6 U 999 953.8 mg/Kg 94 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <49.6 U*+*1 999 1308 mg/Kg 129 70 - 130

C10-C28)

MS MS %Recovery Qualifier Limits Surrogate 170 S1+ 70 - 130 1-Chlorooctane o-Terphenyl 138 S1+ 70 - 130

Lab Sample ID: 880-34208-1 MSD

Matrix: Solid

Analysis Batch: 64423

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

Prep Type: Total/NA

Prep Batch: 64404

Sample Sample MSD MSD %Rec RPD Spike Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit U 999 942.2 92 Gasoline Range Organics <49.6 mg/Kg 70 - 130 20 (GRO)-C6-C10 Diesel Range Organics (Over <49.6 U*+*1 999 1307 mg/Kg 129 70 - 130 20

C10-C28)

MSD MSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 171 S1+ 70 - 130 138 S1+ 70 - 130 o-Terphenyl

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

QC Sample Results

Client: Carmona Resources Job ID: 880-34208-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64405/1-A

Matrix: Solid

Analysis Batch: 64500

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Dil Fac MDL Unit Analyte Result Qualifier RL D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 10/11/23 18:28

Lab Sample ID: LCS 880-64405/2-A

Matrix: Solid

Analysis Batch: 64500

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 251.4 mg/Kg 101 90 - 110

Lab Sample ID: LCSD 880-64405/3-A

Matrix: Solid

Analysis Batch: 64500

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 251.8 mg/Kg 101 90 - 110

Lab Sample ID: 880-34204-A-1-D MS

Matrix: Solid

Analysis Batch: 64500

MS MS Sample Sample Spike %Rec Analyte Qualifier Added Result Result Qualifier Unit %Rec Limits Chloride 290 248 540.9 101 90 - 110 mg/Kg

Lab Sample ID: 880-34204-A-1-E MSD

Matrix: Solid

Analysis Batch: 64500

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 290 248 Chloride 541.5 mg/Kg 101 90 - 110 0 20

QC Association Summary

Client: Carmona Resources

Job ID: 880-34208-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34208-1	BH-5 (0-1')	Total/NA	Solid	5035	
MB 880-64332/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34208-1	BH-5 (0-1')	Total/NA	Solid	8021B	64332
MB 880-64332/5-A	Method Blank	Total/NA	Solid	8021B	64332
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	8021B	64332
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64332
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	64332
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64332

Analysis Batch: 64593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34208-1	BH-5 (0-1')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 64404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34208-1	BH-5 (0-1')	Total/NA	Solid	8015NM Prep	
MB 880-64404/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-64404/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-64404/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-34208-1 MS	BH-5 (0-1')	Total/NA	Solid	8015NM Prep	
880-34208-1 MSD	BH-5 (0-1')	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64423

Lab Sample ID 880-34208-1	Client Sample ID BH-5 (0-1')	Prep Type Total/NA	Matrix Solid	Method 8015B NM	Prep Batch 64404
MB 880-64404/1-A	Method Blank	Total/NA	Solid	8015B NM	64404
LCS 880-64404/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	64404
LCSD 880-64404/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	64404
880-34208-1 MS	BH-5 (0-1')	Total/NA	Solid	8015B NM	64404
880-34208-1 MSD	BH-5 (0-1')	Total/NA	Solid	8015B NM	64404

Analysis Batch: 64525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34208-1	BH-5 (0-1')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64405

Released to Imaging: 3/18/2024 9:14:49 AM

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34208-1	BH-5 (0-1')	Soluble	Solid	DI Leach	
MB 880-64405/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Carmona Resources Job ID: 880-34208-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

HPLC/IC (Continued)

Leach Batch: 64405 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34204-A-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-34204-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 64500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34208-1	BH-5 (0-1')	Soluble	Solid	300.0	64405
MB 880-64405/1-A	Method Blank	Soluble	Solid	300.0	64405
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	300.0	64405
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64405
880-34204-A-1-D MS	Matrix Spike	Soluble	Solid	300.0	64405
880-34204-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	64405

Eurofins Midland

Lab Chronicle

Client: Carmona Resources

Job ID: 880-34208-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

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

Date Collected: 10/04/23 00:00 Date Received: 10/09/23 16:20 Lab Sample ID: 880-34208-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	64332	10/10/23 10:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64432	10/11/23 18:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64593	10/11/23 18:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			64525	10/11/23 12:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	64404	10/10/23 15:31	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64423	10/11/23 12:09	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	64405	10/10/23 15:31	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64500	10/11/23 20:54	CH	EET MID

Laboratory References:

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

Eurofins Midland

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Accreditation/Certification Summary

Client: Carmona Resources

Job ID: 880-34208-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Progra	am	Identification Number	Expiration Date
Texas	NELA	Р	T104704400-23-26	06-30-24
0 ,	• •	ut the laboratory is not certif	fied by the governing authority. This lis	t may include analytes
for which the agency do Analysis Method	oes not offer certification. 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: Nighthawk 3H

Job ID: 880-34208-1

SDG: Lea 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

Eurofins Midland

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Sample Summary

Client: Carmona Resources Project/Site: Nighthawk 3H

Job ID: 880-34208-1

SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34208-1	BH-5 (0-1')	Solid	10/04/23 00:00	10/09/23 16:20

		1626				MIMILES	10000	2111
	(-4-23	10				AMA B	
Regeived, by (Signature) Date/Time	(Regeiv	Date/Time			(Signature)	Relinquished by (Signature)		3
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		- Compahuina	Conner Mochrin	SOURCES COM	armona@carmonar	to Mike Carmona mc	nail results	Comments: Er
		×	G 1	×		10/4/2023	01-3 (0-1)	
Sample Comments			0				7 () 41	2
		ТРН	Grab/	Soil Water	Time	Date	Sample Identification	Sample
NaOH+Ascorbic Acid SAPC		I 801	6.0		Corrected Temperature	(Total Containers.
Zn Acetate+NaOH Zn		5M (ic	2	Temperature Reading	No N/A	Seals.	Sample Custody Seals.
Na ₂ S ₂ O ₂ Na ₂ S _O		GR:	Pa	+	Correction Factor	Yes No NIA C	eals	Cooler Custody Seals
Nation Nation		O +	ran	1	Thermometer ID	s) No		Received Intact:
•		DRC	No nete	Wet Ice	Yes No We	1 m	EPT	SAMPLE RECEIPT
) + N	rs	7				PO#
		IRO				CCM		Samplers Name.
_))	5 day		xico Due Date	Lea County, New Mexico		Project Location
None			sh Code	itine 🔲 Rush	✓ Routine	2090		Project Number
Preservative Codes	ANALYSIS REQUEST			Turn Around				Project Name
	***************************************					Nighthawk 3H		N N N N N N N N N N N N N N N N N N N
Deliverables. EDD ☐ ADaPT ☐ Other		om	msanıarı@marathonoil.com	Email msania				Phone
Reporting Level III DST/UST RRP DLevel IV		Houston TX 77024	ate ZIP	City State ZIP		Midland TX 79701	Midland	City State ZIP
State of Project:		990 Town and Country Blvd	3	Address		310 vy vvali St Ste 500	O I O V	Address.
Program UST/PST ☐PRP ☐rownfields ☐RC ☐perfund ☐		Marathon Oil Corporation	Company Name	Compa		Carrilona resources	2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Address Address
ANOUN Order Comments				2		a Recourses	Carmon	Company Name
- 11		Melodie Saniari	Bill to (if different)	Bill to (Merritt	Clinton Merritt	Project Manager
	केटाई ६ वटन		a Si					
		* 1	all 10 mm at					

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-34208-1

SDG Number: Lea County, New Mexico

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Login Number: 34208
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	

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Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/13/2023 2:33:56 PM

JOB DESCRIPTION

Nighthawk 3H SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34207-1

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 10/13/2023 2:33:56 PM

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

Eurofins Midland is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies

Released to Imaging: 3/18/2024 9:14:49 AM

Client: Carmona Resources Project/Site: Nighthawk 3H Laboratory Job ID: 880-34207-1 SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources Job ID: 880-34207-1 SDG: Lea County, New Mexico Project/Site: Nighthawk 3H

Qualifiers

GC VOA

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

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**

Indicates the analyte was analyzed for but not detected.

TEF

TEQ

TNTC

Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	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

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Carmona Resources

Job ID: 880-34207-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Job ID: 880-34207-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-34207-1

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 10/9/2023~4:20~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 $2.6^{\circ}C$

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: H-1 (0-6") (880-34207-1).

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: H-1 (0-6") (880-34207-1) and (880-34311-A-1-C). 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: Surrogate recovery for the following sample was outside control limits: H-1 (0-6") (880-34207-1). 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.

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Date Received: 10/09/23 16:20

Client Sample Results

Client: Carmona Resources Job ID: 880-34207-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Client Sample ID: H-1 (0-6") Date Collected: 10/04/23 00:00

Lab Sample ID: 880-34207-1

libic	ID.	000-04201-1
		Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		10/11/23 15:04	10/12/23 18:57	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/11/23 15:04	10/12/23 18:57	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/11/23 15:04	10/12/23 18:57	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		10/11/23 15:04	10/12/23 18:57	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/11/23 15:04	10/12/23 18:57	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		10/11/23 15:04	10/12/23 18:57	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	69	S1-	70 - 130				10/11/23 15:04	10/12/23 18:57	1
1,4-Difluorobenzene (Surr)	103		70 - 130				10/11/23 15:04	10/12/23 18:57	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			10/12/23 18:57	1
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (GC)						
• •	•	ics (DRO) (Qualifier	GC)	MDL	Unit	D	Prepared	Analyzed	Dil Fac
: Method: SW846 8015 NM - Diese	•	Qualifier	•	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 10/10/23 23:35	Dil Fac
Method: SW846 8015 NM - Diese Analyte	Result <49.9	Qualifier U	RL 49.9	MDL		<u>D</u>	Prepared		Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies	Result <49.9 sel Range Orga	Qualifier U	RL 49.9			<u>D</u>	Prepared Prepared		1
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies Analyte	Result <49.9 sel Range Orga	Qualifier Unics (DRO) Qualifier	RL 49.9 (GC)		mg/Kg			10/10/23 23:35	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics	Result <49.9 sel Range Orga Result	Qualifier Unics (DRO) Qualifier	(GC)		mg/Kg		Prepared	10/10/23 23:35 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.9 sel Range Orga Result	Qualifier U unics (DRO) Qualifier U	(GC)		mg/Kg		Prepared	10/10/23 23:35 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U unics (DRO) Qualifier U	RL 49.9 (GC) RL 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30	10/10/23 23:35 Analyzed 10/10/23 23:35 10/10/23 23:35	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9 sel Range Orga Result <49.9	Qualifier U unics (DRO) Qualifier U	(GC) RL 49.9		mg/Kg Unit mg/Kg		Prepared 10/10/23 09:30	10/10/23 23:35 Analyzed 10/10/23 23:35	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U unics (DRO) Qualifier U U Qualifier	RL 49.9 (GC) RL 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30 Prepared	Analyzed 10/10/23 23:35 Analyzed 10/10/23 23:35 10/10/23 23:35 Analyzed	1 Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U Inics (DRO) Qualifier U U Qualifier	RL 49.9 (GC) RL 49.9 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30	Analyzed 10/10/23 23:35 Analyzed 10/10/23 23:35 10/10/23 23:35	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH	Result	Qualifier U unics (DRO) Qualifier U U Qualifier	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits		mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30 Prepared	Analyzed 10/10/23 23:35 Analyzed 10/10/23 23:35 10/10/23 23:35 Analyzed	
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <49.9	Qualifier U Conics (DRO) Qualifier U U Qualifier S1+ S1+	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130		mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30 Prepared 10/10/23 09:30	Analyzed 10/10/23 23:35 Analyzed 10/10/23 23:35 10/10/23 23:35 Analyzed 10/10/23 23:35	Dil Fac

5.04

mg/Kg

136

10/11/23 20:48

Chloride

Surrogate Summary

Client: Carmona Resources

Job ID: 880-34207-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

•				Percent Surrogate Rec
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34207-1	H-1 (0-6")	69 S1-	103	
880-34311-A-1-A MS	Matrix Spike	122	100	
880-34311-A-1-B MSD	Matrix Spike Duplicate	115	104	
LCS 880-64502/1-A	Lab Control Sample	128	109	
LCSD 880-64502/2-A	Lab Control Sample Dup	128	101	
MB 880-64502/5-A	Method Blank	80	91	
Surrogate Legend				
BFB = 4-Bromofluorobenzer	ne (Surr)			
DFBZ = 1,4-Difluorobenzene	e (Surr)			

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34207-1	H-1 (0-6")	138 S1+	142 S1+	
Surrogate Legend				

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Midland

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Client: Carmona Resources Job ID: 880-34207-1 SDG: Lea County, New Mexico Project/Site: Nighthawk 3H

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64502/5-A

Matrix: Solid Analysis Batch: 64523 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64502

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/23 15:04	10/12/23 11:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/11/23 15:04	10/12/23 11:23	1

MB MB

Surrogate	%Recovery Quali	fier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80	70 - 130	10/11/23 15:04	10/12/23 11:23	1
1.4-Difluorobenzene (Surr)	91	70 - 130	10/11/23 15:04	10/12/23 11:23	1

Lab Sample ID: LCS 880-64502/1-A

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64502

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.07857		mg/Kg		79	70 - 130	
Toluene	0.100	0.07926		mg/Kg		79	70 - 130	
Ethylbenzene	0.100	0.09043		mg/Kg		90	70 - 130	
m-Xylene & p-Xylene	0.200	0.1946		mg/Kg		97	70 - 130	
o-Xylene	0.100	0.09961		mg/Kg		100	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	128	70 - 130
1,4-Difluorobenzene (Surr)	109	70 - 130

Lab Sample ID: LCSD 880-64502/2-A

Matrix: Solid

Analysis Batch: 64523

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 64502

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08430		mg/Kg		84	70 - 130	7	35
Toluene	0.100	0.07828		mg/Kg		78	70 - 130	1	35
Ethylbenzene	0.100	0.08874		mg/Kg		89	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1787		mg/Kg		89	70 - 130	9	35
o-Xylene	0.100	0.1040		mg/Kg		104	70 - 130	4	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1.4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-34311-A-1-A MS

Matrix: Solid

Analysis Batch: 64523

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

Prep Batch: 64502

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.0996	0.09524		mg/Kg		96	70 - 130	
Toluene	<0.00200	U	0.0996	0.09387		mg/Kg		94	70 - 130	

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Job ID: 880-34207-1 Client: Carmona Resources Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34311-A-1-A MS Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 64523 Prep Batch: 64502

	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Ethylbenzene	<0.00200	U	0.0996	0.1043		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.199	0.2282		mg/Kg		115	70 - 130
o-Xylene	<0.00200	U	0.0996	0.1141		mg/Kg		115	70 - 130

Limits

MS MS %Recovery Qualifier Surrogate

70 - 130 4-Bromofluorobenzene (Surr) 122 1,4-Difluorobenzene (Surr) 70 - 130 100

Lab Sample ID: 880-34311-A-1-B MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA Analysis Batch: 64523 Prep Batch: 64502

Sample Sample Spike MSD MSD RPD Result Qualifier %Rec RPD Limit Added Result Qualifier Limits Analyte Unit D Benzene <0.00200 U 0.0990 0.08499 mg/Kg 86 70 - 130 11 35 Toluene <0.00200 0.0990 0.08138 mg/Kg 82 70 - 130 14 35 0.0990 0.08808 89 70 - 130 17 35 Ethylbenzene < 0.00200 U mg/Kg m-Xylene & p-Xylene < 0.00401 U 0.198 0.1873 mg/Kg 95 70 - 130 20 35 0.0990 0.09482 96 70 - 130 o-Xylene <0.00200 U mg/Kg 18 35

MSD MSD Qualifier Limits Surrogate %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 115 1,4-Difluorobenzene (Surr) 104 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64405/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

мв мв Result Qualifier RL MDL Unit D Dil Fac Analyte Prepared Analyzed 5.00 10/11/23 18:28 Chloride <5.00 U mg/Kg

Lab Sample ID: LCS 880-64405/2-A **Client Sample ID: Lab Control Sample** Matrix: Solid **Prep Type: Soluble**

Analysis Batch: 64500

Spike LCS LCS %Rec Analyte Added Result Qualifier Limits Unit %Rec Chloride 250 251.4 mg/Kg 101 90 - 110

Lab Sample ID: LCSD 880-64405/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

Spike LCSD LCSD %Rec RPD Added Qualifier Limit Analyte Result Unit D %Rec Limits RPD Chloride 250 251.8 101 90 - 110 20 mg/Kg

Eurofins Midland

Client: Carmona Resources Job ID: 880-34207-1 SDG: Lea County, New Mexico Project/Site: Nighthawk 3H

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-34204-A-1-D MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Soluble Analysis Batch: 64500

Sample Sample Spike MS MS %Rec Result Qualifier Added Result Qualifier Analyte Unit %Rec Limits Chloride 290 248 540.9 mg/Kg 101 90 - 110

Lab Sample ID: 880-34204-A-1-E MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Soluble

Analysis Batch: 64500 Sample Sample Spike MSD MSD %Rec RPD

Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec Chloride 290 248 541.5 mg/Kg 101 90 - 110 0 20

QC Association Summary

Client: Carmona Resources

Job ID: 880-34207-1
Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34207-1	H-1 (0-6")	Total/NA	Solid	5035	
MB 880-64502/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64502/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64502/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34311-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-34311-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34207-1	H-1 (0-6")	Total/NA	Solid	8021B	64502
MB 880-64502/5-A	Method Blank	Total/NA	Solid	8021B	64502
LCS 880-64502/1-A	Lab Control Sample	Total/NA	Solid	8021B	64502
LCSD 880-64502/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64502
880-34311-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	64502
880-34311-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64502

Analysis Batch: 64681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34207-1	H-1 (0-6")	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 64320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34207-1	H-1 (0-6")	Total/NA	Solid	8015B NM	64329

Prep Batch: 64329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34207-1	H-1 (0-6")	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34207-1	H-1 (0-6")	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64405

Lab Sample ID 880-34207-1	Client Sample ID H-1 (0-6")	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
MB 880-64405/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-34204-A-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-34204-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 64500

Lab Sample ID 880-34207-1	Client Sample ID H-1 (0-6")	Prep Type Soluble	Matrix Solid	Method 300.0	Prep Batch 64405
MB 880-64405/1-A	Method Blank	Soluble	Solid	300.0	64405
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	300.0	64405
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64405
880-34204-A-1-D MS	Matrix Spike	Soluble	Solid	300.0	64405

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QC Association Summary

Client: Carmona Resources

Job ID: 880-34207-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

HPLC/IC (Continued)

Analysis Batch: 64500 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34204-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	64405

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Lab Chronicle

Client: Carmona Resources Job ID: 880-34207-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

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

Date Collected: 10/04/23 00:00 Date Received: 10/09/23 16:20 Lab Sample ID: 880-34207-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	64502	10/11/23 15:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64523	10/12/23 18:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64681	10/12/23 18:57	SM	EET MID
Total/NA	Analysis	8015 NM		1			64470	10/10/23 23:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	64329	10/10/23 09:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64320	10/10/23 23:35	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	64405	10/10/23 15:31	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64500	10/11/23 20:48	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

Job ID: 880-34207-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Progra	ım	Identification Number	Expiration Date
Texas	NELAI)	T104704400-23-26	06-30-24
The following analytes	are included in this report hu	t the laboratory is not certif	ied by the governing authority. This lis	t may include analyt
0 ,	oes not offer certification.	t the laboratory to not corta	ied by the governing duthenty. This he	t may morado anary c
,		Matrix	Analyte	a may morado dinaly c
for which the agency d	oes not offer certification.	•	, , ,	. may morado unarye

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Method Summary

Client: Carmona Resources
Project/Site: Nighthawk 3H
SD

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Job ID: 880-34207-1 SDG: Lea County, New Mexico

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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: Nighthawk 3H

Job ID: 880-34207-1

SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34207-1	H-1 (0-6")	Solid	10/04/23 00:00	10/09/23 16:20

(")

880-34207 Chain of Custody

Pate/ Illie	A K		9-23 VLQ20	10-0				More	10011	Month
Data di	Received by (Signature)	Rec	Date/Time	D			y (Signature)	Relinquished by (Signature)	70	
ources.com	nt merritt merritt @carmonareso	illionaresources.com, Ci					(
	Comments: Email results to Mike Carmona mcarmona@carmonaresources.com. Conner Moehring@carmonaresources.com. Cint Moeit	rmonarosouros com Cli	cmoshring@ca	Moehring	s.com. Conne	nonaresource	carmona@carr	Carmona m	I results to Mike	Comments: Ema

			×	_	G	×		10/4/2023)-6")	H-1 (0-6")
Sample Comments				┼	Comp					
			ТРН	# of	Water Grab/	Soil	Time	Date	ntification	Sample Identification
NaOH+Ascorbic Acid SAPC			801		2.0	rature	Corrected Temperature			Total Containers.
Zn Acetate+NaOH Zn			5M (2.4	iding	Temperature Reading	No (N/A)	Yes	Sample Custody Seals
Narso Naso			GRO oride	Pa	25.7		Correction Factor	No (N/A	Yes	Cooler Custody Seals
H ₃ PO ₄ HP) + D	ram	824		Thermometer ID			Received Intact:
H ₂ SO ₄ H ₂ NaOH Na			RO	eter	Yes) No	Wet Ice	Yes (No	emp Blank.		SAMPLE RECEIPT
			+ MF	s	•)			PO #:
⊻.			RO)		Juay	טמל טמול	o constant	CCM		Sampler's Name
None NO DI Water H ₂ O				Code	F 42.	Duo Data	POINT	ea County New Mexico) ka	Project Location
Licael Adula COURS				Pres.	Rush	マ Routine		2090		Project Number
Processing Code	DUEST	ANALYSIS REQUEST			Turn Around	Turn		Nighthawk 3H		Project Name
ADaPT Other	Deliverables. EDD		B	athonoil co	msanjari@marathonoil com	Email				Phone
ST/UST RRP Level IV	Reporting Level II Level III S1		Houston TX 77024	<u></u>	City State ZIP			701	Midland, TX 79701	City, State ZIP
	State of Project:	ntry Blvd	990 Town and Country Blvd	6	Address			Ste 500	310 W Wall St Ste 500	Address
vnfields	Program UST/PST ☐PRP ☐}rownfields	ration	Marathon Oil Corporation	2	Company Name			urces	Carmona Resources	Company Name
Comments	Work Order Comments		Melodie Sanjari		Bill to (if different)				Clinton Merritt	Project Manager
Page1 of1									T	,

Login Sample Receipt Checklist

Client: Carmona Resources Job Number: 880-34207-1 SDG Number: Lea County, New Mexico

Login Number: 34207 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

ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/12/2023 10:49:43 AM

JOB DESCRIPTION

Nighthawk 3H SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34206-1

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 10/12/2023 10:49:43 AM

Authorized for release by Jessica Kramer, Project Manager <u>Jessica.Kramer@et.eurofinsus.com</u> (432)704-5440 3

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Client: Carmona Resources Project/Site: Nighthawk 3H Laboratory Job ID: 880-34206-1 SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources

Job ID: 880-34206-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

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Qualifiers

GC VOA Qualifier

 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 Description

U Indicates the analyte was analyzed for but not detected.

Glossary

Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	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

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Case Narrative

Client: Carmona Resources

Job ID: 880-34206-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Job ID: 880-34206-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-34206-1

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 10/9/2023~4:20~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 $2.6^{\circ}C$

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: H-2 (0-6") (880-34206-1).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-64287 and analytical batch 880-64327 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-2 (0-6") (880-34206-1). 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.

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Client Sample Results

Client: Carmona Resources Job ID: 880-34206-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

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

Date Received: 10/09/23 16:20

Lab Sample ID: 880-34206-1 Date Collected: 10/04/23 00:00

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:47	10/11/23 01:59	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:47	10/11/23 01:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:47	10/11/23 01:59	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		10/10/23 10:47	10/11/23 01:59	
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:47	10/11/23 01:59	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		10/10/23 10:47	10/11/23 01:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				10/10/23 10:47	10/11/23 01:59	1
1,4-Difluorobenzene (Surr)	102		70 - 130				10/10/23 10:47	10/11/23 01:59	1
Method: TAL SOP Total BTEX -	Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	II	0.00401		mg/Kg			10/11/23 01:59	
					mg/Ng			10/11/25 01.59	
Method: SW846 8015 NM - Dieso Analyte Total TPH	el Range Organ	ics (DRO) (MDL		<u>D</u>	Prepared	Analyzed 10/10/23 23:13	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH	el Range Organ Result <49.9	ics (DRO) (Gualifier	RL 49.9	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Die	el Range Organ Result <49.9 sel Range Organ	ics (DRO) (Qualifier U	RL 49.9 (GC)		Unit mg/Kg		<u> </u>	Analyzed 10/10/23 23:13	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Die Analyte	el Range Organ Result <49.9 sel Range Orga Result	Qualifier Unics (DRO) Qualifier	RL 49.9 (GC)	MDL MDL	Unit mg/Kg Unit	<u>D</u>	Prepared	Analyzed 10/10/23 23:13 Analyzed	Dil Fac
Method: SW846 8015 NM - Dieso Analyte Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics	el Range Organ Result <49.9 sel Range Organ	Qualifier Unics (DRO) Qualifier	RL 49.9 (GC)		Unit mg/Kg		<u> </u>	Analyzed 10/10/23 23:13	Dil Fac
Method: SW846 8015 NM - Diese Analyte	el Range Organ Result <49.9 sel Range Orga Result	ics (DRO) (Qualifier U nics (DRO) Qualifier U	RL 49.9 (GC)		Unit mg/Kg Unit		Prepared	Analyzed 10/10/23 23:13 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	el Range Organ Result 49.9 sel Range Orga Result 49.9	ics (DRO) (Qualifier U nics (DRO) Qualifier U	(GC) RL 49.9 (GC) RL 49.9		Unit mg/Kg Unit mg/Kg		Prepared 10/10/23 09:30	Analyzed 10/10/23 23:13 Analyzed 10/10/23 23:13 10/10/23 23:13	Dil Fac
Method: SW846 8015 NM - Dieso Analyte Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10	el Range Organ Result 49.9 sel Range Orga Result 49.9	ics (DRO) (Qualifier U nics (DRO) Qualifier U	(GC) RL 49.9 (GC) RL 49.9		Unit mg/Kg Unit mg/Kg		Prepared 10/10/23 09:30	Analyzed 10/10/23 23:13 Analyzed 10/10/23 23:13	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	el Range Organ Result 49.9 sel Range Orga Result 49.9	ics (DRO) (COMPANIES (DRO) (DR	(GC) RL 49.9 (GC) RL 49.9 49.9		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30	Analyzed 10/10/23 23:13 Analyzed 10/10/23 23:13 10/10/23 23:13	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	el Range Organ Result 49.9 sel Range Orga Result 49.9 49.9	ics (DRO) (COMPANIES (DRO)) Qualifier U Qualifier U U U	GC) RL 49.9 (GC) RL 49.9 49.9 49.9		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30	Analyzed 10/10/23 23:13 Analyzed 10/10/23 23:13 10/10/23 23:13 10/10/23 23:13	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	el Range Organ Result <49.9 sel Range Orga Result <49.9 <49.9 <49.9 %Recovery 135	ics (DRO) (Qualifier U nics (DRO) Qualifier U U	GC) RL 49.9 (GC) RL 49.9 49.9 49.9 Limits		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30 Prepared	Analyzed 10/10/23 23:13 Analyzed 10/10/23 23:13 10/10/23 23:13 10/10/23 23:13 Analyzed	Dil Fac
Method: SW846 8015 NM - Dieso Analyte Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	el Range Organ Result <49.9 sel Range Orga Result <49.9 <49.9 <49.9 %Recovery 135 143	Control (Control (Con	GC) RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30 Prepared 10/10/23 09:30	Analyzed 10/10/23 23:13 Analyzed 10/10/23 23:13 10/10/23 23:13 10/10/23 23:13 Analyzed 10/10/23 23:13	Dil Fac

4.98

334

mg/Kg

10/11/23 20:31

Chloride

Surrogate Summary

Client: Carmona Resources

Job ID: 880-34206-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

	BFB1
Sample ID Client Samp	ole ID (70-130)
-34206-1 H-2 (0-6")	109
-34210-A-1-B MS Matrix Spike	109
-34210-A-1-C MSD Matrix Spike	Duplicate 119
8 880-64334/1-A Lab Control	Sample 102
5D 880-64334/2-A Lab Control	Sample Dup 111
880-64287/5-A Method Blar	nk 118
880-64334/5-A Method Blan	nk 109
Surrogate Legend	
64334/5-A Method Blan	· · · · · · · · · · · · · · · · · · ·

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34206-1	H-2 (0-6")	135 S1+	143 S1+	

Surrogate Legend

1CO = 1-Chlorooctane OTPH = o-Terphenyl

DFBZ = 1,4-Difluorobenzene (Surr)

Client: Carmona Resources Job ID: 880-34206-1 SDG: Lea County, New Mexico Project/Site: Nighthawk 3H

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64287/5-A

Matrix: Solid Analysis Batch: 64327 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64287

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/09/23 15:21	10/10/23 12:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/09/23 15:21	10/10/23 12:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/09/23 15:21	10/10/23 12:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/09/23 15:21	10/10/23 12:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/09/23 15:21	10/10/23 12:31	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/09/23 15:21	10/10/23 12:31	1

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Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	10/09/23 15	21 10/10/23 12:31	1
1,4-Difluorobenzene (Surr)	142	S1+	70 - 130	10/09/23 15	:21 10/10/23 12:31	1

Lab Sample ID: MB 880-64334/5-A Client Sample ID: Method Blank Matrix: Solid Prep Type: Total/NA

Analysis Batch: 64327 Prep Batch: 64334

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:47	10/11/23 00:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:47	10/11/23 00:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:47	10/11/23 00:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/10/23 10:47	10/11/23 00:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:47	10/11/23 00:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/10/23 10:47	10/11/23 00:08	1

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Surrogate	%Recovery	Qualifier	Limits	Prepare	ed	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	10/10/23 1	10:47	10/11/23 00:08	1
1,4-Difluorobenzene (Surr)	123		70 - 130	10/10/23 1	10:47	10/11/23 00:08	1

Lab Sample ID: LCS 880-64334/1-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 64327

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1095		mg/Kg		110	70 - 130	
Toluene	0.100	0.09213		mg/Kg		92	70 - 130	
Ethylbenzene	0.100	0.09514		mg/Kg		95	70 - 130	
m-Xylene & p-Xylene	0.200	0.1886		mg/Kg		94	70 - 130	
o-Xylene	0.100	0.08073		mg/Kg		81	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	102	70 - 130
1.4-Difluorobenzene (Surr)	105	70 - 130

Lab Sample ID: LCSD 880-64334/2-A

Matrix: Solid						Prep Type: Total/NA				
Analysis Batch: 64327							Prep Batch: 64334			
	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1124		mg/Kg		112	70 - 130	3	35	

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Client Sample ID: Lab Control Sample Dup

Prep Batch: 64334

Client: Carmona Resources Job ID: 880-34206-1 SDG: Lea County, New Mexico Project/Site: Nighthawk 3H

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

Lab Sample ID: LCSD 880-64334/2-A

Matrix: Solid Analysis Batch: 64327 **Client Sample ID: Lab Control Sample Dup**

Prep Type: Total/NA Prep Batch: 64334

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Toluene	0.100	0.09389		mg/Kg		94	70 - 130	2	35
Ethylbenzene	0.100	0.09160		mg/Kg		92	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1845		mg/Kg		92	70 - 130	2	35
o-Xylene	0.100	0.1001		mg/Kg		100	70 - 130	21	35

LCSD LCSD

Surrogate	%Recovery 0	Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 880-34210-A-1-B MS

Matrix: Solid

Analysis Batch: 64327

Client Samp	le ID: Matrix Spike
P	rep Type: Total/NA

Prep Batch: 64334

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00198	U	0.0998	0.09460		mg/Kg		95	70 - 130	
Toluene	<0.00198	U	0.0998	0.07870		mg/Kg		79	70 - 130	
Ethylbenzene	<0.00198	U	0.0998	0.08754		mg/Kg		88	70 - 130	
m-Xylene & p-Xylene	<0.00396	U	0.200	0.1751		mg/Kg		88	70 - 130	
o-Xylene	<0.00198	U	0.0998	0.08501		mg/Kg		85	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	109	70 - 130
1,4-Difluorobenzene (Surr)	95	70 - 130

Lab Sample ID: 880-34210-A-1-C MSD

Matrix: Solid

Analysis Batch: 64327

Client	Sample	ID: M	atrix S	nike	Duplicate

Prep Type: Total/NA Prep Batch: 64334

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		Sample	Sample	Spike	MSD	MSD				%Rec		RPD
	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Benzene	<0.00198	U	0.100	0.1009		mg/Kg		101	70 - 130	6	35
	Toluene	<0.00198	U	0.100	0.07927		mg/Kg		79	70 - 130	1	35
	Ethylbenzene	<0.00198	U	0.100	0.08967		mg/Kg		89	70 - 130	2	35
	m-Xylene & p-Xylene	<0.00396	U	0.200	0.1926		mg/Kg		96	70 - 130	10	35
	o-Xylene	<0.00198	U	0.100	0.08782		mg/Kg		88	70 - 130	3	35
ı												

MSD MSD

Surroyate	76Recovery	Qualifier	Lillits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64405/1-A

Matrix: Solid

Analysis Batch: 64500

Client Sample ID: Method Blank **Prep Type: Soluble**

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Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00 U	5.00	mg/Kg			10/11/23 18:28	1

Eurofins Midland

Client: Carmona Resources Job ID: 880-34206-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-64405/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits Chloride 250 251.4 mg/Kg 101 90 - 110

Lab Sample ID: LCSD 880-64405/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

Spike LCSD LCSD %Rec RPD Added Result Qualifier Limit Analyte Unit D %Rec Limits RPD Chloride 250 251.8 mg/Kg 101 90 - 110 0

Lab Sample ID: 880-34204-A-1-D MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Soluble

Analysis Batch: 64500

MS MS %Rec Spike Sample Sample Analyte Result Qualifier Added Result Qualifier Unit Limits Chloride 290 248 540.9 101 90 - 110 mg/Kg

Lab Sample ID: 880-34204-A-1-E MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 64500

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	290		248	541.5		mg/Kg		101	90 - 110	0	20

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QC Association Summary

Client: Carmona Resources

Job ID: 880-34206-1
Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

GC VOA

Prep Batch:	64287
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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-64287/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 64327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34206-1	H-2 (0-6")	Total/NA	Solid	8021B	64334
MB 880-64287/5-A	Method Blank	Total/NA	Solid	8021B	64287
MB 880-64334/5-A	Method Blank	Total/NA	Solid	8021B	64334
LCS 880-64334/1-A	Lab Control Sample	Total/NA	Solid	8021B	64334
LCSD 880-64334/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64334
880-34210-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	64334
880-34210-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64334

Prep Batch: 64334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34206-1	H-2 (0-6")	Total/NA	Solid	5035	
MB 880-64334/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64334/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64334/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34210-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-34210-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34206-1	H-2 (0-6")	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 64320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34206-1	H-2 (0-6")	Total/NA	Solid	8015B NM	64329

Prep Batch: 64329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34206-1	H-2 (0-6")	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34206-1	H-2 (0-6")	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34206-1	H-2 (0-6")	Soluble	Solid	DI Leach	
MB 880-64405/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-34204-A-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-34204-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Carmona Resources

Job ID: 880-34206-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

HPLC/IC

Analysis Batch: 64500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34206-1	H-2 (0-6")	Soluble	Solid	300.0	64405
MB 880-64405/1-A	Method Blank	Soluble	Solid	300.0	64405
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	300.0	64405
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64405
880-34204-A-1-D MS	Matrix Spike	Soluble	Solid	300.0	64405
880-34204-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	64405

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Lab Chronicle

Client: Carmona Resources

Job ID: 880-34206-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

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

Date Collected: 10/04/23 00:00 Date Received: 10/09/23 16:20 Lab Sample ID: 880-34206-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	64334	10/10/23 10:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64327	10/11/23 01:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64496	10/11/23 01:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			64469	10/10/23 23:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	64329	10/10/23 09:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64320	10/10/23 23:13	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	64405	10/10/23 15:31	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64500	10/11/23 20:31	CH	EET MID

Laboratory References:

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

Eurofins Midland

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Accreditation/Certification Summary

Client: Carmona Resources

Job ID: 880-34206-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Progra	am	Identification Number	Expiration Date
Texas	NELA	Р	T104704400-23-26	06-30-24
• •	are included in this report, bu	ut the laboratory is not certif	fied by the governing authority. This lis	t may include analytes
Analysis Method	Prep Method	Matrix	Analyte	
8015 NM		Solid	Total TPH	
Total BTEX		Solid	Total BTEX	

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SDG: Lea County, New Mexico

Method Summary

Client: Carmona Resources
Project/Site: Nighthawk 3H

Job ID: 880-34206-1

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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: Nighthawk 3H

Job ID: 880-34206-1

SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34206-1	H-2 (0-6")	Solid	10/04/23 00:00	10/09/23 16:20

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L (c)ect Manager	CHILICH MELLIC				Bill to: (if different)		Melod	Melodie Sanjari	ari							5	ork O	rder C	Work Order Comments	ਛੋ		
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Phone				Email	msanjari@marathonoil.com	athonoil.c	öm						☐ □	Deliverables, EDD	s. ED			ADaPT 🗆		Other		
Project Name	Nig	Nighthawk 3H		Turn	Turn Around						AMA	2	<u> </u>	1					,		· [
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Total Containers.		(Corrected Temperature	rature	2.6	L		801											NaOH+Ascorbic Acid SAPC	scorbic	Acid S	APC
Sample Identification	tification	Date	Time	Soil	Water Grab/	Cont		TPI	_										Sa	mple (Sample Comments	ints
H-2 (0-6")		10/4/2023		×	9		×	×	×						\dashv							
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Comments. Email results to mine Cambona incarmona@carmonaresources.com, Conner Moehring cmoehring@carmonaresou	results to mike c	aimona me	:armona@can	nonaresource	s.com, Conne	r Moehrir	ng cma	oehrin	ıg@carr	onares	ources.	com, (lint M	erritt M	lerritt	С@са	mona	resou	rces.com, Clint Merritt MerrittC@carmonaresources.com	m		
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Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-34206-1

SDG Number: Lea County, New Mexico

Login Number: 34206 List Source: Eurofins Midland

Creator: Rodriguez, Leticia

List Number: 1

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

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Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/12/2023 9:17:06 PM

JOB DESCRIPTION

Nighthawk 3H SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34205-1

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 10/12/2023 9:17:06 PM

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

Eurofins Midland is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies Page 2 of 18

10/12/2023

Released to Imaging: 3/18/2024 9:14:49 AM

Client: Carmona Resources Project/Site: Nighthawk 3H Laboratory Job ID: 880-34205-1 SDG: Lea County, New Mexico

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Definitions/Glossary

Job ID: 880-34205-1 Client: Carmona Resources Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Qualifiers

GC VOA

Qualifier **Qualifier Description**

MS and/or MSD recovery exceeds control limits. 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**

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**

Detection Limit (DoD/DOE) DL

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 Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NFG 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)

Relative Percent Difference, a measure of the relative difference between two points RPD

TEF Toxicity Equivalent Factor (Dioxin) TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Eurofins Midland

Case Narrative

Client: Carmona Resources

Job ID: 880-34205-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Job ID: 880-34205-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-34205-1

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 10/9/2023~4:20~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 $2.6^{\circ}C$

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: H-3 (0-6") (880-34205-1).

GC VOA

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-64332 and analytical batch 880-64432 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

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

HPLC/IC

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

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Date Received: 10/09/23 16:20

Client Sample Results

Client: Carmona Resources Job ID: 880-34205-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34205-1 Date Collected: 10/04/23 00:00

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/10/23 10:38	10/11/23 16:08	
Toluene	< 0.00199	U	0.00199		mg/Kg		10/10/23 10:38	10/11/23 16:08	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		10/10/23 10:38	10/11/23 16:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/10/23 10:38	10/11/23 16:08	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		10/10/23 10:38	10/11/23 16:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/10/23 10:38	10/11/23 16:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130				10/10/23 10:38	10/11/23 16:08	1
1,4-Difluorobenzene (Surr)	104		70 - 130				10/10/23 10:38	10/11/23 16:08	1
Method: TAL SOP Total BTEX -	Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
. •	<0.00398 el Range Organ		0.00398 GC)		mg/Kg			10/11/23 16:08	1
Total BTEX Method: SW846 8015 NM - Diese Analyte	el Range Organ Result	ics (DRO) (GC)	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
: Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (GC)	MDL		<u>D</u>	Prepared		·
Method: SW846 8015 NM - Diese Analyte	el Range Organ Result <50.0	ics (DRO) (Gualifier	GC) RL 50.0	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH	el Range Organ Result <50.0 sel Range Organ	ics (DRO) (Gualifier	GC) RL 50.0		Unit	D_	Prepared Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics	el Range Organ Result <50.0 sel Range Organ	ics (DRO) (Qualifier Unics (DRO) Qualifier	GC) RL 50.0		Unit mg/Kg			Analyzed 10/10/23 22:51	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	el Range Organ Result <50.0 sel Range Orga Result	ics (DRO) (Qualifier U nics (DRO) Qualifier U	GC) RL 50.0 (GC) RL		Unit mg/Kg Unit		Prepared	Analyzed 10/10/23 22:51 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	el Range Organ Result <50.0 sel Range Orga Result <50.0	ics (DRO) (Qualifier U nics (DRO) Qualifier U	GC) RL 50.0 (GC) RL 50.0		Unit mg/Kg Unit mg/Kg		Prepared 10/10/23 09:30	Analyzed 10/10/23 22:51 Analyzed 10/10/23 22:51	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	el Range Organ Result <50.0 sel Range Orga Result <50.0 <50.0	ics (DRO) (Qualifier U nics (DRO) Qualifier U U	GC) RL 50.0 (GC) RL 50.0 50.0		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30	Analyzed 10/10/23 22:51 Analyzed 10/10/23 22:51 10/10/23 22:51	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	el Range Organ Result <50.0 sel Range Orga Result <50.0 <50.0 <50.0	ics (DRO) (Qualifier U nics (DRO) Qualifier U U	GC) RL 50.0 (GC) RL 50.0 50.0 50.0		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30	Analyzed 10/10/23 22:51 Analyzed 10/10/23 22:51 10/10/23 22:51 10/10/23 22:51	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Die	el Range Organ Result <50.0 sel Range Orga Result <50.0 <50.0 <80.0 %Recovery	ics (DRO) (Qualifier U nics (DRO) Qualifier U U	GC) RL 50.0 (GC) RL 50.0 50.0 50.0 Limits		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30 Prepared	Analyzed 10/10/23 22:51 Analyzed 10/10/23 22:51 10/10/23 22:51 10/10/23 22:51 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	el Range Organ	ics (DRO) (Qualifier U nics (DRO) Qualifier U U Qualifier	GC) RL 50.0 (GC) RL 50.0 50.0 50.0 Limits 70 - 130 70 - 130		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30 Prepared 10/10/23 09:30	Analyzed 10/10/23 22:51 Analyzed 10/10/23 22:51 10/10/23 22:51 10/10/23 22:51 Analyzed 10/10/23 22:51	Dil Fac

4.99

mg/Kg

246

10/11/23 20:25

Chloride

Surrogate Summary

Client: Carmona Resources

Job ID: 880-34205-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Rec
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34196-A-1-B MS	Matrix Spike	102	102	
880-34196-A-1-C MSD	Matrix Spike Duplicate	112	102	
880-34205-1	H-3 (0-6")	119	104	
LCS 880-64332/1-A	Lab Control Sample	111	104	
LCSD 880-64332/2-A	Lab Control Sample Dup	99	101	
MB 880-64332/5-A	Method Blank	108	122	
Surrogate Legend				
BFB = 4-Bromofluorobenze	ene (Surr)			
DFBZ = 1,4-Difluorobenzer	ne (Surr)			

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34205-1	H-3 (0-6")	106	112	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Midland

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QC Sample Results

Client: Carmona Resources Job ID: 880-34205-1 SDG: Lea County, New Mexico Project/Site: Nighthawk 3H

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64332/5-A

Matrix: Solid Analysis Batch: 64432 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64332

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Xylenes, Total	< 0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	10/10/23 10:38	10/11/23 12:35	1
1,4-Difluorobenzene (Surr)	122		70 - 130	10/10/23 10:38	10/11/23 12:35	1

Lab Sample ID: LCS 880-64332/1-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64332

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1166		mg/Kg		117	70 - 130	
Toluene	0.100	0.09644		mg/Kg		96	70 - 130	
Ethylbenzene	0.100	0.09544		mg/Kg		95	70 - 130	
m-Xylene & p-Xylene	0.200	0.1878		mg/Kg		94	70 - 130	
o-Xylene	0.100	0.09012		mg/Kg		90	70 - 130	

LCS LCS

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

Lab Sample ID: LCSD 880-64332/2-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 64332

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1117		mg/Kg		112	70 - 130	4	35
Toluene	0.100	0.09300		mg/Kg		93	70 - 130	4	35
Ethylbenzene	0.100	0.09384		mg/Kg		94	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1837		mg/Kg		92	70 - 130	2	35
o-Xylene	0.100	0.08378		mg/Kg		84	70 - 130	7	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1.4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-34196-A-1-B MS

Matrix: Solid

Analysis Batch: 64432

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

Prep Batch: 64332

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.101	0.09018		mg/Kg		89	70 - 130	
Toluene	<0.00201	U	0.101	0.07128		mg/Kg		71	70 - 130	

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Page 8 of 18

Client: Carmona Resources Job ID: 880-34205-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34196-A-1-B MS Client Sample ID: Matrix Spike **Matrix: Solid**

Prep Type: Total/NA Analysis Batch: 64432 Prep Batch: 64332 MS MS Sample Sample Snike

	Sample	Sample	Spike	IVIO	IVIO				70 KeC	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00201	U F1	0.101	0.06697	F1	mg/Kg		66	70 - 130	
m-Xylene & p-Xylene	<0.00402	U F1	0.202	0.1343	F1	mg/Kg		66	70 - 130	
o-Xylene	<0.00201	U F1	0.101	0.06838	F1	mg/Kg		67	70 - 130	

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

Lab Sample ID: 880-34196-A-1-C MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 64432** Prep Batch: 64332

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.0996	0.09951		mg/Kg		100	70 - 130	10	35
Toluene	<0.00201	U	0.0996	0.08277		mg/Kg		83	70 - 130	15	35
Ethylbenzene	<0.00201	U F1	0.0996	0.08667		mg/Kg		87	70 - 130	26	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.1785		mg/Kg		89	70 - 130	28	35
o-Xylene	<0.00201	U F1	0.0996	0.08121		mg/Kg		81	70 - 130	17	35

MSD MSD Surrogate Qualifier Limits %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 112 1,4-Difluorobenzene (Surr) 102 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64405/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

	МВ	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/11/23 18:28	1

Lab Sample ID: LCS 880-64405/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

Spike LCS LCS %Rec Added Analyte Result Qualifier Limits Unit %Rec Chloride 250 251.4 mg/Kg 101 90 - 110

Lab Sample ID: LCSD 880-64405/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Analysis Batch: 64500

Spike LCSD LCSD %Rec RPD Result Qualifier Added Limit Analyte Unit D %Rec Limits RPD Chloride 250 251.8 101 90 - 110 20 mg/Kg

Prep Type: Soluble

Eurofins Midland

QC Sample Results

Client: Carmona Resources

Job ID: 880-34205-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-34204-A-1-D MS

Client Sample ID: Matrix Spike

Matrix: Solid
Analysis Batch: 64500
Prep Type: Soluble

Sample Sample Spike MS MS %Rec Result Qualifier Added Result Qualifier Analyte Unit %Rec Limits Chloride 290 248 540.9 mg/Kg 101 90 - 110

Lab Sample ID: 880-34204-A-1-E MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Soluble

Analysis Batch: 64500

Sample Sample Spike MSD MSD %Rec R

RPD Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec Chloride 290 248 541.5 mg/Kg 101 90 - 110 0 20

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QC Association Summary

Client: Carmona Resources

Job ID: 880-34205-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34205-1	H-3 (0-6")	Total/NA	Solid	5035	
MB 880-64332/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34205-1	H-3 (0-6")	Total/NA	Solid	8021B	64332
MB 880-64332/5-A	Method Blank	Total/NA	Solid	8021B	64332
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	8021B	64332
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64332
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	64332
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64332

Analysis Batch: 64591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34205-1	H-3 (0-6")	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 64320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34205-1	H-3 (0-6")	Total/NA	Solid	8015B NM	64329

Prep Batch: 64329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34205-1	H-3 (0-6")	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34205-1	H-3 (0-6")	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64405

Lab Sample ID 880-34205-1	Client Sample ID H-3 (0-6")	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
MB 880-64405/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-34204-A-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-34204-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 64500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34205-1	H-3 (0-6")	Soluble	Solid	300.0	64405
MB 880-64405/1-A	Method Blank	Soluble	Solid	300.0	64405
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	300.0	64405
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64405
880-34204-A-1-D MS	Matrix Spike	Soluble	Solid	300.0	64405

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Page 11 of 18

QC Association Summary

Client: Carmona Resources

Job ID: 880-34205-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

HPLC/IC (Continued)

Analysis Batch: 64500 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34204-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	64405

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Lab Chronicle

Client: Carmona Resources

Job ID: 880-34205-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

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

Date Collected: 10/04/23 00:00 Date Received: 10/09/23 16:20 Lab Sample ID: 880-34205-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	64332	10/10/23 10:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64432	10/11/23 16:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64591	10/11/23 16:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			64468	10/10/23 22:51	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	64329	10/10/23 09:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64320	10/10/23 22:51	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	64405	10/10/23 15:31	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64500	10/11/23 20:25	CH	EET MID

Laboratory References:

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

Eurofins Midland

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Accreditation/Certification Summary

Client: Carmona Resources

Job ID: 880-34205-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Progra	am	Identification Number	Expiration Date				
Texas	NELA	Р	T104704400-23-26	06-30-24				
	are included in this report, bu	ut the laboratory is not certif	fied by the governing authority. This lis	t may include analytes				
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: Nighthawk 3H

Method Description

Total BTEX Calculation

Volatile Organic Compounds (GC)

Diesel Range Organics (DRO) (GC)

Diesel Range Organics (DRO) (GC)

Deionized Water Leaching Procedure

Anions, Ion Chromatography

Closed System Purge and Trap

Job ID: 880-34205-1 SDG: Lea County, New Mexico

EET MID

EET MID

Protocol	Laboratory
SW846	EET MID
TAL SOP	EET MID
SW846	EET MID
SW846	EET MID
EPA	EET MID
SW846	EET MID

SW846

ASTM

Protocol References:

Method

8021B

Total BTEX 8015 NM

8015B NM

8015NM Prep

DI Leach

300.0

5035

ASTM = ASTM International

EPA = US Environmental Protection Agency

Microextraction

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

Eurofins Midland

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Sample Summary

Client: Carmona Resources Project/Site: Nighthawk 3H

Job ID: 880-34205-1

SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34205-1	H-3 (0-6")	Solid	10/04/23 00:00	10/09/23 16:20

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Andrew	Comments Email results to mine Carmona mcarmonaresources.com, Conner Moehring cmoehring@carmonaresources.com, Clint MerrittC@carmonaresources.com	C								H-3 (0-6")	Sample Identification	Total Containers.	Sample Custody Seals.	Cooler Custody Seals.	Received Intact:	SAMPLE RECEIPT	PO#	Sampler's Name	Project Location	Project Number	Project Name	Phone	ate ZIP	Address	Company Name.	Project Manager
	Tresuits to mixe									-6")	tification		Yes	Yes	A				Lea C				Midland TX 79701	310 W Wall St Ste 500	Carmona Resources	Clinton Merritt
Reimquished by (Signature)	carmona m									10/4/2023	Date		No XX) No	Temp Blank		CCM	Lea County New Mexico	2090	Nighthawk 3H		701	Ste 500	urces	
(Signature)	carmona@car										Time	Corrected Temperature	Temperature Reading	Correction Factor	Thermometer ID	Yes (No)))		exico							
	monaresourc									×	Soil	erature	ading	7		Wet Ice			Due Date	Routine	Turr	Email		***************************************		
	es.com, Conn									9	Water Comp	2.4	7.4	72.7	ナなら	Yes) No)		5 day	Rush	Turn Around	msanjari@marathonoil com	City State ZIP	Address	Company Name	Bill to (if different)
	er Moehr				-					1	p # of Cont	0		Pa	ıram	neter	's	l		Pres.		arathonoil			е	
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	es.com										Samp	NaOH+Ascorbic Acid SAPC	Zn Acetate+NaOH Zn	Na.S.O. NaSO.	NaHSO, NABIS	H, BO, HB	בילה ביל	100		None NO	Prese		T □RRP		Program UST/PST PRP Irownfields RC	Work Order Comments
Dat											Sample Comments	orbic Acı	-NaOH		ARIS	7	2]	ŗş	: ç	2	rvative	Other	_		_	-
Date/Time									-		ıments	d SAPC	Zn			NaCi	Mach Na	MeOH Me	Di vvalei n ₂ O	Mala	Preservative Codes]Level™ []	:	Derfund	2
																			720	5				[-	

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-34205-1

SDG Number: Lea County, New Mexico

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Login Number: 34205
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	N/A	

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<6mm (1/4").

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/12/2023 9:17:06 PM

JOB DESCRIPTION

Nighthawk 3H SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34204-1

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 10/12/2023 9:17:06 PM

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

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Client: Carmona Resources Project/Site: Nighthawk 3H

Laboratory Job ID: 880-34204-1 SDG: Lea County, New Mexico

Table of Contents

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Definitions/Glossary

Client: Carmona Resources

Job ID: 880-34204-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

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Qualifiers

GC VOA

Qualifier Description

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

GC Semi VOA

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

HPLC/IC

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.

Eisted 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)

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TNTC Too Numerous To Count

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Case Narrative

Client: Carmona Resources

Job ID: 880-34204-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Job ID: 880-34204-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-34204-1

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 10/9/2023~4:20~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 $2.6^{\circ}C$

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: H-4 (0-6") (880-34204-1).

GC VOA

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-64332 and analytical batch 880-64432 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: H-4 (0-6") (880-34204-1). 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.

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Client: Carmona Resources Job ID: 880-34204-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

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

Date Collected: 10/04/23 00:00 Date Received: 10/09/23 16:20 Lab Sample ID: 880-34204-1

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/10/23 10:38	10/11/23 15:47	1
Toluene	< 0.00199	U	0.00199		mg/Kg		10/10/23 10:38	10/11/23 15:47	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		10/10/23 10:38	10/11/23 15:47	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/10/23 10:38	10/11/23 15:47	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		10/10/23 10:38	10/11/23 15:47	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/10/23 10:38	10/11/23 15:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				10/10/23 10:38	10/11/23 15:47	1
1,4-Difluorobenzene (Surr)	111		70 - 130				10/10/23 10:38	10/11/23 15:47	1
- Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/11/23 15:47	1
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (0	GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			10/10/23 22:28	1
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
		1.1	F0 F		mg/Kg		10/10/23 09:30	10/10/23 22:28	
0 0	<50.5	U	50.5					10/10/20 22:20	1
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<50.5 <50.5		50.5		mg/Kg		10/10/23 09:30	10/10/23 22:28	1
(GRO)-C6-C10 Diesel Range Organics (Over		U			mg/Kg		10/10/23 09:30 10/10/23 09:30		•
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<50.5	U	50.5					10/10/23 22:28	1
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<50.5 <50.5	U U	50.5 50.5				10/10/23 09:30	10/10/23 22:28	1 1 <i>Dil F</i> ac
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	<50.5 <50.5 <i>%Recovery</i>	U U Qualifier S1+	50.5 50.5 <i>Limits</i>				10/10/23 09:30 Prepared	10/10/23 22:28 10/10/23 22:28 Analyzed	1 1 Dil Fac
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	<50.5 <50.5 %Recovery 160 167	U Qualifier S1+ S1+	50.5 50.5 Limits 70 - 130 70 - 130				10/10/23 09:30 Prepared 10/10/23 09:30	10/10/23 22:28 10/10/23 22:28 Analyzed 10/10/23 22:28	1
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	<50.5 <50.5 **Recovery 160 167 Chromatograp	U Qualifier S1+ S1+	50.5 50.5 Limits 70 - 130 70 - 130	MDL		D	10/10/23 09:30 Prepared 10/10/23 09:30	10/10/23 22:28 10/10/23 22:28 Analyzed 10/10/23 22:28	1 1 Dil Fac

Surrogate Summary

Client: Carmona Resources

Job ID: 880-34204-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

-				Percent Surrogate Red
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34196-A-1-B MS	Matrix Spike	102	102	
880-34196-A-1-C MSD	Matrix Spike Duplicate	112	102	
880-34204-1	H-4 (0-6")	111	111	
LCS 880-64332/1-A	Lab Control Sample	111	104	
LCSD 880-64332/2-A	Lab Control Sample Dup	99	101	
MB 880-64332/5-A	Method Blank	108	122	
Surrogate Legend				
BFB = 4-Bromofluorober	nzene (Surr)			
DFBZ = 1,4-Difluorobenz	zene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34204-1	H-4 (0-6")	160 S1+	167 S1+	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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Client: Carmona Resources Job ID: 880-34204-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64332/5-A

Lab Sample ID: LCS 880-64332/1-A

Matrix: Solid Analysis Batch: 64432 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64332

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prep	ared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	10/10/2	3 10:38	10/11/23 12:35	1
1,4-Difluorobenzene (Surr)	122		70 - 130	10/10/2	3 10:38	10/11/23 12:35	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64332

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1166 mg/Kg 117 70 - 130 Toluene 0.100 0.09644 mg/Kg 96 70 - 130 0.100 Ethylbenzene 0.09544 mg/Kg 95 70 - 130 0.200 0.1878 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 0.09012 70 - 130 o-Xylene mg/Kg

LCS LCS

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

Lab Sample ID: LCSD 880-64332/2-A

Matrix: Solid

Matrix: Solid

Analysis Batch: 64432

Analysis Batch: 64432

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 64332

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1117		mg/Kg		112	70 - 130	4	35
Toluene	0.100	0.09300		mg/Kg		93	70 - 130	4	35
Ethylbenzene	0.100	0.09384		mg/Kg		94	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1837		mg/Kg		92	70 - 130	2	35
o-Xylene	0.100	0.08378		mg/Kg		84	70 - 130	7	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1 4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-34196-A-1-B MS

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64332

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.101	0.09018		mg/Kg		89	70 - 130	
Toluene	<0.00201	U	0.101	0.07128		mg/Kg		71	70 - 130	

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Prep Batch: 64332

Prep Type: Total/NA

QC Sample Results

Client: Carmona Resources Job ID: 880-34204-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34196-A-1-B MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 64432

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00201	U F1	0.101	0.06697	F1	mg/Kg		66	70 - 130	
m-Xylene & p-Xylene	<0.00402	U F1	0.202	0.1343	F1	mg/Kg		66	70 - 130	
o-Xylene	<0.00201	U F1	0.101	0.06838	F1	mg/Kg		67	70 - 130	

MS MS

Surrogate	%Recovery Qu	ualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 880-34196-A-1-C MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

o-Xylene

Analysis Batch: 64432 Prep Batch: 64332 Sample Sample Spike MSD MSD RPD Result Qualifier Added Result Qualifier %Rec RPD Limit Analyte Unit Limits 0.0996 Benzene <0.00201 U 0.09951 mg/Kg 100 70 - 130 10 35 Toluene <0.00201 U 0.0996 0.08277 mg/Kg 83 70 - 130 15 35 Ethylbenzene <0.00201 UF1 0.0996 0.08667 mg/Kg 87 70 - 130 26 35 0.199 0.1785 70 - 130 28 35 m-Xylene & p-Xylene <0.00402 UF1 mg/Kg 0.0996 <0.00201 UF1 0.08121 81 70 - 130 17

mg/Kg

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64405/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 64500

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/11/23 18:28	1

Lab Sample ID: LCS 880-64405/2-A Client Sample ID: Lab Control Sample Matrix: Solid **Prep Type: Soluble**

Analysis Batch: 64500

	Spike	LUS L	_cs			%Rec	
Analyte	Added	Result C	Qualifier U	Jnit D	%Rec	Limits	
Chloride	250	251.4	m	ng/Kg	101	90 - 110	

Lab Sample ID: LCSD 880-64405/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	251.8		mg/Kg		101	90 - 110	0	20

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

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

Prep Type: Soluble

Prep Type: Soluble

QC Sample Results

Client: Carmona Resources Job ID: 880-34204-1 SDG: Lea County, New Mexico Project/Site: Nighthawk 3H

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-34204-1 MS

Matrix: Solid

Analysis Batch: 64500

Sample Sample Spike MS MS %Rec Result Qualifier Added Result Qualifier Analyte Unit %Rec Limits Chloride 290 248 540.9 mg/Kg 101 90 - 110

Lab Sample ID: 880-34204-1 MSD

Matrix: Solid

Analysis Batch: 64500

•	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	290		248	541.5		mg/Kg		101	90 - 110	0	20

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10/12/2023

QC Association Summary

Client: Carmona Resources

Job ID: 880-34204-1
Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34204-1	H-4 (0-6")	Total/NA	Solid	5035	
MB 880-64332/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34204-1	H-4 (0-6")	Total/NA	Solid	8021B	64332
MB 880-64332/5-A	Method Blank	Total/NA	Solid	8021B	64332
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	8021B	64332
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64332
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	64332
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64332

Analysis Batch: 64590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34204-1	H-4 (0-6")	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 64320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34204-1	H-4 (0-6")	Total/NA	Solid	8015B NM	64329

Prep Batch: 64329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34204-1	H-4 (0-6")	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34204-1	H-4 (0-6")	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64405

Lab Sample ID 880-34204-1	Client Sample ID H-4 (0-6")	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
MB 880-64405/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-34204-1 MS	H-4 (0-6")	Soluble	Solid	DI Leach	
880-34204-1 MSD	H-4 (0-6")	Soluble	Solid	DI Leach	

Analysis Batch: 64500

Lab Sample ID 880-34204-1	Client Sample ID H-4 (0-6")	Prep Type Soluble	Matrix Solid	Method 300.0	Prep Batch 64405
MB 880-64405/1-A	Method Blank	Soluble	Solid	300.0	64405
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	300.0	64405
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64405
880-34204-1 MS	H-4 (0-6")	Soluble	Solid	300.0	64405

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QC Association Summary

Client: Carmona Resources

Job ID: 880-34204-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

HPLC/IC (Continued)

Analysis Batch: 64500 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34204-1 MSD	H-4 (0-6")	Soluble	Solid	300.0	64405

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Lab Chronicle

Client: Carmona Resources

Job ID: 880-34204-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

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

Date Collected: 10/04/23 00:00 Date Received: 10/09/23 16:20 Lab Sample ID: 880-34204-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	64332	10/10/23 10:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64432	10/11/23 15:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64590	10/11/23 15:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			64467	10/10/23 22:28	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	64329	10/10/23 09:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64320	10/10/23 22:28	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	64405	10/10/23 15:31	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64500	10/11/23 20:07	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

Job ID: 880-34204-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Progr	am	Identification Number	Expiration Date
Texas	NELA	Р	T104704400-23-26	06-30-24
,	are included in this report, bu	ut the laboratory is not certif	fied by the governing authority. This lis	t may include analytes
Analysis Method	Prep Method	Matrix	Analyte	
8015 NM		Solid	Total TPH	
Total BTEX		Solid	Total BTEX	

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Job ID: 880-34204-1

Method Summary

Client: Carmona Resources Project/Site: Nighthawk 3H SDG: Lea 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: Nighthawk 3H

Job ID: 880-34204-1

SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34204-1	H-4 (0-6")	Solid	10/04/23 00:00	10/09/23 16:20

			(620)	00			rep	Ohr	Month	Ma
Date/Time	Received by (Signature)	Rece	Date/Time	100			Nemindusined by (Signature)	//		7
							ov (Signaturo)	aling tiched		
63001663.60111	e merrete merrete @carmonare		(,		(
The state of the s	Comments · Email results to Mike Carmona mcarmona@carmonaresources.com, Conner Moehring@carmonaresources.com, Clint Morritt @carmonaresources.com	monaresources com Clin	ນ cmoehring@cai	nner Moehrin	rces.com. Co	rmonaresou	ncarmona@ca	Carmona n	I results to Mik	Comments: Emai
The second secon										
			1							
			×	G 1		×		10/4/2023	1-6")	H-4 (0-6")
Sample Comments			ТР	Comp Cont	Water	Soil	Time	Date	ntification	Sample Identification
NaOH+Ascorbic Acid SAPC			H 80		- C	Jerature	Corrected Lemperature			Cai Conalicio.
Zn Acetate+NaOH Zn			151		1,	adilig	Competation reading			Total Containers
Na ₂ S ₂ O ₃ NaSO ₃			BTE // (G	<u> </u>	142	and in a	Temperature Bear			Sample Custody Seals
NaHSO ₄ NABIS			RO) Par	1		Compation Fort	<u>`</u>	Vac	Cooler Custody Seal
H ₃ PO ₄ HP			+ DI	I ame		AAGLICG	Thermometer II	as No	+	Received Intact
H2OO4 H2 NACH NA			RO ·	ter) Wet Ice		Temo Blank		SAMPLE RECEIPT
			+ MF	Ś)) (PO#:
_			RO)					CCM		Sampler's Name.
				4	5 dav	Due Date	/lexico	Lea County, New Mexico	Lea	Project Location
				Pres.	Rush	☑ Routine		2090		Project Number
Preservative Codes	JEST	ANALYSIS REQUEST			Turn Around	2 1	<u> </u>	Nighthawk 3H		Project Name
Culei										
) 	Deliverables EDD AD		3	marathonoul co		Email			•	Phone
]ST/UST □RRP □LeveLIV □	Reporting Level II Level III ST/UST		Houston TX 77024		City State ZIP			701	Midland TX 79701	City State ZIP
	State of Project:	ry Blvd	990 Town and Country Blvd		Address			Ste 500	310 W Wall St Ste 500	Address.
}rownfields RRC perfund	Program UST/PST ☐PRP ☐r	ation	Marathon Oil Corporation		Company Name			urces	Carmona Resources	Company Name.
Work Order Comments	Work Ord		Melodie Sanjari		Bill to (if different)			The state of the s	Clinton Merritt	Project Manager

	W oi
880-34204 Chain of Custody	

Login Sample Receipt Checklist

Client: Carmona Resources Job Number: 880-34204-1 SDG Number: Lea County, New Mexico

List Source: Eurofins Midland

Login Number: 34204 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	N/A	

<6mm (1/4").

ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/12/2023 9:17:06 PM

JOB DESCRIPTION

Nighthawk 3H SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34203-1

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 10/12/2023 9:17:06 PM

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

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Eurofins Midland is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies
Page 2 of 18
10/12/2023

Client: Carmona Resources Project/Site: Nighthawk 3H Laboratory Job ID: 880-34203-1 SDG: Lea County, New Mexico

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Chain of Custody	17
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Definitions/Glossary

Job ID: 880-34203-1 Client: Carmona Resources Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

GC VOA Qualifier

Qualifiers

Qualifier Description MS and/or MSD recovery exceeds control limits. 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**

Indicates the analyte was analyzed for but not detected.

Glossary Abbreviation

Listed under the "D" column to designate that the result is reported on a dry weight basis Percent Recovery %R 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

These commonly used abbreviations may or may not be present in this report.

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" Minimum Detectable Activity (Radiochemistry) MDA MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit Minimum Level (Dioxin) ML MPN Most Probable Number Method Quantitation Limit MQL

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)

Reporting Limit or Requested Limit (Radiochemistry) RL

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

Job ID: 880-34203-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Job ID: 880-34203-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-34203-1

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 10/9/2023~4:20~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 $2.6^{\circ}C$

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: H-5 (0-6") (880-34203-1).

GC VOA

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-64332 and analytical batch 880-64432 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: H-5 (0-6") (880-34203-1). 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.

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Client: Carmona Resources Job ID: 880-34203-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Client Sample ID: H-5 (0-6")

Date Collected: 10/04/23 00:00 Date Received: 10/09/23 16:20

Released to Imaging: 3/18/2024 9:14:49 AM

Lab Sample ID: 880-34203-1

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 15:27	
Toluene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 15:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 15:27	,
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		10/10/23 10:38	10/11/23 15:27	
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 15:27	
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		10/10/23 10:38	10/11/23 15:27	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	106		70 - 130				10/10/23 10:38	10/11/23 15:27	
1,4-Difluorobenzene (Surr)	105		70 - 130				10/10/23 10:38	10/11/23 15:27	
Method: TAL SOP Total BTEX - To	otal BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00401	U	0.00401		mg/Kg			10/11/23 15:27	•
Method: SW846 8015 NM - Diese	Range Organ	ics (DRO) (GC)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			10/10/23 22:06	•
Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics GRO)-C6-C10	<50.5	U	50.5		mg/Kg		10/10/23 09:30	10/10/23 22:06	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		10/10/23 09:30	10/10/23 22:06	,
Oll Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		10/10/23 09:30	10/10/23 22:06	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	149	S1+	70 - 130				10/10/23 09:30	10/10/23 22:06	1
o-Terphenyl	157	S1+	70 - 130				10/10/23 09:30	10/10/23 22:06	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	287	· · · · · · · · · · · · · · · · · · ·	5.05		mg/Kg	_		10/11/23 20:02	1

Eurofins Midland

Surrogate Summary

Client: Carmona Resources

Job ID: 880-34203-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34196-A-1-B MS	Matrix Spike	102	102	
880-34196-A-1-C MSD	Matrix Spike Duplicate	112	102	
880-34203-1	H-5 (0-6")	106	105	
LCS 880-64332/1-A	Lab Control Sample	111	104	
LCSD 880-64332/2-A	Lab Control Sample Dup	99	101	
MB 880-64332/5-A	Method Blank	108	122	
Surrogate Legend				
BFB = 4-Bromofluorober	nzene (Surr)			
DFBZ = 1,4-Difluoroben:	zene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34203-1	H-5 (0-6")	149 S1+	157 S1+	

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

Eurofins Midland

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Client: Carmona Resources Job ID: 880-34203-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64332/5-A

Matrix: Solid Analysis Batch: 64432 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64332

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Xylenes, Total	< 0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108	70 - 130	10/10/23 10:38	10/11/23 12:35	1
1 4-Difluorobenzene (Surr)	122	70 130	10/10/23 10:38	10/11/23 12:35	1

Lab Sample ID: LCS 880-64332/1-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 64332

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1166 mg/Kg 117 70 - 130 Toluene 0.100 0.09644 mg/Kg 96 70 - 130 0.100 Ethylbenzene 0.09544 mg/Kg 95 70 - 130 0.200 70 - 130 m-Xylene & p-Xylene 0.1878 mg/Kg 0.100 0.09012 70 - 130 o-Xylene mg/Kg

LCS LCS

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

Lab Sample ID: LCSD 880-64332/2-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64332

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1117		mg/Kg		112	70 - 130	4	35
Toluene	0.100	0.09300		mg/Kg		93	70 - 130	4	35
Ethylbenzene	0.100	0.09384		mg/Kg		94	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1837		mg/Kg		92	70 - 130	2	35
o-Xylene	0.100	0.08378		mg/Kg		84	70 - 130	7	35

LCSD LCSD

Surrogate	%Recovery Qualifi	er Limits
4-Bromofluorobenzene (Surr)	99	70 - 130
1,4-Difluorobenzene (Surr)	101	70 - 130

Lab Sample ID: 880-34196-A-1-B MS

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64332

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.101	0.09018		mg/Kg		89	70 - 130	
Toluene	<0.00201	U	0.101	0.07128		mg/Kg		71	70 - 130	

Eurofins Midland

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Client: Carmona Resources Job ID: 880-34203-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34196-A-1-B MS Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 64432

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00201	U F1	0.101	0.06697	F1	mg/Kg		66	70 - 130	
m-Xylene & p-Xylene	<0.00402	U F1	0.202	0.1343	F1	mg/Kg		66	70 - 130	
o-Xylene	<0.00201	U F1	0.101	0.06838	F1	mg/Kg		67	70 - 130	

MS MS

Surrogate	%Recovery Qualifie	er Limits
4-Bromofluorobenzene (Surr)	102	70 - 130
1,4-Difluorobenzene (Surr)	102	70 - 130

Lab Sample ID: 880-34196-A-1-C MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 64432

Prep Type: Total/NA

Prep Batch: 64332

Prep Batch: 64332

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.0996	0.09951		mg/Kg		100	70 - 130	10	35
Toluene	<0.00201	U	0.0996	0.08277		mg/Kg		83	70 - 130	15	35
Ethylbenzene	<0.00201	U F1	0.0996	0.08667		mg/Kg		87	70 - 130	26	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.1785		mg/Kg		89	70 - 130	28	35
o-Xylene	<0.00201	U F1	0.0996	0.08121		mg/Kg		81	70 - 130	17	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64405/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 64500

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D)	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg				10/11/23 18:28	1

Lab Sample ID: LCS 880-64405/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	251.4		mg/Kg		101	90 - 110	

Lab Sample ID: LCSD 880-64405/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 64500

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	Spike	LCSD	LCSD			%Rec		RPD
Analyte	Added	Result	Qualifier	Unit D	%Rec	Limits	RPD	Limit
Chloride	250	251.8		mg/Kg	101	90 - 110	0	20

Eurofins Midland

Client: Carmona Resources Job ID: 880-34203-1 SDG: Lea County, New Mexico Project/Site: Nighthawk 3H

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-34195-A-1-C MS Client Sample ID: Matrix Spike **Matrix: Solid**

Prep Type: Soluble

Analysis Batch: 64500

Sample Sample Spike MS MS %Rec Result Qualifier Added Result Qualifier Analyte Unit %Rec Limits Chloride 116 253 380.1 mg/Kg 105 90 - 110

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analysis Batch: 64500

Matrix: Solid

Lab Sample ID: 880-34195-A-1-D MSD

Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec Chloride 116 253 380.4 mg/Kg 105 90 - 110 0 20

QC Association Summary

Client: Carmona Resources Job ID: 880-34203-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34203-1	H-5 (0-6")	Total/NA	Solid	5035	
MB 880-64332/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34203-1	H-5 (0-6")	Total/NA	Solid	8021B	64332
MB 880-64332/5-A	Method Blank	Total/NA	Solid	8021B	64332
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	8021B	64332
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64332
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	64332
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64332

Analysis Batch: 64589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34203-1	H-5 (0-6")	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 64320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34203-1	H-5 (0-6")	Total/NA	Solid	8015B NM	64329

Prep Batch: 64329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34203-1	H-5 (0-6")	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34203-1	H-5 (0-6")	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64405

Lab Sample ID 880-34203-1	Client Sample ID H-5 (0-6")	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
MB 880-64405/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-34195-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-34195-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 64500

Released to Imaging: 3/18/2024 9:14:49 AM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34203-1	H-5 (0-6")	Soluble	Solid	300.0	64405
MB 880-64405/1-A	Method Blank	Soluble	Solid	300.0	64405
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	300.0	64405
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64405
880-34195-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	64405

Eurofins Midland

QC Association Summary

Client: Carmona Resources

Job ID: 880-34203-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

HPLC/IC (Continued)

Analysis Batch: 64500 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34195-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	64405

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Lab Chronicle

Client: Carmona Resources

Job ID: 880-34203-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Client Sample ID: H-5 (0-6")

Date Collected: 10/04/23 00:00 Date Received: 10/09/23 16:20 Lab Sample ID: 880-34203-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	64332	10/10/23 10:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64432	10/11/23 15:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64589	10/11/23 15:27	SM	EET MID
Total/NA	Analysis	8015 NM		1			64466	10/10/23 22:06	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	64329	10/10/23 09:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64320	10/10/23 22:06	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	64405	10/10/23 15:31	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64500	10/11/23 20:02	CH	EET MID

Laboratory References:

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

Eurofins Midland

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Accreditation/Certification Summary

Client: Carmona Resources

Job ID: 880-34203-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Progra	ım	Identification Number	Expiration Date									
Texas	NELAI)	T104704400-23-26	06-30-24									
The following analytes	The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes												
0 ,	oes not offer certification.	t the laboratory to not corta	ied by the governing duthenty. This he	t may morado anary c									
,		Matrix	Analyte	a may morado dinaly c									
for which the agency d	oes not offer certification.	•	, , ,	. may morado unarye									

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Method Summary

Client: Carmona Resources Project/Site: Nighthawk 3H

Job ID: 880-34203-1

SDG: Lea County, New Mexico

Protocol	Laboratory
SW846	EET MID
TAL SOP	EET MID
SW846	EET MID
SW846	EET MID
EPA	EET MID

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: Nighthawk 3H

Job ID: 880-34203-1

SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34203-1	H-5 (0-6")	Solid	10/04/23 00:00	10/09/23 16:20

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Mu	Comments Emai								H-5 (0-6")	Sample Identification	Total Containers.	Sample Custody Seals	Cooler Custody Seals.	Received Intact:	SAMPLE RECEIPT	PO#:	Sampler's Name.	Project I postion	riant Nismbar	Project Name	Phone	City State ZIP	Address.	Company Name	Project Manager
Mored	Email results to Mike Carmona mcarmona@carmonaresources.com, Conner Moehring cmoehring@carmonaresources.com, Clint MerrittC@carmonaresources com		A CONTRACTOR OF THE CONTRACTOR						0-6")	ntification		als Yes	<u> </u>	4) l	_,		רממ					Midland, TX 79701	310 W Wall St Ste 500	Carmona Resources	Clinton Merritt
	ke Carmona mcarmona@c:								10/4/2023	Date		No M/A			epap Blank		CCM	County Now M	2000	Nighthawk 3H		9701	Ste 500	ources	
Mes	carmona@car									Time	Corrected Temperature	Temperature Reading:	Correction Factor	Thermometer ID	Yes (No	_	exico								
	monaresource								×	Soil	erature	ading:	7		Wet Ice:		Due Date	7 Position	7 Pontan	Turn	Email				
	s.com, Conne								G	Water Comp	2.6	24	96.4	✓	(Yes) No		5 day	Rush		Turn Around	msanjari@marathonoil com	City State ZIP	Address.	Company Name	Bill to (if different)
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	com									Sample	++Ascorbi	Zn Acetate+NaOH Zn	Na,S,O, NaSO,	Named Name	7 2	. F	Cool	NO	rresery.		Other	□RRP	ļ	\ RC	rents
Date/ilme										Sample Comments	NaOH+Ascorbic Acid SAPC	와 Zn	<u>،</u> ر	2	NaOH Na	HNO3. HN	МеОН Ме	DI Wat	Preservative Codes				!	perfund	
ne l										nts	PC				ă	Ξ	Me	DI Water H ₂ O	des			□Level IV □	Г	und	

880-34203 Chain of Custody

of.

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-34203-1

SDG Number: Lea County, New Mexico

Login Number: 34203 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	

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Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/12/2023 9:13:39 PM

JOB DESCRIPTION

Nighthawk 3H SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34202-1

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 10/12/2023 9:13:39 PM

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

Client: Carmona Resources Project/Site: Nighthawk 3H Laboratory Job ID: 880-34202-1 SDG: Lea County, New Mexico

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Definitions/Glossary

Job ID: 880-34202-1 Client: Carmona Resources Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Qualifiers

GC VOA

Qualifier **Qualifier Description**

MS and/or MSD recovery exceeds control limits. 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**

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**

Detection Limit (DoD/DOE) DL

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 Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NFG 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)

Relative Percent Difference, a measure of the relative difference between two points RPD

TEF Toxicity Equivalent Factor (Dioxin) TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Eurofins Midland

Case Narrative

Client: Carmona Resources

Job ID: 880-34202-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Job ID: 880-34202-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-34202-1

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 10/9/2023~4:20~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 $2.6^{\circ}C$

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: H-6 (0-6") (880-34202-1).

GC VOA

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-64332 and analytical batch 880-64432 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

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

HPLC/IC

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

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Client Sample Results

Client: Carmona Resources Job ID: 880-34202-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

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

Date Collected: 10/04/23 00:00 Date Received: 10/09/23 16:20 Lab Sample ID: 880-34202-1

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		10/10/23 10:38	10/11/23 15:06	1
Toluene	<0.00201	U	0.00201		mg/Kg		10/10/23 10:38	10/11/23 15:06	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/10/23 10:38	10/11/23 15:06	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		10/10/23 10:38	10/11/23 15:06	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/10/23 10:38	10/11/23 15:06	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/10/23 10:38	10/11/23 15:06	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	104		70 - 130				10/10/23 10:38	10/11/23 15:06	
1,4-Difluorobenzene (Surr)	107		70 - 130				10/10/23 10:38	10/11/23 15:06	1
Method: TAL SOP Total BTEX - To	otal BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			10/11/23 15:06	1
Method: SW846 8015 NM - Diesel	Range Organ	ics (DRO) (GC)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			10/10/23 21:44	1
Method: SW846 8015B NM - Diese	el Range Orga	nics (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		10/10/23 09:30	10/10/23 21:44	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		10/10/23 09:30	10/10/23 21:44	1
Oll Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		10/10/23 09:30	10/10/23 21:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130				10/10/23 09:30	10/10/23 21:44	1
o-Terphenyl	128		70 - 130				10/10/23 09:30	10/10/23 21:44	1
Method: EPA 300.0 - Anions, Ion (Chromatograp	hy - Solubl	e						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Surrogate Summary

Client: Carmona Resources

Job ID: 880-34202-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34196-A-1-B MS	Matrix Spike	102	102	
880-34196-A-1-C MSD	Matrix Spike Duplicate	112	102	
880-34202-1	H-6 (0-6")	104	107	
LCS 880-64332/1-A	Lab Control Sample	111	104	
LCSD 880-64332/2-A	Lab Control Sample Dup	99	101	
MB 880-64332/5-A	Method Blank	108	122	
Surrogate Legend				
BFB = 4-Bromofluorober	nzene (Surr)			
DFBZ = 1,4-Difluorobenz	zene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34202-1	H-6 (0-6")	121	128	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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Client: Carmona Resources Job ID: 880-34202-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64332/5-A

Lab Sample ID: LCS 880-64332/1-A

Matrix: Solid

Matrix: Solid Analysis Batch: 64432 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64332

1

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Xvlenes Total	<0.00400	U	0.00400		ma/Ka		10/10/23 10:38	10/11/23 12:35	1

MB MB

Surrogate	%Recover	y Qualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzen	ne (Surr) 10	8 70 - 130	10/10/23 10:38	10/11/23 12:35	1
1,4-Difluorobenzene ((Surr) 12		10/10/23 10:38	10/11/23 12:35	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64332

Prep Type: Total/NA

Prep Batch: 64332

Analysis Batch: 64432 Spike LCS LCS Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1166 mg/Kg 117 70 - 130 0.09644 Toluene 0.100 mg/Kg 96 70 - 130 0.100 0.09544 95 Ethylbenzene mg/Kg 70 - 130 0.200 0.1878 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 0.09012 70 - 130 o-Xylene mg/Kg

LCS LCS

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

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Lab Sample ID: LCSD 880-64332/2-A

Analysis Batch: 64432

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1117		mg/Kg		112	70 - 130	4	35
Toluene	0.100	0.09300		mg/Kg		93	70 - 130	4	35
Ethylbenzene	0.100	0.09384		mg/Kg		94	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1837		mg/Kg		92	70 - 130	2	35
o-Xylene	0.100	0.08378		mg/Kg		84	70 - 130	7	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-34196-A-1-B MS

Matrix: Solid

Analysis Batch: 64432

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

Prep Batch: 64332

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.101	0.09018		mg/Kg		89	70 - 130	
Toluene	<0.00201	U	0.101	0.07128		mg/Kg		71	70 - 130	

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Page 8 of 18

Client: Carmona Resources Job ID: 880-34202-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34196-A-1-B MS Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 64432 Prep Batch: 64332 Snike MS MS Sample Sample

Sample	Sample	Spike	IVIO	IVIO				70Rec
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
<0.00201	U F1	0.101	0.06697	F1	mg/Kg		66	70 - 130
<0.00402	U F1	0.202	0.1343	F1	mg/Kg		66	70 - 130
< 0.00201	U F1	0.101	0.06838	F1	mg/Kg		67	70 - 130
	Result <0.00201 <0.00402	Result Qualifier	Result Qualifier Added <0.00201	Result Qualifier Added Result <0.00201	Result Qualifier Added Result Qualifier <0.00201	Result Qualifier Added Result Qualifier Unit <0.00201	Result Qualifier Added Result Qualifier Unit D <0.00201	Result Qualifier Added Result Qualifier Unit D %Rec <0.00201

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

Client Sample ID: Matrix Spike Duplicate Lab Sample ID: 880-34196-A-1-C MSD

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 64432** Prep Batch: 64332

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.0996	0.09951		mg/Kg		100	70 - 130	10	35
Toluene	<0.00201	U	0.0996	0.08277		mg/Kg		83	70 - 130	15	35
Ethylbenzene	<0.00201	U F1	0.0996	0.08667		mg/Kg		87	70 - 130	26	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.1785		mg/Kg		89	70 - 130	28	35
o-Xylene	<0.00201	U F1	0.0996	0.08121		mg/Kg		81	70 - 130	17	35

MSD MSD Surrogate Qualifier Limits %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 112 1,4-Difluorobenzene (Surr) 70 - 130 102

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64405/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 64500

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/11/23 18:28	1

Lab Sample ID: LCS 880-64405/2-A Client Sample ID: Lab Control Sample Matrix: Solid **Prep Type: Soluble**

Analysis Batch: 64500

	Spike	LUS L	_cs			%Rec	
Analyte	Added	Result C	Qualifier U	Jnit D	%Rec	Limits	
Chloride	250	251.4	m	ng/Kg	101	90 - 110	

Lab Sample ID: LCSD 880-64405/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	251.8		mg/Kg		101	90 - 110	0	20

Eurofins Midland

Client: Carmona Resources

Job ID: 880-34202-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-34195-A-1-C MS

Client Sample ID: Matrix Spike
Matrix: Solid

Prep Type: Soluble

Analysis Batch: 64500

Sample Sample Spike MS MS %Rec Result Qualifier Result Qualifier Added Analyte Unit %Rec Limits Chloride 116 253 380.1 mg/Kg 105 90 - 110

Lab Sample ID: 880-34195-A-1-D MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Soluble

Analysis Batch: 64500

Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec Chloride 116 253 380.4 mg/Kg 105 90 - 110 0 20

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QC Association Summary

Client: Carmona Resources

Job ID: 880-34202-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34202-1	H-6 (0-6")	Total/NA	Solid	5035	
MB 880-64332/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34202-1	H-6 (0-6")	Total/NA	Solid	8021B	64332
MB 880-64332/5-A	Method Blank	Total/NA	Solid	8021B	64332
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	8021B	64332
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64332
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	64332
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64332

Analysis Batch: 64588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34202-1	H-6 (0-6")	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 64320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34202-1	H-6 (0-6")	Total/NA	Solid	8015B NM	64329

Prep Batch: 64329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34202-1	H-6 (0-6")	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34202-1	H-6 (0-6")	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64405

Lab Sample ID 880-34202-1	Client Sample ID H-6 (0-6")	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
MB 880-64405/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-34195-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-34195-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 64500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34202-1	H-6 (0-6")	Soluble	Solid	300.0	64405
MB 880-64405/1-A	Method Blank	Soluble	Solid	300.0	64405
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	300.0	64405
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64405
880-34195-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	64405

Eurofins Midland

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QC Association Summary

Client: Carmona Resources

Job ID: 880-34202-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

HPLC/IC (Continued)

Analysis Batch: 64500 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34195-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	64405

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Lab Chronicle

Client: Carmona Resources

Job ID: 880-34202-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

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

Date Collected: 10/04/23 00:00 Date Received: 10/09/23 16:20 Lab Sample ID: 880-34202-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	64332	10/10/23 10:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64432	10/11/23 15:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64588	10/11/23 15:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			64465	10/10/23 21:44	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	64329	10/10/23 09:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64320	10/10/23 21:44	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	64405	10/10/23 15:31	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64500	10/11/23 19:56	CH	EET MID

Laboratory References:

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

Eurofins Midland

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Accreditation/Certification Summary

Client: Carmona Resources

Job ID: 880-34202-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Progra	am	Identification Number	Expiration Date
Texas	NELA	Р	T104704400-23-26	06-30-24
• •	are included in this report, bu	ut the laboratory is not certif	fied by the governing authority. This lis	t may include analytes
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: Nighthawk 3H

Job ID: 880-34202-1

SDG: Lea 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: Nighthawk 3H

Job ID: 880-34202-1

SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34202-1	H-6 (0-6")	Solid	10/04/23 00:00	10/09/23 16:20

310 W Wall St Ste 500 Midland TX 79701

Carmona Resources Clinton Merritt

Bill to (if different)

Company Name

Houston TX 77024 990 Town and Country Blvd Marathon Oil Corporation Melodie Sanjari

Program UST/PST PRP rownfields RC State of Project:

□perfund

Work Order Comments

Project Manager Company Name: Address.

	Mon	۵			Comments: Email						Manager and the state of the st		H-6 (0-6")	Sample Identification	Total Containers.	Sample Custody Seals	Cooler Custody Seals	Received Intact:	SAMPLE RECEIPT	PO#	Sampler's Name	Project Location	Project Number	Project Name		Phone	City, State ZIP
	mer (Relinquis		Common Common Common Investmenta@carmenaresources.com, Conner Moenring@carmenaresources.com, Clint Merritt MerrittC@carmenaresources.com	results to Mike Carm								-6") 10/4/2023	tification Date		S Yes No N/A	Yes No WA	(es) No	PT Temp Blank.		CCM	Lea County, New Mexico	2090		Nighthawk 3H		Midland TX 79701
	JAM	Relinquished by (Signature)		она пісаннопафсан	nna mcarmona@car								2023	te Time	Corrected Temperature	A Temperature Reading	Correction Factor	Thermometer ID	Yes (b)	3	X	New Mexico	06		wk 3H		
				nonaresource									×	Soil	rature	ading	,		Wet Ice			Due Date		Turn		Email	
				s.com, conner									G	Water Comp	2.5	2.4	4:20	tro	ON (OX))		5 dav		Turn Around		msanjari@marathonoil com	City State ZIP
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	54	Date/Time		ng cmo		1							×		· · · · · ·	ВТ	EX	8021	В							com	Housto
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H				s.com										Sample	NaOH+Ascorbic Acid SAPC	Zn Acetate+NaOH Zn	Na-S-O- Na-SO	NaHSO, NARIS	H,BO, HB	H-80 H	Cool Cool		None NO	Presen		Other	RRP
		Date/Time												Sample Comments	bic Acid	aOH Zn	5 E	ZIS	ā	200	MeC	: 9	2 6	Preservative Codes			
		ime												ents	SAPC				NaCi	NaOH Na	MeOH Me	DI VVAIGI H2O	ator u o	odes			□Level IV □



Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-34202-1

SDG Number: Lea County, New Mexico

obo Hambon Loa Coarry, Horr Moxico

Login Number: 34202 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	N/A	

<6mm (1/4").

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/12/2023 9:13:14 PM

JOB DESCRIPTION

Nighthawk 3H SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34201-1

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 10/12/2023 9:13:14 PM

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

Client: Carmona Resources Project/Site: Nighthawk 3H Laboratory Job ID: 880-34201-1 SDG: Lea County, New Mexico

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Definitions/Glossary

Job ID: 880-34201-1 Client: Carmona Resources Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Qualifiers

GC VOA

Qualifier **Qualifier Description**

MS and/or MSD recovery exceeds control limits. 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**

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**

Detection Limit (DoD/DOE) DL

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 Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NFG 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)

Relative Percent Difference, a measure of the relative difference between two points RPD

TEF Toxicity Equivalent Factor (Dioxin) TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Eurofins Midland

Case Narrative

Client: Carmona Resources

Job ID: 880-34201-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Job ID: 880-34201-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-34201-1

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 10/9/2023~4:20~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 $2.6^{\circ}C$

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: H-7 (0-6") (880-34201-1).

GC VOA

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-64332 and analytical batch 880-64432 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

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

HPLC/IC

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

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Client Sample Results

Client: Carmona Resources Job ID: 880-34201-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Client Sample ID: H-7 (0-6")

Date Collected: 10/04/23 00:00 Date Received: 10/09/23 16:20

Lab Sample ID: 880-34201-1

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 14:46	
Toluene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 14:46	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 14:46	
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/10/23 10:38	10/11/23 14:46	
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 14:46	
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/10/23 10:38	10/11/23 14:46	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	112		70 - 130				10/10/23 10:38	10/11/23 14:46	
1,4-Difluorobenzene (Surr)	103		70 - 130				10/10/23 10:38	10/11/23 14:46	
Method: TAL SOP Total BTEX - ⁻	Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
T DTEV	<0.00399	11	0.00399		mg/Kg			10/11/23 14:46	
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (GC)						
Method: SW846 8015 NM - Diese Analyte	el Range Organ Result	ics (DRO) (GC)	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fa
Method: SW846 8015 NM - Diese Analyte	el Range Organ	ics (DRO) (GC)	MDL		<u>D</u>	Prepared		Dil Fa
Method: SW846 8015 NM - Diese Analyte Total TPH	el Range Organ Result <49.6	ics (DRO) (Gualifier	GC) RL 49.6	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Die	el Range Organ Result 49.6 sel Range Organ	ics (DRO) (Gualifier	GC) RL 49.6	MDL	Unit mg/Kg	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics	el Range Organ Result 49.6 sel Range Organ	Qualifier Unics (DRO) Qualifier	GC) RL 49.6		Unit mg/Kg		· · ·	Analyzed 10/10/23 21:22	Dil Fa
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	el Range Organ Result <49.6 sel Range Orga Result	Qualifier U nics (DRO) Qualifier U u U U U U U U U U U U U U U U U U U	GC) RL 49.6 (GC) RL		Unit mg/Kg Unit		Prepared	Analyzed 10/10/23 21:22 Analyzed	Dil Fa
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	el Range Organ Result 49.6 Sel Range Orga Result 49.6	ics (DRO) (Qualifier U nics (DRO) Qualifier U	GC) RL 49.6 (GC) RL 49.6		Unit mg/Kg Unit mg/Kg		Prepared 10/10/23 09:30	Analyzed 10/10/23 21:22 Analyzed 10/10/23 21:22	Dil Fa
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	el Range Organ Result 49.6 sel Range Orga Result 49.6 49.6	Company (Company) (Company	GC) RL 49.6 (GC) RL 49.6 49.6		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30	Analyzed 10/10/23 21:22 Analyzed 10/10/23 21:22 10/10/23 21:22	Dil Fa
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	el Range Organ Result 49.6 Sel Range Orga Result 49.6 49.6 49.6 <49.6	Company (Company) (Company	GC) RL 49.6 (GC) RL 49.6 49.6 49.6		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30	Analyzed 10/10/23 21:22 Analyzed 10/10/23 21:22 10/10/23 21:22 10/10/23 21:22	Dil Fa
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	el Range Organ Result <49.6 sel Range Orga Result <49.6 <49.6 <49.6 %Recovery	Company (Company) (Company	GC) RL 49.6 (GC) RL 49.6 49.6 49.6 Limits		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30 Prepared	Analyzed 10/10/23 21:22 Analyzed 10/10/23 21:22 10/10/23 21:22 10/10/23 21:22 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	el Range Organ	ics (DRO) (Qualifier U nics (DRO) Qualifier U U Qualifier	GC) RL 49.6 (GC) RL 49.6 49.6 49.6 Limits 70 - 130 70 - 130		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30 Prepared 10/10/23 09:30	Analyzed 10/10/23 21:22 Analyzed 10/10/23 21:22 10/10/23 21:22 10/10/23 21:22 Analyzed 10/10/23 21:22	Dil Fa

4.96

mg/Kg

174

Released to Imaging: 3/18/2024 9:14:49 AM

Chloride

10/11/23 19:50

Surrogate Summary

Client: Carmona Resources

Job ID: 880-34201-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1	Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34196-A-1-B MS	Matrix Spike	102	102	
880-34196-A-1-C MSD	Matrix Spike Duplicate	112	102	
880-34201-1	H-7 (0-6")	112	103	
LCS 880-64332/1-A	Lab Control Sample	111	104	
LCSD 880-64332/2-A	Lab Control Sample Dup	99	101	
MB 880-64332/5-A	Method Blank	108	122	
Surrogate Legend				
BFB = 4-Bromofluorober	nzene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

The state of the s	ery (Acceptance Limits)
1CO1 OTPH1	
Lab Sample ID Client Sample ID (70-130) (70-130)	
880-34201-1 H-7 (0-6") 114 119	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Midland

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Client: Carmona Resources

Job ID: 880-34201-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64332/5-A

Matrix: Solid Analysis Batch: 64432 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64332

	MB	мв							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Xvlenes, Total	< 0.00400	U	0.00400		ma/Ka		10/10/23 10:38	10/11/23 12:35	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	10/10/23 10:38	10/11/23 12:35	1
1,4-Difluorobenzene (Surr)	122		70 - 130	10/10/23 10:38	10/11/23 12:35	1

Lab Sample ID: LCS 880-64332/1-A Client Sample ID: Lab Control Sample

Matrix: Solid

Analysis Batch: 64432

Prep Type: Total/NA

Prep Batch: 64332

	Бріке	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1166		mg/Kg		117	70 - 130	
Toluene	0.100	0.09644		mg/Kg		96	70 - 130	
Ethylbenzene	0.100	0.09544		mg/Kg		95	70 - 130	
m-Xylene & p-Xylene	0.200	0.1878		mg/Kg		94	70 - 130	
o-Xylene	0.100	0.09012		mg/Kg		90	70 - 130	

LCS LCS

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

Lab Sample ID: LCSD 880-64332/2-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Lab Control Sample Dup

Prep Batch: 64332

Prep Batch: 64332

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1117		mg/Kg		112	70 - 130	4	35	
Toluene	0.100	0.09300		mg/Kg		93	70 - 130	4	35	
Ethylbenzene	0.100	0.09384		mg/Kg		94	70 - 130	2	35	
m-Xylene & p-Xylene	0.200	0.1837		mg/Kg		92	70 - 130	2	35	
o-Xylene	0.100	0.08378		mg/Kg		84	70 - 130	7	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1.4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-34196-A-1-B MS

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64332

l		Sample	Sample	Spike	MS	MS				%Rec	
	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
	Benzene	<0.00201	U	0.101	0.09018		mg/Kg		89	70 - 130	
l	Toluene	<0.00201	U	0.101	0.07128		mg/Kg		71	70 - 130	

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Prep Batch: 64332

Job ID: 880-34201-1 Client: Carmona Resources SDG: Lea County, New Mexico Project/Site: Nighthawk 3H

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

Lab Sample ID: 880-34196-A-1-B MS Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 64432

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00201	U F1	0.101	0.06697	F1	mg/Kg		66	70 - 130	
m-Xylene & p-Xylene	<0.00402	U F1	0.202	0.1343	F1	mg/Kg		66	70 - 130	
o-Xylene	<0.00201	U F1	0.101	0.06838	F1	mg/Kg		67	70 - 130	

MS MS

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

Lab Sample ID: 880-34196-A-1-C MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 64432** Prep Batch: 64332

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.0996	0.09951		mg/Kg		100	70 - 130	10	35
Toluene	<0.00201	U	0.0996	0.08277		mg/Kg		83	70 - 130	15	35
Ethylbenzene	<0.00201	U F1	0.0996	0.08667		mg/Kg		87	70 - 130	26	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.1785		mg/Kg		89	70 - 130	28	35
o-Xylene	<0.00201	U F1	0.0996	0.08121		mg/Kg		81	70 - 130	17	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64405/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 64500

MR MR

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/11/23 18:28	1

Lab Sample ID: LCS 880-64405/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

	Spike	LUS	LCS				%Rec	
Analyte	Added	Result (Qualifier	Unit	D	%Rec	Limits	
Chloride	250	251.4		mg/Kg		101	90 - 110	

Lab Sample ID: LCSD 880-64405/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 64500

7a y o. o = 2.000									
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	251.8		mg/Kg		101	90 - 110	0	20

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Lab Sample ID: 880-34195-A-1-C MS

Lab Sample ID: 880-34195-A-1-D MSD

QC Sample Results

Client: Carmona Resources Job ID: 880-34201-1 SDG: Lea County, New Mexico Project/Site: Nighthawk 3H

Method: 300.0 - Anions, Ion Chromatography (Continued)

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analysis Batch: 64500

Matrix: Solid

Matrix: Solid

Sample Sample Spike MS MS %Rec Result Qualifier Result Qualifier Added Analyte Unit %Rec Limits Chloride 116 253 380.1 mg/Kg 105 90 - 110

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analysis Batch: 64500

Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec Chloride 116 253 380.4 mg/Kg 105 90 - 110 0 20

QC Association Summary

Client: Carmona Resources

Job ID: 880-34201-1
Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34201-1	H-7 (0-6")	Total/NA	Solid	5035	
MB 880-64332/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34201-1	H-7 (0-6")	Total/NA	Solid	8021B	64332
MB 880-64332/5-A	Method Blank	Total/NA	Solid	8021B	64332
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	8021B	64332
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64332
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	64332
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64332

Analysis Batch: 64587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34201-1	H-7 (0-6")	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 64320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34201-1	H-7 (0-6")	Total/NA	Solid	8015B NM	64329

Prep Batch: 64329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34201-1	H-7 (0-6")	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34201-1	H-7 (0-6")	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34201-1	H-7 (0-6")	Soluble	Solid	DI Leach	
MB 880-64405/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-34195-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-34195-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 64500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34201-1	H-7 (0-6")	Soluble	Solid	300.0	64405
MB 880-64405/1-A	Method Blank	Soluble	Solid	300.0	64405
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	300.0	64405
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64405
880-34195-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	64405

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QC Association Summary

Client: Carmona Resources

Job ID: 880-34201-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

HPLC/IC (Continued)

Analysis Batch: 64500 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34195-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	64405

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Lab Chronicle

Client: Carmona Resources Job ID: 880-34201-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Client Sample ID: H-7 (0-6")

Date Collected: 10/04/23 00:00 Date Received: 10/09/23 16:20

Lab Sample ID: 880-34201-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	64332	10/10/23 10:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64432	10/11/23 14:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64587	10/11/23 14:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			64464	10/10/23 21:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	64329	10/10/23 09:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64320	10/10/23 21:22	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	64405	10/10/23 15:31	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64500	10/11/23 19:50	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

Job ID: 880-34201-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Progra	am	Identification Number	Expiration Date
Texas	NELA	Р	T104704400-23-26	06-30-24
• ,	are included in this report, bu	ut the laboratory is not certif	fied by the governing authority. This lis	st may include analytes
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: Nighthawk 3H

Job ID: 880-34201-1 SDG: Lea County, New Mexico

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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

Eurofins Midland

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Sample Summary

Client: Carmona Resources Project/Site: Nighthawk 3H

Job ID: 880-34201-1

SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34201-1	H-7 (0-6")	Solid	10/04/23 00:00	10/09/23 16:20

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880-34201 Chain of Custody		

Modi		comments: Email						H-7 (0-6")	Sample Identification	Total Containers.	Sample Custody Seals	Cooler Custody Seals	Received Intact:	SAMPLE RECEIPT	PO#	Sampler's Name	Project Location	Project Number	Project Name.	Phone	City, State ZIP N	Address.	Company Name	Project Manager (
Woh Ju	Relingu	Comments: Email results to Mike Carmona mcarmona@carmonaresources.com, Conner Moehring@carmonaresources.com, Clint Merritt MerrittC@carmonaresources.com							ffication Date		Yes No	Yes No (k	Yes No	Temp Blank.		CCM	Lea County,	2090	Nighthawk 3H		Midland, TX 79701	310 W Wall St Ste 500	Carmona Resources	Clinton Merritt
MB	Relinquished by: (Signature)	iona mcarmona@c						10/4/2023	ıte Time	Corrected Temperature	N/A Temperature Reading	Correction Factor	Thermometer ID	Yes		×	Lea County, New Mexico	90	awk 3H)		
	9)	zarmonaresources						×	Soil	nperature	Reading	ctor) Wet Ice			Due Date	✓ Routine	Turn /	Email				
		s.com, Conner M						9	Water Comp	9.5	2.4	+:20	S A	(Yes) No			5 day	sh	Turn Around	msanjari@marathonoil.com	City, State ZIP	Address.	Company Name:	Bill to: (if different)
207	Date	oehring cı				-	-	1 ×	# of Cont		ВТ		8021	eter B	'S			Pres. Code		onoil.com	Ноц	990	Mar	Mei
	Date/Time	noehrii						×	ТРН	801	5M (GR	0 + 1	ORO	+ MI	RO)					Houston, TX 77024	Town ar	athon Oi	Melodie Sanjari
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received by (signature)	ived hur	t Merritt				-													JEST	Deliverables, EDD	Reporting	State of Project:	Program	
Signature	Cianati	MerrittC						1												les. EDE	Level	roject:	UST/PS	
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		urces.co							Sa	NaOH+A	Zn Acets	Na ₂ S ₂ O ₂ Na ₂ SO ₂	NaHSO, NARIS	H-BO. HB	H 202 H	H 20		None NO	Pre				nfields	Work Order Comments
	$\ $	m							mple Co	scorbic /	Zn Acetate+NaOH, Zn	NaSO.	NARIS	₽ ~	,	-			servati	Other	RRP		RC	#
Date/Time									Sample Comments	NaOH+Ascorbic Acid SAPC	4 7n			Na	NaOH Ma	Ne Co	u valer 120	DI Water: H.O.	Preservative Codes		□Level IV □		perfund	

Login Sample Receipt Checklist

Client: Carmona Resources Job Number: 880-34201-1 SDG Number: Lea County, New Mexico

List Source: Eurofins Midland

List Number: 1

Login Number: 34201

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

ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/12/2023 9:12:23 PM

JOB DESCRIPTION

Nighthawk 3H SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34200-1

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 10/12/2023 9:12:23 PM

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

Eurofins Midland is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies

Page 2 of 18

10/12/2023

Client: Carmona Resources Project/Site: Nighthawk 3H Laboratory Job ID: 880-34200-1 SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources

Job ID: 880-34200-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Qualifiers

GC VOA

Qualifier Description

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

GC Semi VOA

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

r QE Tractical Quantitation Elim

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

Eurofins Midland

Case Narrative

Client: Carmona Resources

Job ID: 880-34200-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Job ID: 880-34200-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-34200-1

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 10/9/2023~4:20~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 $2.6^{\circ}C$

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: H-8 (0-6") (880-34200-1).

GC VOA

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-64332 and analytical batch 880-64432 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

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

HPLC/IC

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

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Client Sample Results

Client: Carmona Resources Job ID: 880-34200-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Client Sample ID: H-8 (0-6")

Lab Sample ID: 880-34200-1 Date Collected: 10/04/23 00:00

Matrix: Solid

Method: SW846 8021B - Volatile Analyte	•	Qualifier	, RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	- <0.00199		0.00199		mg/Kg		10/10/23 10:38	10/11/23 14:25	
Toluene	< 0.00199		0.00199		mg/Kg		10/10/23 10:38	10/11/23 14:25	1
Ethylbenzene	< 0.00199		0.00199		mg/Kg		10/10/23 10:38	10/11/23 14:25	1
m-Xylene & p-Xylene	<0.00398		0.00398		mg/Kg		10/10/23 10:38	10/11/23 14:25	1
o-Xylene	< 0.00199		0.00199		mg/Kg		10/10/23 10:38	10/11/23 14:25	1
Xylenes, Total	<0.00398		0.00398		mg/Kg		10/10/23 10:38	10/11/23 14:25	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				10/10/23 10:38	10/11/23 14:25	1
1,4-Difluorobenzene (Surr)	103		70 - 130				10/10/23 10:38	10/11/23 14:25	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	<0.00398				mg/Kg			10/11/23 14:25	
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (•						
Method: SW846 8015 NM - Diese Analyte	el Range Organ Result	ics (DRO) (GC)	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte	el Range Organ	ics (DRO) (GC)	MDL		<u>D</u>	Prepared		Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH	el Range Organ Result <49.7	ics (DRO) (Qualifier	GC) RL 49.7	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies	el Range Organ Result Result 49.7 sel Range Orga Result	ics (DRO) (Qualifier Unics (DRO) Qualifier	GC) RL 49.7	MDL	Unit mg/Kg	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics	el Range Organ Result <49.7 sel Range Organ	ics (DRO) (Qualifier Unics (DRO) Qualifier	GC) RL 49.7		Unit mg/Kg		<u> </u>	Analyzed 10/10/23 21:00	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10	el Range Organ Result Result 49.7 sel Range Orga Result	ics (DRO) (Qualifier U nics (DRO) Qualifier U	GC) RL 49.7 (GC) RL		Unit mg/Kg Unit		Prepared	Analyzed 10/10/23 21:00 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	el Range Organ Result 49.7 sel Range Orga Result 49.7 49.7	ics (DRO) (Qualifier U nics (DRO) Qualifier U	GC) RL 49.7 (GC) RL 49.7 49.7		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30	Analyzed 10/10/23 21:00 Analyzed 10/10/23 21:00 10/10/23 21:00	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	el Range Organ Result Result 49.7 Result 49.7 Result 49.7	ics (DRO) (Qualifier U nics (DRO) Qualifier U	GC) RL 49.7 (GC) RL 49.7		Unit mg/Kg Unit mg/Kg		Prepared 10/10/23 09:30	Analyzed 10/10/23 21:00 Analyzed 10/10/23 21:00	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	el Range Organ Result 49.7 sel Range Orga Result 49.7 49.7	ics (DRO) (Qualifier U nics (DRO) Qualifier U U	GC) RL 49.7 (GC) RL 49.7 49.7 49.7 Limits		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30	Analyzed 10/10/23 21:00 Analyzed 10/10/23 21:00 10/10/23 21:00	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	el Range Organ Result 49.7 sel Range Orga Result 49.7 49.7 49.7	ics (DRO) (Qualifier U nics (DRO) Qualifier U U	GC) RL 49.7 (GC) RL 49.7 49.7 49.7		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30	Analyzed 10/10/23 21:00 Analyzed 10/10/23 21:00 10/10/23 21:00 10/10/23 21:00	Dil Fac
Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	sel Range Organ Result <49.7 sel Range Orga Result <49.7 <49.7 <49.7 %Recovery	ics (DRO) (Qualifier U nics (DRO) Qualifier U U	GC) RL 49.7 (GC) RL 49.7 49.7 49.7 Limits		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30 Prepared	Analyzed 10/10/23 21:00 Analyzed 10/10/23 21:00 10/10/23 21:00 10/10/23 21:00 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	el Range Organ	ics (DRO) (Qualifier U nics (DRO) Qualifier U U Qualifier	GC) RL 49.7 (GC) RL 49.7 49.7 49.7 Limits 70 - 130 70 - 130		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30 Prepared 10/10/23 09:30	Analyzed 10/10/23 21:00 Analyzed 10/10/23 21:00 10/10/23 21:00 Analyzed 10/10/23 21:00	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	ics (DRO) (Qualifier U nics (DRO) Qualifier U U Qualifier	GC) RL 49.7 (GC) RL 49.7 49.7 49.7 Limits 70 - 130 70 - 130		Unit mg/Kg Unit mg/Kg mg/Kg mg/Kg		Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30 Prepared 10/10/23 09:30	Analyzed 10/10/23 21:00 Analyzed 10/10/23 21:00 10/10/23 21:00 Analyzed 10/10/23 21:00	Dil Fac

Surrogate Summary

Client: Carmona Resources Job ID: 880-34200-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34196-A-1-B MS	Matrix Spike	102	102	
880-34196-A-1-C MSD	Matrix Spike Duplicate	112	102	
880-34200-1	H-8 (0-6")	103	103	
LCS 880-64332/1-A	Lab Control Sample	111	104	
LCSD 880-64332/2-A	Lab Control Sample Dup	99	101	
MB 880-64332/5-A	Method Blank	108	122	
Surrogate Legend				
BFB = 4-Bromofluorober	nzene (Surr)			
DFBZ = 1,4-Difluorobena	zene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34200-1	H-8 (0-6")	126	127	
Surrogate Legend	,			

1CO = 1-Chlorooctane OTPH = o-Terphenyl

Client: Carmona Resources Job ID: 880-34200-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64332/5-A

Lab Sample ID: LCS 880-64332/1-A

Matrix: Solid Analysis Batch: 64432

Xylenes, Total

Matrix: Solid

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64332

	МВ	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	
Toluene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	

mg/Kg

MB MB

<0.00400 U

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	10	/10/23 10:38	10/11/23 12:35	1
1,4-Difluorobenzene (Surr)	122		70 - 130	10	/10/23 10:38	10/11/23 12:35	1

0.00400

Client Sample ID: Lab Control Sample

10/11/23 12:35

10/10/23 10:38

Prep Type: Total/NA

Prep Batch: 64332

Analysis Batch: 64432 Spike LCS LCS Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1166 mg/Kg 117 70 - 130 0.09644 Toluene 0.100 mg/Kg 96 70 - 130 0.100 0.09544 95 Ethylbenzene mg/Kg 70 - 130 0.200 0.1878 94 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 0.09012 70 - 130 o-Xylene mg/Kg

LCS LCS

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

Lab Sample ID: LCSD 880-64332/2-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 64432

Prep Type: Total/NA Prep Batch: 64332

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1117		mg/Kg		112	70 - 130	4	35	
Toluene	0.100	0.09300		mg/Kg		93	70 - 130	4	35	
Ethylbenzene	0.100	0.09384		mg/Kg		94	70 - 130	2	35	
m-Xylene & p-Xylene	0.200	0.1837		mg/Kg		92	70 - 130	2	35	
o-Xylene	0.100	0.08378		mg/Kg		84	70 - 130	7	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1.4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-34196-A-1-B MS

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64332

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.101	0.09018		mg/Kg		89	70 - 130	
Toluene	<0.00201	U	0.101	0.07128		mg/Kg		71	70 - 130	

Eurofins Midland

Client: Carmona Resources Job ID: 880-34200-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34196-A-1-B MS Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 64432 Prep Batch: 64332

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00201	U F1	0.101	0.06697	F1	mg/Kg		66	70 - 130	
m-Xylene & p-Xylene	<0.00402	U F1	0.202	0.1343	F1	mg/Kg		66	70 - 130	
o-Xylene	<0.00201	U F1	0.101	0.06838	F1	mg/Kg		67	70 - 130	

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

Lab Sample ID: 880-34196-A-1-C MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 64432** Prep Batch: 64332

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.0996	0.09951		mg/Kg		100	70 - 130	10	35
Toluene	<0.00201	U	0.0996	0.08277		mg/Kg		83	70 - 130	15	35
Ethylbenzene	<0.00201	U F1	0.0996	0.08667		mg/Kg		87	70 - 130	26	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.1785		mg/Kg		89	70 - 130	28	35
o-Xylene	<0.00201	U F1	0.0996	0.08121		mg/Kg		81	70 - 130	17	35

MSD MSD Surrogate Qualifier Limits %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 112 1,4-Difluorobenzene (Surr) 102 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64405/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

	МВ	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/11/23 18:28	1

Lab Sample ID: LCS 880-64405/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

Spike LCS LCS %Rec Added Analyte Result Qualifier Limits Unit %Rec Chloride 250 251.4 mg/Kg 101 90 - 110

Lab Sample ID: LCSD 880-64405/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

Spike LCSD LCSD %Rec RPD Result Qualifier Added Limits Limit Analyte Unit D %Rec RPD Chloride 250 251.8 101 90 - 110 20 mg/Kg

Eurofins Midland

Client: Carmona Resources Job ID: 880-34200-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-34195-A-1-C MS Client Sample ID: Matrix Spike **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	116		253	380.1		mg/Kg		105	90 - 110	

Lab Sample ID: 880-34195-A-1-D MSD Client Sample ID: Matrix Spike Duplicate Matrix: Solid **Prep Type: Soluble**

Analysis Batch: 64500

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	116		253	380.4	-	mg/Kg		105	90 - 110	0	20

QC Association Summary

Client: Carmona Resources

Job ID: 880-34200-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34200-1	H-8 (0-6")	Total/NA	Solid	5035	
MB 880-64332/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34200-1	H-8 (0-6")	Total/NA	Solid	8021B	64332
MB 880-64332/5-A	Method Blank	Total/NA	Solid	8021B	64332
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	8021B	64332
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64332
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	64332
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64332

Analysis Batch: 64586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34200-1	H-8 (0-6")	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 64320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34200-1	H-8 (0-6")	Total/NA	Solid	8015B NM	64329

Prep Batch: 64329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34200-1	H-8 (0-6")	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34200-1	H-8 (0-6")	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64405

Lab Sample ID 880-34200-1	Client Sample ID H-8 (0-6")	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
MB 880-64405/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-34195-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-34195-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 64500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34200-1	H-8 (0-6")	Soluble	Solid	300.0	64405
MB 880-64405/1-A	Method Blank	Soluble	Solid	300.0	64405
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	300.0	64405
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64405
880-34195-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	64405

Eurofins Midland

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QC Association Summary

Client: Carmona Resources

Job ID: 880-34200-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

HPLC/IC (Continued)

Analysis Batch: 64500 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34195-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	64405

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Lab Chronicle

Client: Carmona Resources Job ID: 880-34200-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Client Sample ID: H-8 (0-6")

Date Received: 10/09/23 16:20

Lab Sample ID: 880-34200-1 Date Collected: 10/04/23 00:00

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	64332	10/10/23 10:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64432	10/11/23 14:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64586	10/11/23 14:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			64463	10/10/23 21:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	64329	10/10/23 09:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64320	10/10/23 21:00	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	64405	10/10/23 15:31	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64500	10/11/23 19:44	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Carmona Resources

Job ID: 880-34200-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Progr	am	Identification Number	Expiration Date
Texas	NELA	Р	T104704400-23-26	06-30-24
,	are included in this report, bu	ut the laboratory is not certif	fied by the governing authority. This lis	t may include analytes
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: Nighthawk 3H

Job ID: 880-34200-1

SDG: Lea 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: Nighthawk 3H

Job ID: 880-34200-1

SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34200-1	H-8 (0-6")	Solid	10/04/23 00:00	10/09/23 16:20

Project Manager

Clinton Merritt

Bill to (if different)

Melodie Sanjari

i Toject Manager	Chillon Mellitt				Bill to (if different)		Melodi	Melodie Sanjari								Vork O	rder Co	Work Order Comments	(J)		
Company Name	Carmona Resources	ces			Company Name	,,,	Marath	on Oil C	Marathon Oil Corporation				Progra	Program UST/PST PRP	/PST [RP	krownfi	Frownfields PBC	5	marking	
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City, State ZIP	Midland TX 79701	1			City, State ZIP		Housto	Houston TX 77024	7024				Reporti	Reporting Level II Level III	<u>_</u>	vel III	□st/ust		RRP [□Level IV □	
Phone.				Email	msanıarı@marathonoil com	rathonoil c	om						Deliver	Deliverables EDD	B D		ADaPT 🗆		Other:		
Project Name	z	Nighthawk 3H		1	Turn Around	<u></u>				>	V		2					,			
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Project Location	Lea Co	Lea County, New Mexico		Due Date	5 day	<u></u>)									n	Cool Cool		MeOH Me	-
Sampler's Name.		CCM						IRO									T	HCL HC		HNO. HN	
PO#)	rs		+ M									<u> </u>	H ₂ SO, H ₂		NaOH Na	
SAMPLE RECEIPT		Perma Blank.	Yes(No	Wet ice	(Yes) No	nete	1B	DRO	0.0								I	dH 'Od'H			
Received Intact:	Yes		Thermometer ID		SOLL	ran	802	0 + C	e 30								z :	NaHSO, NARIS	ARIO		
Cooler Custody Seals.	Yes	No (I	Correction Factor		4.2D	Pa	ΓEX	GR	orid								z	Na ₂ S ₂ O ₃ NaSO ₂	VaSO,		
Sample Custody Seals	ls. Yes No		Temperature Reading	ding	5.5	l	В	5M (Chl								Z	Zn Acetate+NaOH Zn	+NaOH	Zn	
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Sample Identification	tification	Date	Time	Soil	Water Comp	cont		TPI										Sam	ple Co	Sample Comments	
H-8 (0-6")	-6")	10/4/2023		×	G	1	×	×	×							1					
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Comments Email results to Mike Carmona mcarmona@carmonaresources.com, Conner Moehring cmoehring@carmonaresources.com, Clint Merritt MerrittC@carmonaresources.com	results to Mike	Carmona m	carmona@carr	nonaresource	s.com, Conne	er Moehrin	g cmo	ehring	@carmo	naresou	rces.cc	m, Clir	it Merri	tt Merr	ttC@c	armon	resour	ces.con	3		
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Login Sample Receipt Checklist

Client: Carmona Resources Job Number: 880-34200-1 SDG Number: Lea County, New Mexico

Login Number: 34200 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	N/A	

<6mm (1/4").

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/12/2023 9:11:26 PM

JOB DESCRIPTION

Nighthawk 3H SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34199-1

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 10/12/2023 9:11:26 PM

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

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Client: Carmona Resources Project/Site: Nighthawk 3H Laboratory Job ID: 880-34199-1 SDG: Lea County, New Mexico

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Definitions/Glossary

Job ID: 880-34199-1 Client: Carmona Resources Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

GC VOA Qualifier

U

Qualifiers

Qualifier Description

MS and/or MSD recovery exceeds control limits. 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**

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

Percent Recovery %R 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" Minimum Detectable Activity (Radiochemistry) MDA MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit Minimum Level (Dioxin) ML MPN Most Probable Number Method Quantitation Limit MQL

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)

Reporting Limit or Requested Limit (Radiochemistry) RL

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

Job ID: 880-34199-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Job ID: 880-34199-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-34199-1

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 10/9/2023~4:20~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 $2.6^{\circ}C$

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: H-9 (0-6") (880-34199-1).

GC VOA

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-64332 and analytical batch 880-64432 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: H-9 (0-6") (880-34199-1). 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.

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Client Sample Results

Client: Carmona Resources Job ID: 880-34199-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Client Sample ID: H-9 (0-6")

Lab Sample ID: 880-34199-1 Date Collected: 10/04/23 00:00 Matrix: Solid

Date Received: 10/09/23 16:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		10/10/23 10:38	10/11/23 14:05	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/10/23 10:38	10/11/23 14:05	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/10/23 10:38	10/11/23 14:05	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		10/10/23 10:38	10/11/23 14:05	
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/10/23 10:38	10/11/23 14:05	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		10/10/23 10:38	10/11/23 14:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				10/10/23 10:38	10/11/23 14:05	1
1,4-Difluorobenzene (Surr)	102		70 - 130				10/10/23 10:38	10/11/23 14:05	1
Method: TAL SOP Total BTEX -	Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			10/11/23 14:05	1
: Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (GC)						
Method: SW846 8015 NM - Diese Analyte	•	ics (DRO) (GC)	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
	•	Qualifier	•	MDL		<u>D</u>	Prepared	Analyzed 10/10/23 20:38	Dil Fac
Analyte Total TPH	Result <49.7	Qualifier U	RL 49.7	MDL	Unit	<u>D</u>	Prepared		Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die	Result <49.7	Qualifier U	RL 49.7		Unit	D	Prepared Prepared		Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die Analyte	Result <49.7	Qualifier Unics (DRO) Qualifier	RL 49.7		Unit mg/Kg	<u> </u>		10/10/23 20:38	1
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics	Result <49.7 sel Range Orga Result	Qualifier Unics (DRO) Qualifier	(GC)		Unit mg/Kg	<u> </u>	Prepared	10/10/23 20:38 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.7 sel Range Orga Result	Qualifier U nics (DRO) Qualifier U	(GC)		Unit mg/Kg	<u> </u>	Prepared	10/10/23 20:38 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.7 sel Range Orga Result <49.7 <49.7	Qualifier U nics (DRO) Qualifier U	RL 49.7 (GC) RL 49.7 49.7		Unit mg/Kg Unit mg/Kg mg/Kg	<u> </u>	Prepared 10/10/23 09:30 10/10/23 09:30	10/10/23 20:38 Analyzed 10/10/23 20:38 10/10/23 20:38	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.7 sel Range Orga Result <49.7	Qualifier U nics (DRO) Qualifier U	(GC) RL 49.7		Unit mg/Kg Unit mg/Kg	<u> </u>	Prepared 10/10/23 09:30	10/10/23 20:38 Analyzed 10/10/23 20:38	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.7 sel Range Orga Result <49.7 <49.7	Qualifier U nics (DRO) Qualifier U	RL 49.7 (GC) RL 49.7 49.7		Unit mg/Kg Unit mg/Kg mg/Kg	<u> </u>	Prepared 10/10/23 09:30 10/10/23 09:30	10/10/23 20:38 Analyzed 10/10/23 20:38 10/10/23 20:38	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U nics (DRO) Qualifier U U	RL 49.7 (GC) RL 49.7 49.7 49.7		Unit mg/Kg Unit mg/Kg mg/Kg	<u> </u>	Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30	Analyzed 10/10/23 20:38 Analyzed 10/10/23 20:38 10/10/23 20:38 10/10/23 20:38	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <49.7	Qualifier U nics (DRO) Qualifier U U Qualifier	RL 49.7 (GC) RL 49.7 49.7 49.7 Limits		Unit mg/Kg Unit mg/Kg mg/Kg	<u> </u>	Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30 Prepared	Analyzed 10/10/23 20:38 Analyzed 10/10/23 20:38 10/10/23 20:38 10/10/23 20:38 Analyzed	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <49.7	Qualifier U nics (DRO) Qualifier U U Qualifier S1+ S1+	RL 49.7 (GC) RL 49.7 49.7 49.7 Limits 70 - 130 70 - 130		Unit mg/Kg Unit mg/Kg mg/Kg	<u> </u>	Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30 Prepared 10/10/23 09:30	Analyzed 10/10/23 20:38 Analyzed 10/10/23 20:38 10/10/23 20:38 Analyzed 10/10/23 20:38	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result <49.7	Qualifier U nics (DRO) Qualifier U U Qualifier S1+ S1+	RL 49.7 (GC) RL 49.7 49.7 49.7 Limits 70 - 130 70 - 130	MDL	Unit mg/Kg Unit mg/Kg mg/Kg	<u> </u>	Prepared 10/10/23 09:30 10/10/23 09:30 10/10/23 09:30 Prepared 10/10/23 09:30	Analyzed 10/10/23 20:38 Analyzed 10/10/23 20:38 10/10/23 20:38 Analyzed 10/10/23 20:38	Dil Fac

Surrogate Summary

Client: Carmona Resources

Job ID: 880-34199-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34196-A-1-B MS	Matrix Spike	102	102	
880-34196-A-1-C MSD	Matrix Spike Duplicate	112	102	
880-34199-1	H-9 (0-6")	97	102	
LCS 880-64332/1-A	Lab Control Sample	111	104	
LCSD 880-64332/2-A	Lab Control Sample Dup	99	101	
MB 880-64332/5-A	Method Blank	108	122	
Surrogate Legend				
BFB = 4-Bromofluorobei	nzene (Surr)			
DFBZ = 1,4-Difluoroben:	zene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34199-1	H-9 (0-6")	154 S1+	159 S1+	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Midland

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Client: Carmona Resources Job ID: 880-34199-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64332/5-A

Lab Sample ID: LCS 880-64332/1-A

Matrix: Solid Analysis Batch: 64432 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64332

	MB	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepa	ared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	10/10/23	3 10:38	10/11/23 12:35	1
1,4-Difluorobenzene (Surr)	122		70 - 130	10/10/23	3 10:38	10/11/23 12:35	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64332

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1166 mg/Kg 117 70 - 130 Toluene 0.100 0.09644 mg/Kg 96 70 - 130 0.100 Ethylbenzene 0.09544 mg/Kg 95 70 - 130 0.200 94 70 - 130 m-Xylene & p-Xylene 0.1878 mg/Kg 0.100 0.09012 70 - 130 o-Xylene mg/Kg 90

LCS LCS

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

Lab Sample ID: LCSD 880-64332/2-A

Matrix: Solid

Matrix: Solid

Analysis Batch: 64432

Analysis Batch: 64432

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 64332

RPD LCSD LCSD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Limit Benzene 0.100 0.1117 mg/Kg 112 70 - 130 35 Toluene 0.100 0.09300 mg/Kg 93 70 - 130 35 Ethylbenzene 0.100 0.09384 mg/Kg 94 70 - 130 2 35 m-Xylene & p-Xylene 0.200 0.1837 mg/Kg 92 70 - 130 35 0.100 0.08378 o-Xylene mg/Kg 70 - 130 35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1.4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-34196-A-1-B MS

Matrix: Solid

Analysis Batch: 64432

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

Prep Batch: 64332

١		Sample	Sample	Spike	MS	MS				%Rec	
l	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
l	Benzene	<0.00201	U	0.101	0.09018		mg/Kg	_	89	70 - 130	
١	Toluene	<0.00201	U	0.101	0.07128		mg/Kg		71	70 - 130	

Eurofins Midland

Page 8 of 18

Client: Carmona Resources Job ID: 880-34199-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34196-A-1-B MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 64432

Analyte Re										
7	uit	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene <0.00	201	U F1	0.101	0.06697	F1	mg/Kg		66	70 - 130	
m-Xylene & p-Xylene <0.00	02	U F1	0.202	0.1343	F1	mg/Kg		66	70 - 130	
o-Xylene <0.00	201	U F1	0.101	0.06838	F1	mg/Kg		67	70 - 130	

MS MS

Surrogate	%Recovery Qu	ıalifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 64332

Prep Batch: 64332

Lab Sample ID: 880-34196-A-1-C MSD **Matrix: Solid**

Analysis Batch: 64432

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.0996	0.09951		mg/Kg		100	70 - 130	10	35
Toluene	<0.00201	U	0.0996	0.08277		mg/Kg		83	70 - 130	15	35
Ethylbenzene	<0.00201	U F1	0.0996	0.08667		mg/Kg		87	70 - 130	26	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.1785		mg/Kg		89	70 - 130	28	35
o-Xylene	<0.00201	U F1	0.0996	0.08121		mg/Kg		81	70 - 130	17	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64405/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/11/23 18:28	1

Lab Sample ID: LCS 880-64405/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	 250	251.4		mg/Kg		101	90 - 110	

Lab Sample ID: LCSD 880-64405/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

7								
	Spike	LCSD	LCSD			%Rec		RPD
Analyte	Added	Result	Qualifier	Unit D	%Rec	Limits	RPD	Limit
Chloride	250	251.8		mg/Kg	101	90 - 110	0	20

Client: Carmona Resources Job ID: 880-34199-1 SDG: Lea County, New Mexico Project/Site: Nighthawk 3H

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-34195-A-1-C MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Soluble Analysis Batch: 64500

Sample Sample Spike MS MS %Rec Result Qualifier Result Qualifier Added Analyte Unit %Rec Limits Chloride 116 253 380.1 mg/Kg 105 90 - 110

Lab Sample ID: 880-34195-A-1-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Soluble

Analysis Batch: 64500 Sample Sample Spike MSD MSD %Rec RPD

Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec Chloride 116 253 380.4 mg/Kg 105 90 - 110 0 20

QC Association Summary

Client: Carmona Resources Job ID: 880-34199-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34199-1	H-9 (0-6")	Total/NA	Solid	5035	
MB 880-64332/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34199-1	H-9 (0-6")	Total/NA	Solid	8021B	64332
MB 880-64332/5-A	Method Blank	Total/NA	Solid	8021B	64332
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	8021B	64332
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64332
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	64332
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64332

Analysis Batch: 64585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34199-1	H-9 (0-6")	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 64320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34199-1	H-9 (0-6")	Total/NA	Solid	8015B NM	64329

Prep Batch: 64329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34199-1	H-9 (0-6")	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34199-1	H-9 (0-6")	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64405

Lab Sample ID 880-34199-1	Client Sample ID H-9 (0-6")	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
MB 880-64405/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-34195-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-34195-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 64500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34199-1	H-9 (0-6")	Soluble	Solid	300.0	64405
MB 880-64405/1-A	Method Blank	Soluble	Solid	300.0	64405
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	300.0	64405
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64405
880-34195-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	64405

QC Association Summary

Client: Carmona Resources

Job ID: 880-34199-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

HPLC/IC (Continued)

Analysis Batch: 64500 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34195-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	64405

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Lab Chronicle

Client: Carmona Resources Job ID: 880-34199-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Client Sample ID: H-9 (0-6")

Date Received: 10/09/23 16:20

Lab Sample ID: 880-34199-1 Date Collected: 10/04/23 00:00

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	64332	10/10/23 10:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64432	10/11/23 14:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64585	10/11/23 14:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			64462	10/10/23 20:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	64329	10/10/23 09:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64320	10/10/23 20:38	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	64405	10/10/23 15:31	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64500	10/11/23 19:38	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Carmona Resources

Job ID: 880-34199-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Progra	am	Identification Number	Expiration Date		
Texas	NELAP T104704400-23-26		T104704400-23-26	06-30-24		
The following analytes	are included in this report, bu	it the laboratory is not certif	ied by the governing authority. This lis	t may include analytes		
for which the agency do	oes not offer certification.					
for which the agency do	oes not offer certification . Prep Method	Matrix	Analyte			
ů ,		Matrix Solid	Analyte Total TPH			

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Method Summary

Client: Carmona Resources
Project/Site: Nighthawk 3H

Job ID: 880-34199-1 SDG: Lea County, New Mexico

-

Method	Method Description	Protocol	Laboratory
3021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
3015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
3015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
6035	Closed System Purge and Trap	SW846	EET MID
3015NM Prep	Microextraction	SW846	EET MID
I 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: Nighthawk 3H

Job ID: 880-34199-1

SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34199-1	H-9 (0-6")	Solid	10/04/23 00:00	10/09/23 16:20

erdino.

City State ZIP

310 W Wall St Ste 500 Midland TX 79701 Project Manager Company Name

Clinton Merritt

Bill to (if different)

Company Name

City, State ZIP

Melodie Sanjari

Marathon Oil Corporation

990 Town and Country Blvd

Houston, TX 77024

Program UST/PST PRP | rownfields RC State of Project:

Work Order Comments

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Reporting Level II Level III ST/UST

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		Company			Comments: Email res	7									H-9 (0-6")	Sample Identification	lotal Containers.	The Canada Could	Sample Custody Seals	Cooler Custody Seals	Received Intact:	SAMPLE RECEIPT	PO#	Sampler's Name.	Project Location	Project Number	Project Name	Phone
The state of the s		A Comment of the Comm	Relinquished by (Signature)		Comments: Email results to Mike Carmona mcarmona@carmonaresources.com, Conner Moehring cmoehring@carmonaresour									10, 11, 10, 10	10/4/2023	ation Date		1	- 1	No STA	(Yes) No)	Texap Blank.		CCM	Lea County, New Mexico	2090	Nighthawk 3H	
			y (Signature)		carmona@carmo											Time	Corrected Temperature	i ciliberature Keadilig	Temperature Doods	Correction Factor	Thermometer ID	Yes No)					
					naresources.cor									>	×	Soil Water	ure	100		<i>x</i>	$\frac{1}{1}$	Wet Ice.)		Due Date	Routine 1	Turn Around	Email msar
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			Date/Time													Sample Comments	NaOH+Ascorbic Acid SAPC	laOH Zn	SO ₃	80		2	NaOH Na	HNO. HN	MeOH Ma	DI Water: H₀O	Preservative Codes	еr

Login Sample Receipt Checklist

Client: Carmona Resources Job Number: 880-34199-1 SDG Number: Lea County, New Mexico

Login Number: 34199 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	N/A	

<6mm (1/4").

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/12/2023 9:10:11 PM

JOB DESCRIPTION

Nighthawk 3H SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34198-1

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 10/12/2023 9:10:11 PM

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

Eurofins Midland is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies

Client: Carmona Resources Project/Site: Nighthawk 3H Laboratory Job ID: 880-34198-1 SDG: Lea County, New Mexico

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Definitions/Glossary

Job ID: 880-34198-1 Client: Carmona Resources Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Qualifiers

GC VOA Qualifier

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

U

GC Semi VOA

Qualifier **Qualifier Description**

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

HPLC/IC

Qualifier **Qualifier Description**

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

DFR 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

Decision Level Concentration (Radiochemistry) DLC

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

EPA recommended "Maximum Contaminant Level" MCL MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

Method Detection Limit MDL 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

Toxicity Equivalent Factor (Dioxin) TEF TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Case Narrative

Client: Carmona Resources

Job ID: 880-34198-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Job ID: 880-34198-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-34198-1

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 10/9/2023~4:20~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 $2.6^{\circ}C$

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: H-10 (0-6") (880-34198-1).

GC VOA

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-64332 and analytical batch 880-64432 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-64329 and analytical batch 880-64318 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: H-10 (0-6") (880-34198-1), (880-34170-A-21-B), (880-34170-A-21-C MS) and (880-34170-A-21-D 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 samples were outside control limits: (CCV 880-64318/31), (CCV 880-64318/45) and (LCS 880-64329/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike (MS) recoveries for preparation batch 880-64329 and analytical batch 880-64318 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.

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Client Sample Results

Client: Carmona Resources

Job ID: 880-34198-1
Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Client Sample ID: H-10 (0-6")

Date Collected: 10/04/23 00:00 Date Received: 10/09/23 16:20 Lab Sample ID: 880-34198-1

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/10/23 10:38	10/11/23 13:45	1
Toluene	< 0.00199	U	0.00199		mg/Kg		10/10/23 10:38	10/11/23 13:45	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		10/10/23 10:38	10/11/23 13:45	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/10/23 10:38	10/11/23 13:45	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		10/10/23 10:38	10/11/23 13:45	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/10/23 10:38	10/11/23 13:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				10/10/23 10:38	10/11/23 13:45	1
1,4-Difluorobenzene (Surr)	106		70 - 130				10/10/23 10:38	10/11/23 13:45	1
- Method: TAL SOP Total BTEX - T	otal BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/11/23 13:45	1
- Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (GC)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			10/11/23 01:03	1
- Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.5	U	50.5		mg/Kg		10/10/23 09:30	10/11/23 01:03	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.5	U	50.5		mg/Kg		10/10/23 09:30	10/11/23 01:03	1
C10-C28) OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		10/10/23 09:30	10/11/23 01:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	171	S1+	70 - 130				10/10/23 09:30	10/11/23 01:03	
o-Terphenyl		S1+	70 - 130				10/10/23 09:30	10/11/23 01:03	1
Method: FPA 300.0 - Anions Ion	Chromatogran	hv - Solubl	e						
Method: EPA 300.0 - Anions, Ion Analyte	• .	hy - Solubl Qualifier	e RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Surrogate Summary

Client: Carmona Resources Job ID: 880-34198-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acce	ptance Limits)
		BFB1	DFBZ1		
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		
80-34196-A-1-B MS	Matrix Spike	102	102		
880-34196-A-1-C MSD	Matrix Spike Duplicate	112	102		
80-34198-1	H-10 (0-6")	102	106		
.CS 880-64332/1-A	Lab Control Sample	111	104		
CSD 880-64332/2-A	Lab Control Sample Dup	99	101		
MB 880-64332/5-A	Method Blank	108	122		
Surrogate Legend					
BFB = 4-Bromofluorobe	nzene (Surr)				
DFBZ = 1,4-Difluoroben	zene (Surr)				

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits
		1CO1	OTPH1	
b Sample ID	Client Sample ID	(70-130)	(70-130)	
)-34170-A-21-C MS	Matrix Spike	179 S1+	139 S1+	
0-34170-A-21-D MSD	Matrix Spike Duplicate	161 S1+	125	
80-34198-1	H-10 (0-6")	171 S1+	146 S1+	
S 880-64329/2-A	Lab Control Sample	132 S1+	141 S1+	
SD 880-64329/3-A	Lab Control Sample Dup	113	111	
B 880-64329/1-A	Method Blank	181 S1+	162 S1+	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Midland

Page 7 of 19 Released to Imaging: 3/18/2024 9:14:49 AM

Client: Carmona Resources Job ID: 880-34198-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64332/5-A

Lab Sample ID: LCS 880-64332/1-A

Matrix: Solid Analysis Batch: 64432

Xylenes, Total

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64332

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1

MB MB

<0.00400 U

Surrogate	%Recovery	Qualifier	Limits	Pi	repared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	10/1	0/23 10:38	10/11/23 12:35	1
1,4-Difluorobenzene (Surr)	122		70 - 130	10/10	0/23 10:38	10/11/23 12:35	1

0.00400

mg/Kg

Client Sample ID: Lab Control Sample

10/11/23 12:35

10/10/23 10:38

Prep Type: Total/NA

Prep Batch: 64332

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1166 mg/Kg 117 70 - 130 Toluene 0.100 0.09644 mg/Kg 96 70 - 130 0.100 Ethylbenzene 0.09544 mg/Kg 95 70 - 130 0.200 94 70 - 130 m-Xylene & p-Xylene 0.1878 mg/Kg 0.100 0.09012 70 - 130 o-Xylene mg/Kg

LCS LCS

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

Lab Sample ID: LCSD 880-64332/2-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 64432

Prep Typ	e: Total/NA
Prep Ba	tch: 64332
%Rec	RPD

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1117		mg/Kg		112	70 - 130	4	35
Toluene	0.100	0.09300		mg/Kg		93	70 - 130	4	35
Ethylbenzene	0.100	0.09384		mg/Kg		94	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1837		mg/Kg		92	70 - 130	2	35
o-Xylene	0.100	0.08378		mg/Kg		84	70 - 130	7	35

LCSD LCSD

Surrogate	%Recovery Q	ualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-34196-A-1-B MS

Matrix: Solid

Analysis Batch: 64432

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

Prep Batch: 64332

-	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.101	0.09018		mg/Kg	_	89	70 - 130	
Toluene	<0.00201	U	0.101	0.07128		mg/Kg		71	70 - 130	

Job ID: 880-34198-1 Client: Carmona Resources Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

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

Lab Sample ID: 880-34196-A-1-C MSD

Matrix: Solid

Matrix: Solid

Analysis Batch: 64432

Lab Sample ID: 880-34196-A-1-B MS Client Sample ID: Matrix Spike

MS MS

Prep Type: Total/NA

Prep Batch: 64332 %Rec

Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Ethylbenzene <0.00201 U F1 0.101 0.06697 F1 66 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00402 U F1 0.202 0.1343 F1 mg/Kg 66 70 - 130 o-Xylene <0.00201 UF1 0.101 0.06838 F1 67 70 - 130 mg/Kg

MS MS

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

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 64332

Analysis Batch: 64432 Sample Sample Spike MSD MSD RPD Result Qualifier Result Qualifier %Rec RPD Limit Analyte babbA Unit Limits 35

Benzene <0.00201 U 0.0996 0.09951 mg/Kg 100 70 - 130 10 Toluene <0.00201 U 0.0996 0.08277 mg/Kg 83 70 - 130 15 35 Ethylbenzene <0.00201 UF1 0.0996 0.08667 87 70 - 130 26 35 mg/Kg 0.199 m-Xylene & p-Xylene <0.00402 U F1 0.1785 mq/Kq 89 70 - 130 28 35 0.0996 <0.00201 UF1 81 70 - 130 o-Xylene 0.08121 mg/Kg 17

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

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

Lab Sample ID: MB 880-64329/1-A

Matrix: Solid

Analysis Batch: 64318

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64329

мв мв Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Analyte 50.0 10/10/23 09:30 10/10/23 20:38 <50.0 U Gasoline Range Organics mg/Kg (GRO)-C6-C10 10/10/23 09:30 10/10/23 20:38 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg C10-C28) OII Range Organics (Over C28-C36) <50.0 U 50.0 10/10/23 09:30 10/10/23 20:38 mg/Kg

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	181	S1+	70 - 130	10/10/23 09:30	10/10/23 20:38	1
o-Terphenyl	162	S1+	70 - 130	10/10/23 09:30	10/10/23 20:38	1

Lab Sample ID: LCS 880-64329/2-A

Released to Imaging: 3/18/2024 9:14:49 AM

Matrix: Solid

Analysis Batch: 64318

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 64329

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	932.8		mg/Kg		93	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	950.5		mg/Kg		95	70 - 130	
C10-C28)								

Limits

70 - 130

70 - 130

Job ID: 880-34198-1

SDG: Lea County, New Mexico

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

Lab Sample ID: LCS 880-64329/2-A

Matrix: Solid

Analysis Batch: 64318

Client: Carmona Resources

Project/Site: Nighthawk 3H

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64329

	LCS	LCS
Surrogate	%Recovery	Qualifier
1-Chlorooctane	132	S1+

Lab Sample ID: LCSD 880-64329/3-A

Matrix: Solid

o-Terphenyl

Analysis Batch: 64318

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64329

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	980.8		mg/Kg		98	70 - 130	5	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	1021		mg/Kg		102	70 - 130	7	20
C10-C28)									

LCSD LCSD

141 S1+

Surrogate	%Recovery	Qualifier	Limits			
1-Chlorooctane	113		70 - 130			
o-Terphenyl	111		70 - 130			

Lab Sample ID: 880-34170-A-21-C MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 64318

Prep Type: Total/NA

Prep Batch: 64329

Sai	nple Sa	ımple	Spike	MS	MS				%Rec
Analyte R	sult Qu	ualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics < (GRO)-C6-C10	49.8 U		994	1054		mg/Kg		106	70 - 130
Diesel Range Organics (Over < C10-C28)	49.8 U F	F1	994	1372	F1	mg/Kg		136	70 - 130

MS MS

Camania Camania

Surrogate	%Recovery	Qualifier	Limits		
1-Chlorooctane	179	S1+	70 - 130		
o-Terphenyl	139	S1+	70 - 130		

Lab Sample ID: 880-34170-A-21-D MSD **Client Sample ID: Matrix Spike Duplicate**

Matrix: Solid

Analysis Batch: 64318

Prep Type: Total/NA

Prep Batch: 64329

	Sample	Sample	Бріке	MSD	M2D				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	<49.8	U	994	951.5		mg/Kg		96	70 - 130	10	20	
(GRO)-C6-C10												
Diesel Range Organics (Over	<49.8	U F1	994	1244		mg/Kg		123	70 - 130	10	20	
C10-C28)												

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	161	S1+	70 - 130
o-Terphenyl	125		70 - 130

QC Sample Results

Client: Carmona Resources Job ID: 880-34198-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Client Sample ID: Method Blank

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64405/1-A

Matrix: Solid

Analysis Batch: 64500

Prep Type: Soluble

Dil Fac MDL Unit Analyte Result Qualifier RL D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 10/11/23 18:28

Lab Sample ID: LCS 880-64405/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 251.4 mg/Kg 101 90 - 110

мв мв

Lab Sample ID: LCSD 880-64405/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 251.8 mg/Kg 101 90 - 110

Lab Sample ID: 880-34195-A-1-C MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 64500

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added %Rec Result Qualifier Unit Limits Chloride 116 253 380.1 105 90 - 110 mg/Kg

Lab Sample ID: 880-34195-A-1-D MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 64500

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 253 116 380.4 mg/Kg 105 90 - 110 0 20

QC Association Summary

Client: Carmona Resources

Job ID: 880-34198-1
Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34198-1	H-10 (0-6")	Total/NA	Solid	5035	
MB 880-64332/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34198-1	H-10 (0-6")	Total/NA	Solid	8021B	64332
MB 880-64332/5-A	Method Blank	Total/NA	Solid	8021B	64332
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	8021B	64332
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64332
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	64332
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64332

Analysis Batch: 64584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34198-1	H-10 (0-6")	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 64318

_					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34198-1	H-10 (0-6")	Total/NA	Solid	8015B NM	64329
MB 880-64329/1-A	Method Blank	Total/NA	Solid	8015B NM	64329
LCS 880-64329/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	64329
LCSD 880-64329/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	64329
880-34170-A-21-C MS	Matrix Spike	Total/NA	Solid	8015B NM	64329
880-34170-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	64329

Prep Batch: 64329

Lab Sample ID 880-34198-1	Client Sample ID H-10 (0-6")	Prep Type Total/NA	Matrix Solid	Method 8015NM Prep	Prep Batch
MB 880-64329/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-64329/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-64329/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-34170-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-34170-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34198-1	H-10 (0-6")	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64405

Released to Imaging: 3/18/2024 9:14:49 AM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34198-1	H-10 (0-6")	Soluble	Solid	DI Leach	
MB 880-64405/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Carmona Resources

Job ID: 880-34198-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

HPLC/IC (Continued)

Leach Batch: 64405 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34195-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-34195-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 64500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34198-1	H-10 (0-6")	Soluble	Solid	300.0	64405
MB 880-64405/1-A	Method Blank	Soluble	Solid	300.0	64405
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	300.0	64405
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64405
880-34195-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	64405
880-34195-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	64405

Eurofins Midland

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Lab Chronicle

Client: Carmona Resources Job ID: 880-34198-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Client Sample ID: H-10 (0-6")

Date Collected: 10/04/23 00:00 Date Received: 10/09/23 16:20 Lab Sample ID: 880-34198-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	64332	10/10/23 10:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64432	10/11/23 13:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64584	10/11/23 13:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			64461	10/11/23 01:03	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	64329	10/10/23 09:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64318	10/11/23 01:03	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	64405	10/10/23 15:31	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64500	10/11/23 19:21	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Carmona Resources

Job ID: 880-34198-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Progra	ım	Identification Number	Expiration Date	
Texas	NELAI	NELAP T104704400-23-26		06-30-24	
The following analytes	are included in this report, bu	t the laboratory is not certif	ied by the governing authority. This lis	t mav include analyte	
for which the agency d	oes not offer certification.	,	, g	,,	
for which the agency d Analysis Method		Matrix	Analyte	,	
,	oes not offer certification.	•	, , ,		

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Method Summary

Client: Carmona Resources Project/Site: Nighthawk 3H

Job ID: 880-34198-1

SDG: Lea 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: Nighthawk 3H

Job ID: 880-34198-1

SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34198-1	H-10 (0-6")	Solid	10/04/23 00:00	10/09/23 16:20

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Project Manager (Clinton Merritt				Bill to (if different)		Melod	Melodie Sanjari	ii.							۰	Vork	Orde	Con	Work Order Comments	S		
Company Name	Carmona Resources	rces			Company Name.		Marati	non Oil	Marathon Oil Corporation	3			<u>니</u>	Program UST/PST PRP Trownfields PRC	17811	PST	סמס		mfiel	; _	֓֞֞֞֞֓֓֓֓֓֓֓֓֓֓֓֓֟֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓	7	<u> </u>
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Project Number		2090		Routine	Rush	Code			-					_			_		Nor	None NO		DΙ	DI Water H ₂ O
Project Location	Lea Co	Lea County, New Mexico	exico	Due Date	5 day	I)		-				_			_	-	 ;	Cool Cool		MeO	MeOH Me
Sampler's Name		CCM						IRO											H C	HCL HC		NO.	HNO3. HN
PO#))	rs		+ M											Į,	H 70S'H		NaO	NaOH Na
SAMPLE RECEIPT	<u></u>	ema Blank	Yes (No)	Wet Ice		etei	В	DRO	0.0										Ε .	5 } E 3	•	Ġ	9
Received Intact:	(Ves		Thermometer ID		SOLT.	ram	8021) + C	e 30							 -			2 3	N CSHEN	200		
Cooler Custody Seals	Yes 1	No (N)	Correction Factor	- Company	4.20	Pa	EX	GR	orid										2 2	Na-S-O- Naso			
Sample Custody Seals	Yes	No (N/A)	Temperature Reading	ding	p.2	1	вт	5M (Chl										7 2	Zn Acetate+NaOl		, 3 , 3	
Total Containers			Corrected Temperature	rature	$\mathcal{U} \cdot \mathcal{C}$	L		801											Za Z	NaOH+Ascorbic Acid SABO	orbic C	Acid i	PAPO PAPO
Sample Identification	ification	Date	Time	Soil	Water Grab/	# of		ТРН								·	·		T	Sam	Sample Comments	omm	ents
H-10 (0-6")	6")	10/4/2023		×	G	-+	×	×	×	\dashv	\dagger		4	-	+	+	+	\dashv	+				
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Comments, Email	results to Mike	Carmona mo	armona@carr	nonaracourca	com Conno	Maakii											╟	╟	╟				
רטוווויפיוני. בוויפון ופיטוניא לא אוואפ לאווחטחמ mcarmona@carmonaresources.com, Conner Moehring cmoehring@carmonaresources.com, Clint Merritt MerrittC@carmonaresources.com	esuits to mike	carmona mo	;armona@carr	nonaresource	s.com, Conne	' Moehri	ng cma	oehrin,	g@carm	ionares	source	s.com,	Clint	Nerritt	Merrit	tc@c	armo	nares	ourc	es.cor	3		
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Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-34198-1

SDG Number: Log County, New Maying

SDG Number: Lea County, New Mexico

Login Number: 34198
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	N/A	

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<6mm (1/4").

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/12/2023 9:08:59 PM

JOB DESCRIPTION

Nighthawk 3H SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34197-1

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 10/12/2023 9:08:59 PM

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

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Client: Carmona Resources Project/Site: Nighthawk 3H Laboratory Job ID: 880-34197-1 SDG: Lea County, New Mexico

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Definitions/Glossary

Job ID: 880-34197-1 Client: Carmona Resources Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Qualifiers

GC VOA

Qualifier **Qualifier Description** MS and/or MSD recovery exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

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

HPLC/IC

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

MCL

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

DFR 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

Decision Level Concentration (Radiochemistry) DLC

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

Method Detection Limit MDL 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

Toxicity Equivalent Factor (Dioxin) TEF TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Case Narrative

Client: Carmona Resources

Job ID: 880-34197-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Job ID: 880-34197-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-34197-1

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 10/9/2023~4:20~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 $2.6^{\circ}C$

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: H-11 (0-6") (880-34197-1).

GC VOA

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-64332 and analytical batch 880-64432 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-64329 and analytical batch 880-64318 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: H-11 (0-6") (880-34197-1), (880-34170-A-21-B), (880-34170-A-21-C MS) and (880-34170-A-21-D 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 samples were outside control limits: (CCV 880-64318/31), (CCV 880-64318/45) and (LCS 880-64329/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike (MS) recoveries for preparation batch 880-64329 and analytical batch 880-64318 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.

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Client Sample Results

Client: Carmona Resources

Job ID: 880-34197-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Client Sample ID: H-11 (0-6")

Date Collected: 10/04/23 00:00 Date Received: 10/09/23 16:20 Lab Sample ID: 880-34197-1

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		10/10/23 10:38	10/11/23 13:24	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/10/23 10:38	10/11/23 13:24	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/10/23 10:38	10/11/23 13:24	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		10/10/23 10:38	10/11/23 13:24	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/10/23 10:38	10/11/23 13:24	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		10/10/23 10:38	10/11/23 13:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				10/10/23 10:38	10/11/23 13:24	1
1,4-Difluorobenzene (Surr)	100		70 - 130				10/10/23 10:38	10/11/23 13:24	1
Method: TAL SOP Total BTEX	- Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			10/11/23 13:24	1

Method: SW846 8015 NM - Diesel R	ange Organics (DRO) (GC)							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<50.3 U	50.3		mg/Kg			10/11/23 00:41	
Method: SW846 8015B NM - Diesel	Range Organics (DRO) (GC)							

Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.3	U	50.3		mg/Kg		10/10/23 09:30	10/11/23 00:41	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.3	U	50.3		mg/Kg		10/10/23 09:30	10/11/23 00:41	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		10/10/23 09:30	10/11/23 00:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	145	S1+	70 - 130				10/10/23 09:30	10/11/23 00:41	1
o-Terphenyl	123		70 - 130				10/10/23 09:30	10/11/23 00:41	1

Method: EPA 300.0 - Anions, Ion Ch	romatography - Soluble						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	218	5.00	mg/Kg			10/11/23 19:15	1

Surrogate Summary

Client: Carmona Resources

Job ID: 880-34197-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1		
_ab Sample ID	Client Sample ID	(70-130)	(70-130)		
380-34196-A-1-B MS	Matrix Spike	102	102		
380-34196-A-1-C MSD	Matrix Spike Duplicate	112	102		
380-34197-1	H-11 (0-6")	97	100		
_CS 880-64332/1-A	Lab Control Sample	111	104		
_CSD 880-64332/2-A	Lab Control Sample Dup	99	101		
MB 880-64332/5-A	Method Blank	108	122		
Surrogate Legend					
Surrogate Legend BFB = 4-Bromofluorober	nzene (Surr)				

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34170-A-21-C MS	Matrix Spike	179 S1+	139 S1+	
880-34170-A-21-D MSD	Matrix Spike Duplicate	161 S1+	125	
880-34197-1	H-11 (0-6")	145 S1+	123	
LCS 880-64329/2-A	Lab Control Sample	132 S1+	141 S1+	
LCSD 880-64329/3-A	Lab Control Sample Dup	113	111	
MB 880-64329/1-A	Method Blank	181 S1+	162 S1+	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Carmona Resources Job ID: 880-34197-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64332/5-A

Lab Sample ID: LCS 880-64332/1-A

Matrix: Solid

Matrix: Solid Analysis Batch: 64432 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64332

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1

MB MB

Surrogate	%Recover	y Qualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzen	ne (Surr) 10	8 70 - 130	10/10/23 10:38	10/11/23 12:35	1
1,4-Difluorobenzene ((Surr) 12		10/10/23 10:38	10/11/23 12:35	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64332

Analysis Batch: 64432 LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1166 mg/Kg 117 70 - 130 Toluene 0.100 0.09644 mg/Kg 96 70 - 130 0.100 0.09544 Ethylbenzene mg/Kg 95 70 - 130 0.200 0.1878 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 0.09012 70 - 130 o-Xylene mg/Kg

LCS LCS

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

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 64432

Lab Sample ID: LCSD 880-64332/2-A

Prep Type: Total/NA Prep Batch: 64332

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1117		mg/Kg		112	70 - 130	4	35
Toluene	0.100	0.09300		mg/Kg		93	70 - 130	4	35
Ethylbenzene	0.100	0.09384		mg/Kg		94	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1837		mg/Kg		92	70 - 130	2	35
o-Xylene	0.100	0.08378		mg/Kg		84	70 - 130	7	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1.4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-34196-A-1-B MS

Matrix: Solid

Analysis Batch: 64432

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

Prep Batch: 64332

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.101	0.09018		mg/Kg	_	89	70 - 130	
Toluene	<0.00201	U	0.101	0.07128		mg/Kg		71	70 - 130	

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QC Sample Results

Client: Carmona Resources Job ID: 880-34197-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

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

Lab Sample ID: 880

Lab Sample ID: 880-34196-A-1-C MSD

Matrix: Solid

Analysis Batch: 64432

80-34196-A-1-B MS	Client Sample ID: Matrix Spike
	Date Total 1014

Prep Type: Total/NA

Prep Batch: 64332

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits <0.00201 UF1 Ethylbenzene 0.101 0.06697 F1 66 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00402 UF1 0.202 0.1343 F1 mg/Kg 66 70 - 130 0.101 o-Xylene <0.00201 UF1 0.06838 F1 67 70 - 130 mg/Kg

MS MS

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

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 64332

Analysis Batch: 64432

Matrix: Solid

Sample Sample Spike MSD MSD RPD Result Qualifier Result Qualifier %Rec RPD Limit Analyte babbA Unit Limits Benzene <0.00201 U 0.0996 0.09951 mg/Kg 100 70 - 130 10 35 Toluene <0.00201 U 0.0996 0.08277 mg/Kg 83 70 - 130 15 35 Ethylbenzene <0.00201 UF1 0.0996 0.08667 87 70 - 130 26 35 mg/Kg 0.199 70 - 130 m-Xylene & p-Xylene <0.00402 U F1 0.1785 mg/Kg 89 28 35 0.0996 <0.00201 UF1 0.08121 81 70 - 130 o-Xylene mg/Kg 17

MSD MSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	112	70 - 130
1,4-Difluorobenzene (Surr)	102	70 ₋ 130

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

Lab Sample ID: MB 880-64329/1-A

Matrix: Solid

Analysis Batch: 64318

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

Prep Batch: 64329

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/10/23 09:30	10/10/23 20:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/10/23 09:30	10/10/23 20:38	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/10/23 09:30	10/10/23 20:38	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	181	S1+	70 - 130	10/10/23 09:30	10/10/23 20:38	1
o-Terphenyl	162	S1+	70 - 130	10/10/23 09:30	10/10/23 20:38	1

Lab Sample ID: LCS 880-64329/2-A

Matrix: Solid

Analysis Batch: 64318

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

Prep Batch: 64329

	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics	1000	932.8		mg/Kg		93	70 - 130
(GRO)-C6-C10							
Diesel Range Organics (Over	1000	950.5		ma/Ka		95	70 130

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C10-C28)

Limits

70 - 130

70 - 130

Job ID: 880-34197-1 SDG: Lea County, New Mexico

Client: Carmona Resources Project/Site: Nighthawk 3H

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

LCS LCS

132 S1+

141 S1+

%Recovery Qualifier

Lab Sample ID: LCS 880-64329/2-A **Matrix: Solid**

Surrogate

o-Terphenyl

1-Chlorooctane

Analysis Batch: 64318

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64329

Lab Sample ID: LCSD 880-64329/3-A

Matrix: Solid

Analysis Batch: 64318

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64329

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 1000 980.8 98 70 - 1305 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1021 102 mg/Kg 70 - 13020 C10-C28)

LCSD LCSD

Surrogate %Recovery Qualifier Limits 70 - 130 1-Chlorooctane 113 111 70 - 130 o-Terphenyl

Lab Sample ID: 880-34170-A-21-C MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 64318

Prep Type: Total/NA

Prep Batch: 64329

Sample Sample MS MS Spike Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits D Gasoline Range Organics <49.8 U 994 1054 mg/Kg 106 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <49.8 UF1 994 1372 F1 mg/Kg 136 70 - 130

C10-C28)

MS MS %Recovery Qualifier Surrogate Limits S1+ 70 - 130 1-Chlorooctane 179 139 S1+ o-Terphenyl 70 - 130

Lab Sample ID: 880-34170-A-21-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 64318

Prep Type: Total/NA

Prep Batch: 64329 RPD

Sample Sample MSD MSD Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit <49.8 U 951.5 Gasoline Range Organics 994 mg/Kg 96 70 - 130 10 20 (GRO)-C6-C10 Diesel Range Organics (Over <49.8 U F1 994 1244 mg/Kg 123 70 - 130 10 20

C10-C28)

MSD MSD

%Recovery Qualifier Surrogate Limits 1-Chlorooctane 161 S1+ 70 - 130 125 70 - 130 o-Terphenyl

QC Sample Results

Client: Carmona Resources Job ID: 880-34197-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64405/1-A

Matrix: Solid

Analysis Batch: 64500

Client Sample ID: Method Blank **Prep Type: Soluble**

Dil Fac MDL Unit Analyte Result Qualifier RL D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 10/11/23 18:28

мв мв

Lab Sample ID: LCS 880-64405/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 251.4 mg/Kg 101 90 - 110

Lab Sample ID: LCSD 880-64405/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 251.8 mg/Kg 101 90 - 110

Lab Sample ID: 880-34195-A-1-C MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 64500

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added %Rec Result Qualifier Unit Limits Chloride 116 253 380.1 105 90 - 110 mg/Kg

Lab Sample ID: 880-34195-A-1-D MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 64500

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 253 116 380.4 mg/Kg 105 90 - 110 0 20

QC Association Summary

Client: Carmona Resources

Job ID: 880-34197-1
Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34197-1	H-11 (0-6")	Total/NA	Solid	5035	
MB 880-64332/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34197-1	H-11 (0-6")	Total/NA	Solid	8021B	64332
MB 880-64332/5-A	Method Blank	Total/NA	Solid	8021B	64332
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	8021B	64332
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64332
880-34196-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	64332
880-34196-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64332

Analysis Batch: 64583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34197-1	H-11 (0-6")	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 64318

	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34197-1	H-11 (0-6")	Total/NA	Solid	8015B NM	64329
MB 880-64329/1-A	Method Blank	Total/NA	Solid	8015B NM	64329
LCS 880-64329/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	64329
LCSD 880-64329/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	64329
880-34170-A-21-C M	S Matrix Spike	Total/NA	Solid	8015B NM	64329
880-34170-A-21-D M	SD Matrix Spike Duplicate	Total/NA	Solid	8015B NM	64329

Prep Batch: 64329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34197-1	H-11 (0-6")	Total/NA	Solid	8015NM Prep	
MB 880-64329/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-64329/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-64329/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-34170-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-34170-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34197-1	H-11 (0-6")	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34197-1	H-11 (0-6")	Soluble	Solid	DI Leach	
MB 880-64405/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Carmona Resources

Job ID: 880-34197-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

HPLC/IC (Continued)

Leach Batch: 64405 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34195-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-34195-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 64500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34197-1	H-11 (0-6")	Soluble	Solid	300.0	64405
MB 880-64405/1-A	Method Blank	Soluble	Solid	300.0	64405
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	300.0	64405
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64405
880-34195-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	64405
880-34195-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	64405

Eurofins Midland

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Lab Chronicle

Client: Carmona Resources

Job ID: 880-34197-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Client Sample ID: H-11 (0-6")

Date Collected: 10/04/23 00:00 Date Received: 10/09/23 16:20 Lab Sample ID: 880-34197-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	64332	10/10/23 10:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64432	10/11/23 13:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64583	10/11/23 13:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			64460	10/11/23 00:41	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	64329	10/10/23 09:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64318	10/11/23 00:41	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	64405	10/10/23 15:31	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64500	10/11/23 19:15	CH	EET MID

Laboratory References:

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

Eurofins Midland

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Accreditation/Certification Summary

Client: Carmona Resources

Job ID: 880-34197-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Progra	am	Identification Number	Expiration Date
Texas	NELA	Р	T104704400-23-26	06-30-24
	are included in this report, bu	ut the laboratory is not certif	fied by the governing authority. This lis	t may include analytes
Analysis Method	Prep Method	Matrix	Analyte	
8015 NM		Solid	Total TPH	
Total BTEX		Solid	Total BTEX	

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Job ID: 880-34197-1

Method Summary

Client: Carmona Resources Project/Site: Nighthawk 3H SDG: Lea 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: Nighthawk 3H

Job ID: 880-34197-1

SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34197-1	H-11 (0-6")	Solid	10/04/23 00:00	10/09/23 16:20

Commence	The state of the s	(Comments. Email results to Mike Carmona mcarmona@carmonaresources.com, Conner Moehring cmoehring@carmonaresources.com, Clint MerrittC@carmonaresources.com						H-11 (0-6")	Sample Identification	Total Collainers.	Total Containor	Sample Custody Seals.	Cooler Custody Seals	Received Intact:	SAMPLE RECEIPT	PO#:	Sampler's Name:	Project Location	Project Number	Project Name		Phone	City, State ZIP	Address.	Company Name	Project Manager	
			R.	il results to Mike						0-6")	ntification			Yes	Yes					Lea Co					Midland TX 79701	310 W Wall St Ste 500	Carmona Resources	Clinton Merritt	
المعالمة الم			Relinquished by	Carmona mo						10/4/2023	Date			3 (NA)		emp Blank.		CCM	Lea County New Mexico	2090	Nighthawk 3H			01	te 500	ırces		
	AND THE PROPERTY OF THE PROPER		(Signature)	:armona@car							Time	Corrected Temperature		Temperature Reading	Correction Factor	ᆂᆚ	Yes No			exico									
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				es.com, Conn						G	Water Comp	100	1	7.4	ササギ		(es) No	•		5 day	Rush	Turn Around			City State ZIP	Address.	Company Name	Bill to (if different)	
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270	かんめ		Date/Time	y cmoehrin						×	TP	PH 80	151		_) + C		+ MI	RO)					ž	Houston TX 77024	990 Town and Country Blvd	Marathon Oil Corporation	Melodie Sanjari	
				ıg@carmo		-				×				Chlo	ride	300	0.0	,							77024	d Country B	Corporation	ari.	
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		\ \ \ \	Received by (Signature)	lint Merritt Mer																		QUEST		Deliverables EDD	Reporting Level II Level III ST/UST	State of Project:	Program: UST/PST PRP		
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				nonaresou		1		1		$\frac{1}{4}$										1	_	<u> </u>		ADaPT 🗆	III □st/∪		P	Work Order Comments	-34197 Ch
		-		rces.com							Sampi	laOH+Ascor	Zn Acetate+NaOH Zn	Na ₂ S ₂ O ₃ NaSO ₃	Nahso ₄ Nabis	H ₃ FO ₄ HT	11 ₂ 30 ₄ 11 ₂	ה מקר ה של ה			None NO	Preser			ST RRP		elds RC	omments	880-34197 Chain of Custody
			Date/Time								Sample Comments	NaOH+Ascorbic Acid SAPC	VaOH Zn	SC ₃	8 8	5	NaOH Na	HNO ₃ . HN	MeCH Me	Of whater 1120	DI Water H O	Preservative Codes		7	□ □Level IV □	_	C Inerfund		
			J [<u></u>		 	10 4	 	 			Pag	e 1	8	of	19	 9					L _					<u>-</u> -la-		J	1

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-34197-1

SDG Number: Lea County, New Mexico

Login Number: 34197
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	

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Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/12/2023 9:08:59 PM

JOB DESCRIPTION

Nighthawk 3H SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-34196-1

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 10/12/2023 9:08:59 PM

Authorized for release by Jessica Kramer, Project Manager <u>Jessica.Kramer@et.eurofinsus.com</u> (432)704-5440 3

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Client: Carmona Resources Project/Site: Nighthawk 3H Laboratory Job ID: 880-34196-1 SDG: Lea County, New Mexico

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Definitions/Glossary

Job ID: 880-34196-1 Client: Carmona Resources Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Qualifiers

Qualifier

GC VOA

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

Qualifier Description

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**

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

Percent Recovery %R 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" Minimum Detectable Activity (Radiochemistry) MDA MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit Minimum Level (Dioxin) ML MPN Most Probable Number Method Quantitation Limit MQL

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)

Reporting Limit or Requested Limit (Radiochemistry) RL

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

Job ID: 880-34196-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Job ID: 880-34196-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-34196-1

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 10/9/2023~4:20~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 $2.6^{\circ}C$

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: H-12 (0-6") (880-34196-1).

GC VOA

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-64332 and analytical batch 880-64432 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-64312 and analytical batch 880-64318 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: H-12 (0-6") (880-34196-1), (890-5415-A-4-D MS) and (890-5415-A-4-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 samples were outside control limits: (CCV 880-64318/20), (CCV 880-64318/31), (CCV 880-64318/5) and (LCS 880-64312/2-A). Evidence of matrix interferences is not obvious.

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

HPLC/IC

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

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Eurofins Midland 10/12/2023 Date Received: 10/09/23 16:20

Client Sample Results

Client: Carmona Resources Job ID: 880-34196-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Client Sample ID: H-12 (0-6") Lab Sample ID: 880-34196-1

Date Collected: 10/04/23 00:00

Matrix: Solid

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		10/10/23 10:38	10/11/23 13:04	1
Toluene	<0.00201	U	0.00201		mg/Kg		10/10/23 10:38	10/11/23 13:04	1
Ethylbenzene	<0.00201	U F1	0.00201		mg/Kg		10/10/23 10:38	10/11/23 13:04	1
m-Xylene & p-Xylene	<0.00402	U F1	0.00402		mg/Kg		10/10/23 10:38	10/11/23 13:04	1
o-Xylene	<0.00201	U F1	0.00201		mg/Kg		10/10/23 10:38	10/11/23 13:04	1
Xylenes, Total	<0.00402	U F1	0.00402		mg/Kg		10/10/23 10:38	10/11/23 13:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130				10/10/23 10:38	10/11/23 13:04	1
1,4-Difluorobenzene (Surr)	96		70 ₋ 130				10/10/23 10:38	10/11/23 13:04	1

	4-Bromofluorobenzene (Surr)	92	70 - 130	10/10/23 10:38	10/11/23 13:04	1			
I	1,4-Difluorobenzene (Surr)	96	70 - 130	10/10/23 10:38	10/11/23 13:04	1			
ĺ	Mothod: TAL COR Total RTEV Total RTE	'V Calaulati							
ı	Method: TAL SOP Total BTEX - Total BTEX Calculation								

Method: IAL SOP Total BTEX - Tot	al BIEX Calculation						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402 U	0.00402	mg/Kg			10/11/23 13:04	1

Method: SW846 8015 NM - Diesel Ra	ange Organ	ics (DRO) (G	C)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			10/10/23 17:20	1
_									

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.3	U	50.3		mg/Kg		10/10/23 08:39	10/10/23 17:20	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.3	U	50.3		mg/Kg		10/10/23 08:39	10/10/23 17:20	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		10/10/23 08:39	10/10/23 17:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	154	S1+	70 - 130				10/10/23 08:39	10/10/23 17:20	1
o-Terphenyl	132	S1+	70 ₋ 130				10/10/23 08:39	10/10/23 17:20	1

Method: EPA 300.0 - Anions, Ion C							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	256	5.00	mg/Kg			10/11/23 19:09	1

Surrogate Summary

Client: Carmona Resources

Job ID: 880-34196-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate I
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34196-1	H-12 (0-6")	92	96	
880-34196-1 MS	H-12 (0-6")	102	102	
880-34196-1 MSD	H-12 (0-6")	112	102	
LCS 880-64332/1-A	Lab Control Sample	111	104	
LCSD 880-64332/2-A	Lab Control Sample Dup	99	101	
MB 880-64332/5-A	Method Blank	108	122	
Surrogate Legend				
BFB = 4-Bromofluoroben	zene (Surr)			
DFBZ = 1,4-Difluorobenz	ene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1001	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-34196-1	H-12 (0-6")	154 S1+	132 S1+	· —— —— —— —— ——
890-5415-A-4-D MS	Matrix Spike	161 S1+	128	
890-5415-A-4-E MSD	Matrix Spike Duplicate	167 S1+	130	
LCS 880-64312/2-A	Lab Control Sample	126	135 S1+	
LCSD 880-64312/3-A	Lab Control Sample Dup	97	97	
MB 880-64312/1-A	Method Blank	189 S1+	176 S1+	
Surrogate Legend				

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Carmona Resources Job ID: 880-34196-1 SDG: Lea County, New Mexico Project/Site: Nighthawk 3H

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64332/5-A

Matrix: Solid Analysis Batch: 64432 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64332

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	10/10/23 10:38	10/11/23 12:35	1
1,4-Difluorobenzene (Surr)	122		70 - 130	10/10/23 10:38	10/11/23 12:35	1

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 880-64332/1-A

Matrix: Solid

Analysis Batch: 64432

Prep Type: Total/NA

Prep Batch: 64332

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1166	-	mg/Kg		117	70 - 130	
Toluene	0.100	0.09644		mg/Kg		96	70 - 130	
Ethylbenzene	0.100	0.09544		mg/Kg		95	70 - 130	
m-Xylene & p-Xylene	0.200	0.1878		mg/Kg		94	70 - 130	
o-Xylene	0.100	0.09012		mg/Kg		90	70 - 130	

LCS LCS

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

Lab Sample ID: LCSD 880-64332/2-A

Matrix: Solid

Analysis Batch: 64432

Client	Sample	ID: Lab	Control	Sample	Dup

Prep Type: Total/NA

Prep Batch: 64332

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1117		mg/Kg		112	70 - 130	4	35
Toluene	0.100	0.09300		mg/Kg		93	70 - 130	4	35
Ethylbenzene	0.100	0.09384		mg/Kg		94	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1837		mg/Kg		92	70 - 130	2	35
o-Xylene	0.100	0.08378		mg/Kg		84	70 - 130	7	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits		
4-Bromofluorobenzene (Surr)	99		70 - 130		
1.4-Difluorobenzene (Surr)	101		70 - 130		

Lab Sample ID: 880-34196-1 MS

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: H-12 (0-6")

Prep Type: Total/NA

Prep Batch: 64332

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.101	0.09018		mg/Kg		89	70 - 130	
Toluene	< 0.00201	U	0.101	0.07128		mg/Kg		71	70 - 130	

Eurofins Midland

Page 8 of 19

QC Sample Results

Client: Carmona Resources Job ID: 880-34196-1 SDG: Lea County, New Mexico Project/Site: Nighthawk 3H

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

Lab Sample ID: 880-34196-1 MS **Matrix: Solid**

Analysis Batch: 64432

Client	Sample	ID:	H-12	(0-6")
	_	_		1/51.4

Prep Type: Total/NA

Prep Batch: 64332

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00201	U F1	0.101	0.06697	F1	mg/Kg		66	70 - 130	
m-Xylene & p-Xylene	<0.00402	U F1	0.202	0.1343	F1	mg/Kg		66	70 - 130	
o-Xylene	<0.00201	U F1	0.101	0.06838	F1	mg/Kg		67	70 - 130	
•										

MS MS

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

Lab Sample ID: 880-34196-1 MSD Client Sample ID: H-12 (0-6") **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 64432									Prep	Batch:	64332
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.0996	0.09951		mg/Kg		100	70 - 130	10	35
Toluene	<0.00201	U	0.0996	0.08277		mg/Kg		83	70 - 130	15	35
Ethylbenzene	<0.00201	U F1	0.0996	0.08667		mg/Kg		87	70 - 130	26	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.1785		mg/Kg		89	70 - 130	28	35
o-Xylene	<0.00201	U F1	0.0996	0.08121		mg/Kg		81	70 - 130	17	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

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

Lab Sample ID: MB 880-64312/1-A

Matrix: Solid

Analysis Batch: 64318

Client Sample ID: Method Blank
Prep Type: Total/NA
Prop Ratch: 6/312

	IVID	IAID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/09/23 17:24	10/10/23 09:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/09/23 17:24	10/10/23 09:17	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/09/23 17:24	10/10/23 09:17	1

MB MB

MR MR

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	189	S1+	70 - 130	10/09/23 17:24	10/10/23 09:17	1
o-Terphenyl	176	S1+	70 - 130	10/09/23 17:24	10/10/23 09:17	1

Lab Sample ID: LCS 880-64312/2-A

Matrix: Solid

Analysis Batch: 64318

Client Sample	ID: Lab	Control Sample	
	_		

Prep Type: Total/NA Prep Batch: 64312

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	916.1		mg/Kg		92	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	879.0		mg/Kg		88	70 - 130	
C10-C28)								

Eurofins Midland

Job ID: 880-34196-1

SDG: Lea County, New Mexico

Client: Carmona Resources Project/Site: Nighthawk 3H

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

Lab Sample ID: LCS 880-64312/2-A

Matrix: Solid

Analysis Batch: 64318

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

Prep Batch: 64312

LCS LCS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 126 70 - 130 o-Terphenyl 135 S1+ 70 - 130

Lab Sample ID: LCSD 880-64312/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 64318

Prep Type: Total/NA

Prep Batch: 64312

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 1000 895.5 90 70 - 1302 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 807.7 81 mg/Kg 70 - 13020 8 C10-C28)

LCSD LCSD

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

Lab Sample ID: 890-5415-A-4-D MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 64318

Prep Type: Total/NA

Prep Batch: 64312

Sample Sample Spike MS MS Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics <49.9 U 1010 954.9 mg/Kg 93 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 1010 1261 mg/Kg 123 70 - 130 C10-C28)

MS MS %Recovery Qualifier Surrogate Limits S1+ 70 - 130 1-Chlorooctane 161 70 - 130 o-Terphenyl 128

Lab Sample ID: 890-5415-A-4-E MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid**

Analysis Batch: 64318

Prep Type: Total/NA Prep Batch: 64312

Sample Sample MSD MSD RPD Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit U 1010 1023 Gasoline Range Organics <49.9 mg/Kg 100 70 - 130 20 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 1010 1302 mg/Kg 127 70 - 130 3 20

C10-C28)

MSD MSD

%Recovery Qualifier Surrogate Limits 1-Chlorooctane 167 S1+ 70 - 130 130 70 - 130 o-Terphenyl

Eurofins Midland

QC Sample Results

Client: Carmona Resources Job ID: 880-34196-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64405/1-A

Client Sample ID: Method Blank

Prep Type: Soluble

Analysis Batch: 64500

Matrix: Solid

	MB	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/11/23 18:28	1

Lab Sample ID: LCS 880-64405/2-A **Client Sample ID: Lab Control Sample Matrix: Solid**

Prep Type: Soluble

Analysis Batch: 64500

Spike LCS LCS %Rec Added Result Qualifier Analyte Unit D %Rec Limits Chloride 250 251.4 mg/Kg 101 90 - 110

Lab Sample ID: LCSD 880-64405/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Soluble

Analysis Batch: 64500

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit Limits **RPD** Limit Chloride 250 251.8 101 90 - 110 mg/Kg

Lab Sample ID: 880-34195-A-1-C MS Client Sample ID: Matrix Spike **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 64500

_	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	116		253	380.1		mg/Kg		105	90 - 110	

Lab Sample ID: 880-34195-A-1-D MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 64500

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	116		253	380.4		mg/Kg		105	90 - 110	0	20

QC Association Summary

Client: Carmona Resources

Job ID: 880-34196-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

GC VOA

Prep Batch: 64332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34196-1	H-12 (0-6")	Total/NA	Solid	5035	
MB 880-64332/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34196-1 MS	H-12 (0-6")	Total/NA	Solid	5035	
880-34196-1 MSD	H-12 (0-6")	Total/NA	Solid	5035	

Analysis Batch: 64432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34196-1	H-12 (0-6")	Total/NA	Solid	8021B	64332
MB 880-64332/5-A	Method Blank	Total/NA	Solid	8021B	64332
LCS 880-64332/1-A	Lab Control Sample	Total/NA	Solid	8021B	64332
LCSD 880-64332/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64332
880-34196-1 MS	H-12 (0-6")	Total/NA	Solid	8021B	64332
880-34196-1 MSD	H-12 (0-6")	Total/NA	Solid	8021B	64332

Analysis Batch: 64582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34196-1	H-12 (0-6")	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 64312

Lab Sample ID 880-34196-1	Client Sample ID H-12 (0-6")	Prep Type Total/NA	Matrix Solid	Method	Prep Batch
MB 880-64312/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-64312/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-64312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5415-A-4-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5415-A-4-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34196-1	H-12 (0-6")	Total/NA	Solid	8015B NM	64312
MB 880-64312/1-A	Method Blank	Total/NA	Solid	8015B NM	64312
LCS 880-64312/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	64312
LCSD 880-64312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	64312
890-5415-A-4-D MS	Matrix Spike	Total/NA	Solid	8015B NM	64312
890-5415-A-4-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	64312

Analysis Batch: 64457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34196-1	H-12 (0-6")	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64405

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34196-1	H-12 (0-6")	Soluble	Solid	DI Leach	
MB 880-64405/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Midland

10/12/2023

QC Association Summary

Client: Carmona Resources

Job ID: 880-34196-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

HPLC/IC (Continued)

Leach Batch: 64405 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34195-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-34195-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 64500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34196-1	H-12 (0-6")	Soluble	Solid	300.0	64405
MB 880-64405/1-A	Method Blank	Soluble	Solid	300.0	64405
LCS 880-64405/2-A	Lab Control Sample	Soluble	Solid	300.0	64405
LCSD 880-64405/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64405
880-34195-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	64405
880-34195-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	64405

Eurofins Midland

Lab Chronicle

Client: Carmona Resources Job ID: 880-34196-1 Project/Site: Nighthawk 3H SDG: Lea County, New Mexico

Client Sample ID: H-12 (0-6")

Date Collected: 10/04/23 00:00 Date Received: 10/09/23 16:20

Lab Sample ID: 880-34196-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	64332	10/10/23 10:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64432	10/11/23 13:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64582	10/11/23 13:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			64457	10/10/23 17:20	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	64312	10/10/23 08:39	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64318	10/10/23 17:20	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	64405	10/10/23 15:31	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64500	10/11/23 19:09	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

Job ID: 880-34196-1

Project/Site: Nighthawk 3H

SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Progra	am	Identification Number	Expiration Date	
Texas		Р	T104704400-23-26	06-30-24	
	are included in this report, bu	ut the laboratory is not certif	fied by the governing authority. This lis	t may include analytes	
Analysis Method	Prep Method	Matrix	Analyte		
8015 NM Total BTEX		Solid	Total TPH		
		Solid	Total BTEX		

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Method Summary

Client: Carmona Resources Project/Site: Nighthawk 3H

Job ID: 880-34196-1 SDG: Lea 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: Nighthawk 3H

Job ID: 880-34196-1

SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34196-1	H-12 (0-6")	Solid	10/04/23 00:00	10/09/23 16:20

Project Manager	Clinton Merritt				Bill to (if different)		N D	בית בי	3.				_ _					,			
	Carmona Resources	Ces			Company Namo			Marshar Oil Co								֓֞֓֞֓֜֓֞֜֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֡֓֓֓֡֓֓֡֡֓֓֓֓֡֡֓֡֓֡֓֡֡֡֓֡֓		Tel Col	More Confidence		<u>.</u>
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te ZIP	Midland TX 79701)1			City, State ZIP	·	Housto	Houston TX 77024	7024				 _	eporting	Level II	∏Lev	<u>e</u> ≡	Reporting Level II Level III ST/UST	T RRP		
Phone				Email		athonoil.c	om						Lō LT	Deliverables EDD	es ED		Þ	ADaPT 🗆		٠.	
Project Name	z	Nighthawk 3H		Tum	Turn Around						ANAL	NALYSIS REQUEST		ST					Preserv	Drasarvativa Codes	§
Project Number		2090		✓ Routine	Rush	Pres.							_		\dashv	\exists		8	None NO	ביאו ומ	DI Water: H-O
Project Location	Lea Co	Lea County, New Mexico	exico	Due Date	5 day				-	-			4	-	+				2		
Sampler's Name.		CCM						RO)										5 8	HO 100	MeCH Me	Z 8
PO#:			J)	<i>J</i> 1	7			+ MI										<u> </u>	איצטי אי	ND CONIT	<u> </u>
SAMPLE RECEIPT		βе́яна Blank:	Yes No	Wet ice.	(Yes) No	eter	В	ORO	0.0									I .	P	i va Ci i Na	ā
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Cooler Custody Seals.	Yes N	No MA	Correction Factor	۲. ا	7 00	Pa	EX	GRO	orid									Z :	Na-S-O- NaSO	⊃ ₹	
Sample Custody Seals	s Yes No		Temperature Reading	ading	2.4		вт	5M (Chl									7 7	Zn Acetate+NaOH Zn	S S	
Total Containers.			Corrected Temperature	erature	95	LJ		801										Za!	NaOH+Ascorbic Acid SAPC	oic Acid S/	P C
Sample Identification	ification	Date	Time	Soil	Water Comp	# of Cont		TPI				.,,,-							Sample	Sample Comments	its
H-12 (0-6")	6")	10/4/2023		×	G	1	×	×	×				4	-	\dashv			\dashv			
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Comments Email	Email results to Mike Carmona mcarmona@carmonaresources.com, Conner Moehring cmoehring@carmonaresources.com, Clint Merritt MerrittC@carmonaresources.com	Carmona m	carmona@ca	rmonaresourc	es.com, Conne	r Moehri	ng cmc	ehring	@carm	onares	ources.	com,	Zint N	erritt l	Merritt	С@са	mona	esourc	es.com		
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Login Sample Receipt Checklist

Client: Carmona Resources Job Number: 880-34196-1 SDG Number: Lea County, New Mexico

List Source: Eurofins Midland

Login Number: 34196 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	N/A	

Released to Imaging: 3/18/2024 9:14:49 AM

<6mm (1/4").

APPENDIX F

CARMONA RESOURCES

Received by OCD: 11/2/2023 1:35:17 PM Form C-141 State of New Mexico Page 6 Oil Conservation Division

	Page 337 of 38	33
Incident ID		
District RP		
Facility ID		
Application ID		

Closure

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

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

☐ A scaled site and sampling diagram as described in 19.15.29	9.11 NMAC	
Photographs of the remediated site prior to backfill or photomust be notified 2 days prior to liner inspection)	os of the liner integ	grity if applicable (Note: appropriate OCD District office
☐ Laboratory analyses of final sampling (Note: appropriate Ol	DC District office n	nust be notified 2 days prior to final sampling)
☐ Description of remediation activities		
I hereby certify that the information given above is true and compand regulations all operators are required to report and/or file cert may endanger public health or the environment. The acceptance should their operations have failed to adequately investigate and thuman health or the environment. In addition, OCD acceptance compliance with any other federal, state, or local laws and/or regurestore, reclaim, and re-vegetate the impacted surface area to the accordance with 19.15.29.13 NMAC including notification to the Printed Name: Melodie SAnjari Title:	tain release notificate of a C-141 report by remediate contamin of a C-141 report doubtions. The responsion of the conditions that exists OCD when reclame	tions and perform corrective actions for releases which by the OCD does not relieve the operator of liability nation that pose a threat to groundwater, surface water, one not relieve the operator of responsibility for ensible party acknowledges they must substantially sted prior to the release or their final land use in nation and re-vegetation are complete.
Signature:Melodie Sanjari Melodie Sanjari	Date:	5/25/2023 <u>5/25/2023</u>
email:msanjari@marathonoil.com	Telephone:	575-988-8753
OCD Only		
Received by:	Date:	
Closure approval by the OCD does not relieve the responsible par remediate contamination that poses a threat to groundwater, surface party of compliance with any other federal, state, or local laws an	ce water, human hea	
Closure Approved by:	Date:	
Printed Name:	Title:	

Originally submitted via NM OCD Centerstack. Included in Marathon's ACO with the Division - Resubmission Via the Portal was Requested.

Received by OCD: 11/2/2023 1:35:17 PM Form C-141 State of New Mexico Page 6 Oil Conservation Division

	Page 338 of 383
Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

☐ A scaled site and sampling	diagram as described in 19.15.29.	11 NMAC			
Photographs of the remedi must be notified 2 days prior to	ated site prior to backfill or photos b liner inspection)	of the liner int	egrity if applicab	ole (Note: appropriate	OCD District office
☐ Laboratory analyses of fina	al sampling (Note: appropriate OD	C District office	e must be notified	d 2 days prior to final	sampling)
Description of remediation	activities				
and regulations all operators are may endanger public health or the should their operations have fail human health or the environmen compliance with any other feder restore, reclaim, and re-vegetate	tion given above is true and complete required to report and/or file certain the environment. The acceptance of ed to adequately investigate and rest. In addition, OCD acceptance of eal, state, or local laws and/or regulation to the complete impacted surface area to the complete including notification in the Complete in t	in release notifif a C-141 report mediate contains a C-141 report ations. The responditions that expenditions the expendition expenditions the expenditions the expenditions that expenditions the expenditions the expenditions the expenditions the expendi	cations and perform the OCD does in that pose does not relieve to ponsible party ackisted prior to the	orm corrective actions es not relieve the oper a threat to groundwa the operator of respor knowledges they must release or their final	for releases which ator of liability ter, surface water, asibility for at substantially land use in
Printed Name:	Melodie Sanjari	Title:			
Signature: Callie Kanigan	Melodie Sanjari	Date:	5/25/2023		
email:		Telephone: _	5	5/25/2023	
OCD Only					
Received by:		Date:			
remediate contamination that pos	nes not relieve the responsible party ses a threat to groundwater, surface ther federal, state, or local laws and	water, human h			
Closure Approved by:		Dat	e:	<u> </u>	
Printed Name:		Tit	e:		

Originally submitted via NM OCD Centerstack. Included in Marathon's ACO with the Division - Resubmission Via the Portal was Requested.



February 22, 2019

Spill Closure Report: Nighthawk Sate Com 3H (Section 20, T18S, R35E)

API: 30-025-41950

Incident Number: 1RP-5004 & 1RP-5094

Prepared For: Marathon Oil Permian LLC.

2423 Bonita Street

Carlsbad, New Mexico 88220

NMOCD District 1

1625 North French Drive Hobbs, New Mexico 88240

Ms. Olivia Yu,

Marathon Oil Permian LLC., retained Vertex Resource Services Inc. (Vertex) to conduct a Spill Assessment and Remediation Plan for two releases that occurred at the Nighthawk State Com 3H, API: 30-025-41950 production pad. The first release occurred on March 14, 2018 at approximately 10:15 am and the second released occurred on May 30, 2018 at approximately 9:00 am. Remediation was completed for both spills simultaneously as the releases occurred in the same vicinity on the pad. This letter provides a description of the Spill Assessment, Remediation Plan and includes this request for Spill Closure of both incidences.

Site Information

The site is located approximately 50 miles east of Carlsbad, New Mexico. The legal land description for the site is Section 20, Township 18 South and Range 35 East in Lea County, New Mexico (approximately 32° 43' 35.7888"N 103° 28' 41.16"W). The affected property is leased from the State of New Mexico. An aerial photograph and site schematic are included in Attachment 1.

The Geological Map of New Mexico (New Mexico Bureau of Geology and Mineral Resources, 2014-2017) indicates the site's surface geology is Ogallala Formation (lower Pliocene to middle Miocene) – Alluvial and eolian deposits, and petro calcic soils of the southern High Plains. The United States Department of Agriculture, Natural Resource Conservation Services, identifies the local soils as Kimbrough-Lea complex, dry, 0 to 3 percent slopes. This complex is approximately 50 percent Kimbrough gravelly loam, gently sloping, on the tops and sides of low ridges and 25 percent of Lea loam, which is nearly level and is in swales between ridges. These soils are used as range, wildlife habitat, and recreational areas. These descriptions are consistent with observations during the site visit. Site photographs obtained during the Spill Assessment are included in Attachment 2.

2019 Spill Assessment and Remediation ClosureFebruary 2019

Site Assessment / Characterization Requirements

Water, Residential/Public Buildings, Mines and Unstable Areas

Wetlands and surface waters were researched at United States Fish and Wildlife Service, National Wetlands Inventory https://www.fws.gov/wetlands/data/mapper.html; there is no wetland or surface waters within 500 feet of the site. (Attachment 4)

The nearest occupied permanent resident, school, hospital, institution or church are located greater than 300 feet from the site. (Google Earth, 2019) (Attachment 5)

According to the United States Geological Survey, *Inventory of Springs in the State of New Mexico* (1992), there are no springs located within 1,000 feet of the site. (Attachment 6)

New Mexico Office of the State Engineer, New Mexico Water Rights Reporting System. (2018). *Well Log/Meter Information Report* indicated that there are no wells within 1,000 feet of the spill site. (Attachment 7)

New Mexico Energy, Mineral and Natural Resources Department was researched to identify potential active and abandoned mines near the spill. No mines were found in or around the vicinity of the spill site. (Attachment 8)

The United States Department of Homeland Security, Federal Emergency Management Agency (FEMA) Flood Map Service Center, https://msc.fema.gov/portal/search?AddressQuery=malaga%20new%20mexico#searchresultsanchor, was reviewed and Flood Map Number 35015C1300D, effective on December 16, 2008, indicated that the site located in Zone D shaded. "The Zone D designation is used for areas where there are possible but undermined flood hazards, as no analysis of flood hazards have been conducted." (Attachment 9)

The New Mexico State Engineer website (New Mexico Water Rights Reporting System – Water Column Report) indicates that the nearest groundwater data available for Section 20, T18S, R35E and is approximately 3,780 feet north from the site. The groundwater in the area is reported to be at an average depth of 76 feet below ground surface (BGS). The referenced groundwater data are presented in Attachment 10.

The New Mexico State Engineer website (New Mexico Water Rights Reporting System – Active & Inactive Points of Diversion) indicates that the nearest Point of Diversion is located approximately 3,780 feet north of the site, in Section 20, T18S, R35E (Attachment 11).

According to the Karst Map published by the Bureau of Land Management, the site is located within the low ranking of the Karst Potential. Attached in Attachment 12 is the figure depicting the site location and Karst Potential.

The Remediation Plan was written and approved in accordance with the Energy, Minerals and Natural Resource Department, New Mexico Oil Conservation Division, *Guidelines for Remediation of Leaks, Spills and Releases* (August 13, 1993).

Ranking Criteria for NMOCD Aug 13, 1993	Distance	Ranking
Depth to Groundwater	76 ft.	10
Wellhead Protection Area	> 1,000 ft. from a water source	0
Distance to Surface Water Body	200- 1,000 ft.	10
Total Ranking	20	

The following are recommended remediation action levels initially used for final closure efforts.

Recommended Remediation Ad	ction Level 19.15.29 NMAC Aug 14, 2018
Benzene (ppm)	10
BTEX (ppm)	50
TPH (ppm)	100
Chlorides (ppm)	600

Based on a change in regulation during the final remediation, the updated closure criteria effective August 14, 2018 was utilized. As such, this Closure Report has been written in accordance with the New Mexico Administrative Code - *Natural Resources and Wildlife, Oil and Gas Releases* (July 24, 2018).

Closure Criteria for So	Closure Criteria for Soils Impacted by a Release					
Minimum depth below any point within the horizontal	Constituent	Limit				
boundary of the release to groundwater less than 10,000						
mg/I TDS						
51 feet – 100 feet	Chloride	10,000 mg/kg				
	TPH (GRO+DRO+MRO)	2,500 mg/kg				
	BTEX	50 mg/kg				
	Benzene	10 mg/kg				

According to the Closure Criteria for Soils Impacted by a Release in the Natural Resources and Wildlife, Oil and Gas Release, 19.15.26 New Mexico Administrative Code (NMAC), August 14, 2018, the location falls in the "51 feet to 100 feet to groundwater" closure criteria category as per Table 1, 19.15.29.12 NMAC.

MARCH 14, 2018, INCIDENT NUMBER: 1RP-5004

Incident Description

The spill, reported March 14, 2018, involved the release of production water, in the form of mist/spray into secondary containment, onto the well pad surface, and spraying approximately 20 feet off the pad to the north. The release was caused by the failure of a gasket at the heater treater. The well was shut-in, and the damaged gasket was replaced. The mist/spray from the heater treater released a total of 10 barrels (bbls) of production water; approximately 6 bbls within the containment and 4 bbls outside of containment. The mist also traveled approximately 20 feet off the pad. A vacuum truck was immediately dispatched to remove any standing liquids. The liner integrity was assessed to confirm it will continue to contain liquids if another release occurs. A backhoe was additionally dispatched to remove any saturated soils. The initial C-141 Report is included in Attachment 3.

2019 Spill Assessment and Remediation Closure February 2019

Remedial Actions Taken

The initial site visit was completed on May 24, 2018, aimed to identify evidence of the spill specified in the initial C-141 Report, the area of contamination, area of the spray on and off site, and initial sampling points.

On May 30, 2018 initial samples were collected from the site. A total of six (6) test pits were advanced to delineate the vertical and horizontal impacts of the spill. Five (5) test pits were advanced along or outside the boundaries of the spill area to determine the vertical depth and volume of impacts. One (1) test pit was advanced to delineate vertical impacts within the spill area. Soil samples taken during delineation activities were submitted to the lab and analyzed for hydrocarbon (volatile and extractable) and chlorides. The lab results are presented in Table 1 and can be found in Attachment 14.

The lab results from May 30, 2018, showed there was high concentrations of chlorides, which required remediation to below the remediation action levels. On July 15, 2018, after the excavation and removal of soils from the site, three confirmatory samples were collected and submitted to the lab. The collected samples were analyzed for hydrocarbon (volatile and extractable) and chlorides. The lab results are presented in Table 2 and can be found in Attachment 14. The lab results from July 15, 2018, showed high concentrations of chlorides under the prior regulations.

A Remediation Plan was developed on October 31, 2018, approved by the OCD, and executed on November 12, 2018. The plan is presented in Attachment 15.

Remediation included the excavation of impacted soils, transportation by a licensed waste hauler and disposal at an approved waste management facility. The remedial activities began on November 12, 2018 and finished on November 13, 2018. Refusal was reached at 2 to 2.5 feet west of the heater treater. Excavation continued west of the heater treater, reaching a continuous "hard pan" refusal at 2 to 2.5 feet. Soils were removed as close to existing infrastructure as possible in compliance with safety guidance. In total, approximately 470 cubic yards of contaminated soil was excavated and disposed of. Field screening for chlorides was completed during the excavation using the standardized saturated paste method, and Quantabs, and is documented in Table 3, along with lab analysis results. Composite confirmatory samples were collected on November 14, 2018 and submitted for lab analysis. Lab analysis included hydrocarbon (volatile and extractable) and chlorides. Remediation activity can be viewed in Figure 1, Attachment 1, and site photos, documenting the remedial activities in Attachment 2. Daily Field Reports of the excavation and sampling can be found in Attachment 13. The lab results are presented in Table 3 and can be found in Attachment 14.

The confirmatory sample results collected on November 14, 2018 identified areas on the north wall, south wall, and east wall 1 were above closure criteria chloride concentrations. The limits of the excavation area were constrained by refusal due to "hard pan", caliche and existing infrastructure (flow lines, containment area and buried electrical lines). During excavation, caliche was encountered throughout the excavation at 2 to 2.5 feet. A variance was requested to install a 30 Mil liner immediately adjacent to the hard pan layer. This request was approved on December 19, 2019 by Bradley Billings and is included as Attachment 16. The liner was installed on December 20, 2018 at 2 to 2.5 feet below the ground surface, to address those areas on the base of the excavation exceeding the 600-ppm chloride concentration (Attachment 15). The liner was sized to fit the base of the excavation and backfilled with local caliche. Pictures of the liner installation can be found in Attachment 2. The liner within the heater treater containment area was inspected for integrity and

found to be ripped in two (2) places. Due to proximity to existing infrastructure, sampling from beneath the liner could not be completed in accordance with safety practices. It is requested that any residual impacts under the heater treater liner be deferred for remediation until which time the facility is decommissioned.

Т	able 1. De	lineation Soil Char	acterizati	on Result	s Heater Tre	ater – May 3	30, 2018	
Samı	ole Descrip	otion	Field Sc	reening	Petro	leum Hydro	carbons	Inorganic
Sample ID	Depth (ft.)	Date	Volatile Organic Compounds	Quantab Result (High/Low)	Vola	atile	Extractable	
		(mdd) Volatile Or	+) Quantab R	Benzene (mg/kg)	(Mg/kg)	H (mg/kg)	(mg/kg)	
BH18-01	0	5/30/2018	-	-	<0.00199	<0.00199	<15.0	23,900
BH18-01	2	5/30/2018	_	_	<0.00200	<0.00200	<15.0	387
BH18-01	4	5/30/2018	_	-	_	_	-	2,480
BH18-02	0	5/30/2018	-	-	<0.00200	<0.00200	<15.0	1,050
BH18-02	2	5/30/2018	-	-	<0.00202	<0.00202	<15.0	411
BH18-03	0	5/30/2018	-	-	<0.00199	<0.00199	48.9	4,360
BH18-03	2	5/30/2018	-	-	<0.00200	<0.00200	<14.9	518
BH18-04	0	5/30/2018	-	-	<0.00201	0.336	53.1	109
BH18-04	2	5/30/2018	-	-	<0.00199	<0.00199	<15.0	33.9
BH18-04	4	5/30/2018	-	-	-	-	-	21.3
BH18-05	0	5/30/2018	-	-	<0.00201	<0.00201	<15.0	89
BH18-05	2	5/30/2018	-	-	<0.00200	<0.00200	<15.0	48.4
BH18-06	0	5/30/2018	-	-	0.00202	0.00578	65.7	26.4
BH18-06	2	5/30/2018	-	-	<0.00201	<0.00201	<15.0	12.9

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Table 2. Remediation Soil Characterization Results Heater Treater – July 15, 2018								
Samp	ole Descrip	otion	Field Sc	reening	Petro	leum Hydro	carbons	Inorganic
Sample ID	Depth (ft.)	Date	organic Compounds	Quantab Result (High/Low)	Vola	tile	Extractable	
	_	Volatile Organic	Quantab	Benzene (mg/kg)	(gay/gm) (Total)	⊞ ∐ (mg/kg)	Chloride (mg/kg)	
BH18-01		7/15/2018	-	-	<0.00201	<0.00201	<15.0	2,830
BH18-02		7/15/2018	-	-	<0.00202	<0.00202	<15.0	2,240
BH18-03		7/15/2018	-	-	<0.00200	<0.00200	<15.0	2,160

Table 3. Final Confirmatory Soil Characterization Results Heater Treater – November 14, 2018								
Samp	le Descrip	otion	Field Sc	reening	Petro	leum Hydrocarbons		Inorganic
			S		Vola	atile	Extractable	
Sample ID	Depth (ft.)	Date	Volatile Organic Compounds	Quantab Result (High/Low)				
					Benzene	BTEX (Total)	ТРН	Chloride
			(ppm)	(+/-)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
West Wall 1	2	11/14/2018	-	62	<0.0192	<0.0192	<15.0	107
West Wall 2	2	11/14/2018	-	74	<0.0182	<0.0182	<15.0	102
East Wall 1	2	11/14/2018	-	760	<0.0189	<0.0189	<15.0	888
East Wall 2	2	11/14/2018	-	74	<0.0193	<0.0193	<15.0	132
South Wall	1	11/14/2018	-	390	<0.0188	<0.0188	<15.0	695
North Wall	2	11/14/2018	-	802	<0.0198	<0.0198	<14.9	1,130
Base 1	2	11/14/2018	-	128	<0.0171	<0.0171	<15.0	167
Base 2	3	11/14/2018	-	98	<0.0183	0.336	53.1	109

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MAY 30, 2018, INCIDENT NUMBER: 1RP-5094

Incident Description

The spill, reported May 30, 2018, involved the release of oil, leaking on the well pad surface. The release was caused by a rupture in the flowline at the wellhead. The well was shut-in and found the poly line had a 1" hole. The leak from the poly line released approximately of 22 barrels (bbls) of oil. A vacuum truck was immediately dispatched and removed approximately 16 bbls of standing liquids. A backhoe was dispatched to remove saturated soils near the source of the rupture, which were transported to a licensed waste handling facility. The initial C-141 Report is included in Attachment 3.

Remedial Actions Taken

The initial site visit was completed on May 30, 2018, which aimed to identify the area of contamination and clean up the spill specified in the initial C-141 Report. One (1) sample was collected to characterize potential contaminants and their corresponding concentration levels. The soil sample taken during the initial site visit was submitted to the lab and analyzed for hydrocarbon (volatile and extractable) and chlorides. The lab results are presented in Table 4 and can be found in Attachment 14.

The lab results from May 30, 2018, BH18-01, showed high concentrations of hydrocarbon and chlorides. Delineation samples were then collected on July 7, 2018. A total of five (5) test pits were advanced to delineate the vertical and horizontal impacts of the spill. Four (4) test pits were advanced outside the boundaries of the spill area to determine the vertical depth and volume of impacts. One (1) test pit was advanced to delineate vertical and horizontal impacts within the spill area. Soil samples taken during the delineation activity were submitted to the lab and analyzed for hydrocarbon (volatile and extractable) and chlorides. The lab results are presented in Table 5 and can be found in Attachment 14.

The lab results from July 7, 2018, showed there was high concentrations of chlorides, requiring remediation to below the remediation action levels. The Remediation Plan was developed on October 31, 2018, and executed on November 14, 2018. The plan is presented in Attachment 15.

Remediation included the excavation of impacted soils, transportation by a licensed waste hauler and disposal at an approved waste management facility. These activities began on November 14, 2018 and finished on November 15, 2018. Excavation of soils began south of the tank containment area, south to the wellhead and south of the well head. Refusal was reached at 1.5 to 2 feet south of the tank containment area. Excavation continued in the area reaching a continuous refusal at 1.5 to 2 feet. Soils were removed as close to infrastructure as possible in compliance with safety guidance. Approximately 200 cubic yards of contaminated soil was excavated and disposed of. Field screening for chlorides was completed during the excavation using the standardized saturated paste method with Quantabs and is documented in Table 6, along with the lab screening results. Discreet confirmatory samples were collected on November 14, 2018 and submitted for lab analysis. Lab analysis included hydrocarbon (volatile and extractable) and chlorides. Remediation activities can be viewed in Figure 2, Attachment 1, and site photos, documenting the remedial activities in Attachment 2. Daily Field Reports of the excavation and sampling can be found in Attachment 13. The lab results are presented in Table 6 and can be found in Attachment 14.

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The confirmatory sample results collected on November 14, 2018 identified areas on the south wall, and the two (2) base points were above closure criteria chloride concentrations. The limits of the excavation area were constrained by refusal "hard pan", caliche and existing infrastructure (flow lines, containment area and buried electrical lines). During excavation, caliche was hit at 1.5 to 2 feet. A variance was requested to install a 30 Mil liner. This request was approved on December 19, 2018 by Bradley Billings and is included as Attachment 16. The liner was installed on December 20, 2018 at 1.5 to 2 feet below the ground surface, to address those areas on the base of the excavation exceeding the 600-ppm chloride concentration. The liner was sized to fit the base of the excavation and backfilled with local caliche. Pictures of the liner installation can be found in Attachment 2.

Table 4. Initial Soil Characterization Results Wellhead – May 30, 2018								
Samı	ple Descrip	tion	Field Screening		Petro	leum Hydro	carbons	Inorganic
Sample ID	Depth (ft.)	Date	Organic Compounds	Result (High/Low)	Vola	atile	Extractable	
			Volatile	Quantab	Benzene	BTEX (Total)	ТРН	Chloride
			(ppm)	(+/-)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH18-01	0	5/30/2018	-	-	56.4	592	21,300	2,970

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Table 5. Delineation Soil Characterization Results Wellhead – July 7, 2018								
Samp	ole Descrip	otion	Field So	reening	Petroleum Hydrocarbons			Inorganic
Sample ID	Depth (ft.)	Date	Volatile Organic Compounds	Quantab Result (High/Low)	Vola	atile	Extractable	
			Volatile Org	Quantab Re	Benzene	BTEX (Total)	ТРН	Chloride
			(ppm)	(+/-)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
S1	0	7/7/2018	-	-	<0.00201	<0.00202	68.9	5,910
S1	2	7/7/2018	-	-	<0.00202	<0.00201	<15.0	1,700
S1	4	7/7/2018	-	-	<0.00199	<0.00199	40.2	1,630
S2	0	7/7/2018			<0.00198	<0.00198	18.5	408
S2	2	7/7/2018			<0.00202	<0.00201	129	2,310
S2	4	7/7/2018			<0.00202	<0.00202	181	1,450
S3	0	7/7/2018			<0.00200	<0.00200	<15.0	3,160
S3	2	7/7/2018			<0.00201	<0.00201	<15.0	2,460
S3	4	7/7/2018			<0.00201	<0.00201	<15.0	1,610
S4	0	7/7/2018			<0.00200	<0.00200	<15.0	310
S4	2	7/7/2018			<0.00199	<0.00199	64.4	419
S4	4	7/7/2018			<0.00200	<0.00200	53.0	552
S5	0	7/7/2018			<0.00201	<0.00201	<15.0	1,250
S5	2	7/7/2018			<0.00202	<0.00202	<15.0	1,060
S5	4	7/7/2018			<0.00200	<0.00200	<15.0	890

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Table 6. Final Confirmatory Soil Characterization Results Wellhead – November 14, 2018								
Samp	ole Descrip	otion	Field Sc	reening	Petroleum Hydrocarbons			Inorganic
Sample ID	Depth (ft.)	Date	Volatile Organic Compounds	Quantab Result (High/Low)	Vola	atile	Extractable	
				Benzene	BTEX (Total)	HdT (ha)	Chloride	
		44/44/2040	(ppm)	(+/-)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
West Wall	2	11/14/2018	-	High	<0.0199	<0.0199	<15.0	209
East Wall	2	11/14/2018	-	650	<0.0181	<0.0181	<15.0	70.7
South Wall	2	11/14/2018	-	976	<0.0196	<0.0196	<14.9	1,890
North Wall	2	11/14/2018		2450	<0.0184	<0.0184	<15.0	226
Base 1	2	11/14/2018		802	<0.0188	<0.0188	<15.0	522
Base 2	2	11/14/2018		1170	<0.0193	<0.0193	<15.0	2,540
05 East Wall	2	11/14/2018		High	<0.0191	<0.0191	<15.0	374
05 Base	2	11/14/2018		650	<0.0173	<0.0173	<15.0	1,120
05 South Wall	2	11/14/2018		High	<0.0191	<0.0191	<15.0	660
05 North Wall		11/14/2018		High	<0.0189	<0.0189	<14.9	115

2019 Spill Assessment and Remediation Closure February 2019

Closure Request

Initial response addressed concerns that were readily accessible around existing infrastructure on the operating site. Two spills occurred at the site. The first spill occurred on and off site from the heater treater. The second spill occurred on the well pad and was contained within the boundary of the lease in close proximity to the wellhead. The initial samples collected at the site identified, through lab analysis of hydrocarbon and chlorides, there were high concentrations of chlorides which required remediation through excavation. A Remediation Plan was submitted and approved by the NMOCD. During excavation, caliche hindered further excavation. A variance to line the excavated area with a 30 Mil liner was requested and approved. Complete laboratory results are included in Attachment 14.

Remedial efforts have been completed to address the delineated chloride concentrations above 19.15.29 NMAC Closure Criteria for Soils Impacted by a Release. A 30 Mil liner has been installed on the base of the excavation to address any residual impacts at or below 1.5 ft. bgs. The excavation was be backfilled with local caliche soils. Given that the impact associated to both spills has been remediated with the approved variance from NMOCD, Marathon Oil Permian LLC. requests that these spills be closed.

Should you have any questions or concerns, please do not hesitate to contact the undersigned at 832.588.0674 or dhanton@vertex.ca.

Sincerely,

Dhugal Hanton

VICE PRESIDENT – US OPERATIONS

2019 Spill Assessment and Remediation Closure February 2019

Attachments

Attachment 1.	Aerial Photograph
Attachment 2.	Site Photographs
Attachment 3.	Form C-141 Release Notification and Corrective Action
Attachment 4.	U.S. Fish and Wildlife Service, National Wetlands Inventor
Attachment 5.	Permanent resident, School, Church etc. Map
Attachment 6.	Inventory of Springs in Lea County
Attachment 7.	Wells with Well Log Information
Attachment 8.	Active Mines in New Mexico
Attachment 9.	National Flood Hazard Layer Firmette Map
Attachment 10.	Water Column / Average Depth to Water
Attachment 11.	Active & Inactive Points of Diversion Report
Attachment 12.	Karst Potential Map
Attachment 13.	Daily Field Reports and Field Sampling Reports
Attachment 14.	Laboratory Results
Attachment 15.	Remediation Plan

Attachment 16. Liner Variance Email Communication

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Limitations

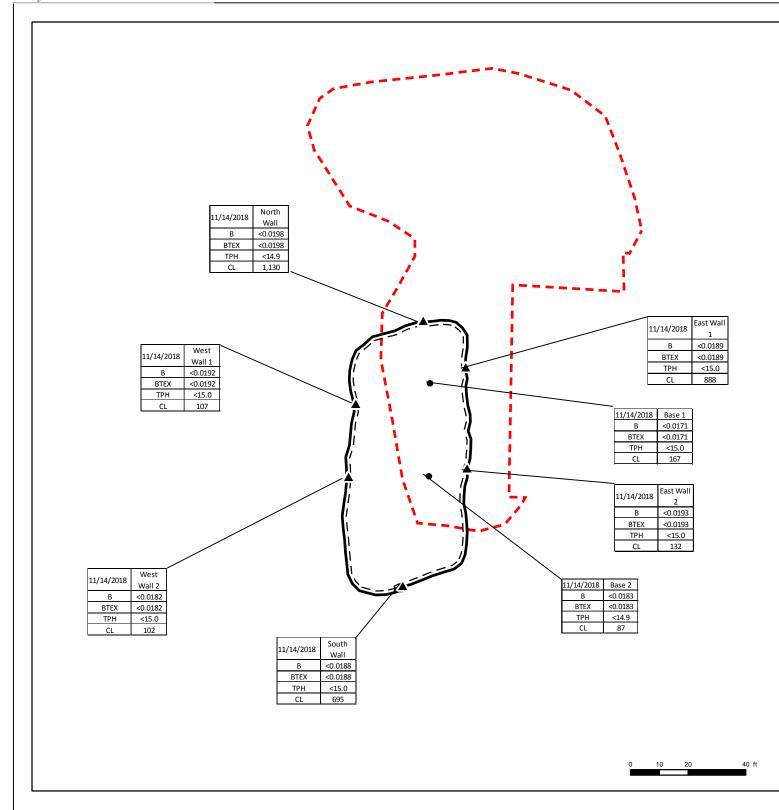
This report has been prepared for the sole benefit of Marathon Oil Permian LLC. This document may not be used by any other person or entity, with the exception of the New Mexico Oil Conservation Division, without the express written consent of Vertex Resource Services Inc. (Vertex) and Marathon Oil Permian LLC. Any use of this report by a third party, or any reliance on decisions made based on it, or damages suffered as a result of the use of this report are the sole responsibility of the user.

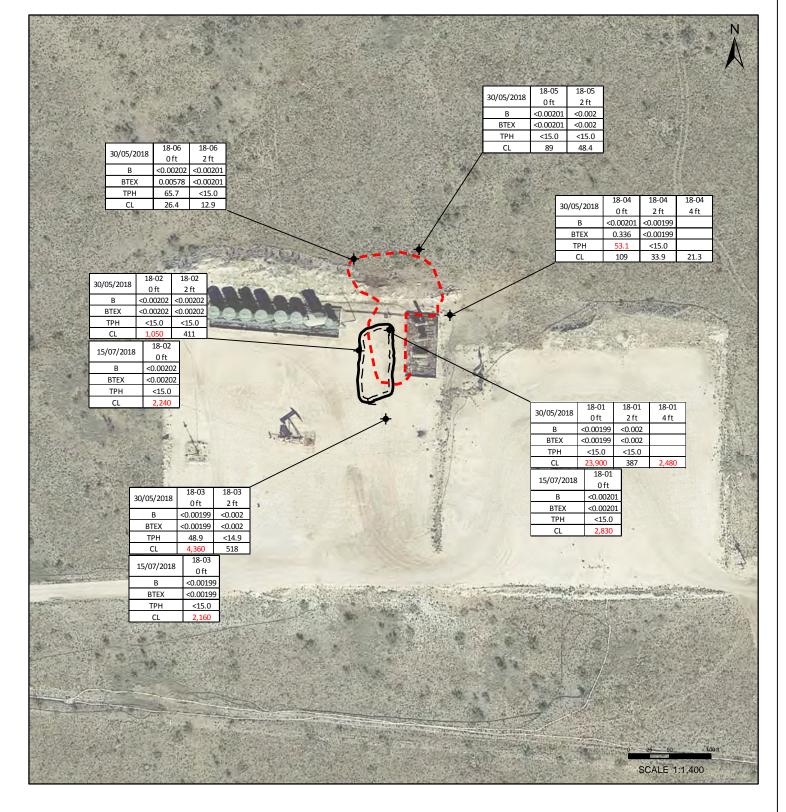
The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgement of Vertex based on the data collected during the assessment. Due to the nature of the assessment and the data available, Vertex cannot warrant against undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be considered legal advice.

ATTACHMENT 1

Received by OCD: 11/2/2023 1:35:17 PM

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Legend

Excavation Spill Area

7	Dorenole
	Base Soil Sample
A	Wall Soil Sample

Recommended Remediation Action Level (ppm)				
Benzene	BTEX	TPH	Chlorides	
10	50	100	600	

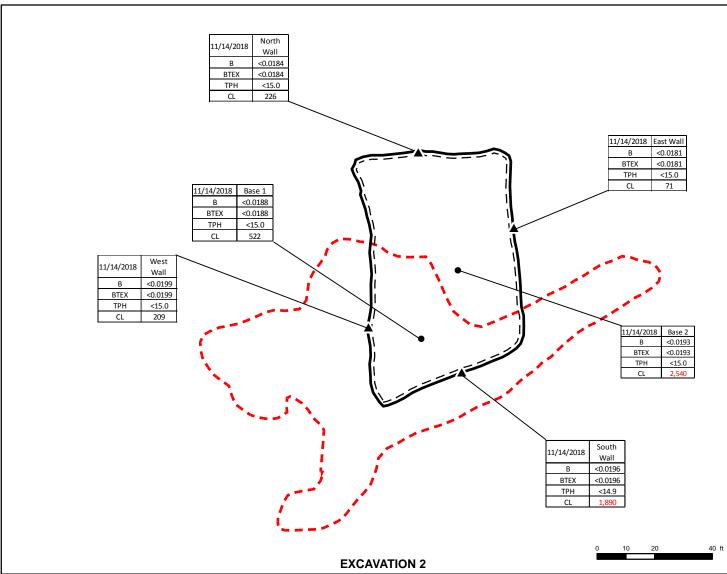


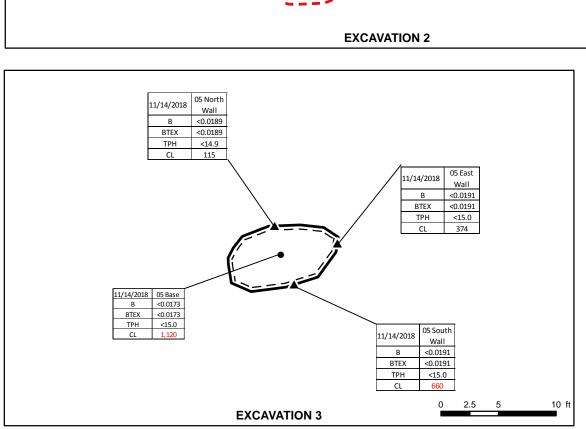
Nighthawk Heater Treater Spill 1RP-5004 March 14, 2018



DRAWN:	PS	FIGURE:
APPROVED:	DH	1
DATE:	FEB 12/19	

Notes: Aerial Image from Google Earth, 2017







Legend

→ Borehole

Base Soil Sample

Wall Soil Sample
Excavation
Spill Area

Recommended Remediation Action Level (ppm)					
Benzene	BTEX	TPH	Chlorides		
10	50	100	600		



Nighthawk Welllhead Spill 1RP-5094 May 30, 2018

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DRAWN:	PS	FIGURE:	
APPROVED:	DH		2
DATE:	FEB 12/19		

Notes: Aerial Image from Google Earth, 2017

ATTACHMENT 2

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Incident ID	1RP-5004
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no tales than 50 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 X No	
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	Yes X 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 X 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 X 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 X No	
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes X 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 X 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.
- X Field data
- \overline{X} Data table of soil contaminant concentration data
- X Depth to water determination
- Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- X Boring or excavation logs
- X Photographs including date and GIS information
- X Topographic/Aerial maps
- X 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.

Received by OCD: 11/2/2023 1:35:17 PM Form C-141 State of New Mexico Page 4 Oil Conservation Division

	Page 359 of 38.	3
Incident ID	1RP-5004	
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: Callie Karringon	Title: HES Professional	
Signature: Callix Karrigan	Date: _3/26/19	
email: <u>cnkarrigan@marathonoil.com</u>	Telephone: 405.202.1028	
OCD Only		
Received by:	Date:	

Received by OCD: 11/2/2023 1:35:17 PM Form C-141 State of New Mexico Page 6 Oil Conservation Division

	Page 360 of 383
Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

A scaled site and sampling diagram as described in 19.15.29.11 NMAC			
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)			
Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)			
☐ Description of remediation activities			
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Name: Title: Title:			
Signature:Callin Kanigan	Date:		
email:	Telephone:		
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:		

Form C-141

Revised April 3, 2017

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

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

			Rele	ease Notific	catio	n and Co	orrective A	ction	l				
		OPERA'	Initial	al Report		Final	Report						
		Iarathon Oil				Contact: Callie Karrigan							
		St, Carlsbac nawk State C		220		Telephone No. 405-202-1028 (cell) 575-297-0956 (office) Facility Type: oil well							
				Mineral (Ournari	, , ,			A DI No	30-025-41	050		
Surface Ow	-								APINO	30-023-41	.930		
Unit Letter Section Township Range Feet from the Nort					_	N OF RE	Feet from the	Fast/V	Vest Line	County			
O	20	18S	35E	240	South		2310	East	vest Eme	Lea			
	Latitude _32.72660771 Longitude 103.47803946NAD83												
				NAT	ΓURE	OF REL		Ţ					
Type of Rele Source of Re							Release: 10 bbl Hour of Occurrence	ce		Recovered: 6 Hour of Disc		Į.	
						unknown		cc	3/14/18 1		covery	′	
Was Immedi	ate Notice C		Yes [No Not R	equired	If YES, To Olivia Yu	Whom? – Lea County						
By Whom? (Date and I							
Was a Water	course Reac	ched?	Yes ∑] No		If YES, Vo	olume Impacting	the Wate	ercourse.				
N/A		pacted, Descr	·				CEIVED Olivia Yu a	at 2:2	?1 pm,	Apr 02	2, 20	018	
Operator arri water in seco	ved onsite f	or daily round inment. Appr	ds and obs oximately	erved a gasket lea 6 barrels was co ed approximately	ntained	in containmer							
A vac truck containment	was dispated was then po	wer washed a	r standing and used a	ken.* fluids in and outs bsorbent material e occurs. Offsite	ls to rec	over remainin	g liquids. The line	er integri	ty was also	assessed to	confi		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human heal or the environment. In addition, NMOCD 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.							er ity ealth						
						OIL CONSERVATION DIVISION							
Signature: C	allie Kar	rigan				M A							
					Approved by Environmental Specialist:								
					Approval Da	4/2/2018	3 I	Expiration	Date:				
			Conditions of Approval: Attached										
Date: 3/28/1				See atta	ached direct	ive.		7 ttacheu					
* Attach Addi				02-1020		Photo documentation post-							
		nOY	180925	52064		cleanup of lined facility requested.							
Released to Imaging: 3/18/2024 9:14:49 AM										pOY180	925	2900	\neg









Operator/Responsible Party,

The OCD has received the form C-141 you provided on _3/28/2018_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-5004__ has been assigned. Please refer to this case number in all future correspondence.

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

The responsible person shall complete <u>division-approved corrective action</u> for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs____ on or before _4/2/2018_. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.
- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.
- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.
- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- •Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.
- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.
- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold

OCD Environmental Bureau Chief 1220 South St. Francis Drive Santa Fe, New Mexico 87505 505-476-3465 jim.griswold@state.nm.us Page 366 of 383

Incident ID	1RP-5094
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 X 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 X 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 X No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes X 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 ver contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	tical extents of soil

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

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

Received by OCD: 11/2/2023 1:35:17 PM Form C-141 State of New Mexico Page 4 Oil Conservation Division

Page 367 of 383

Incident ID	1RP-5094
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: Callie Karringon	Title: HES Professional				
Signature: Callis Karrigan	Date:3/26/19				
email: <u>cnkarrigan@marathonoil.com</u>	Telephone: 405.202.1028				
OCD Only					
Received by:	Date:				

Received by OCD: 11/2/2023 1:35:17 PM Form C-141 State of New Mexico Page 6 Oil Conservation Division

Incident ID
District RP
Facility ID
Application ID

Closure

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

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

☐ A scaled site and sampling diagram as described in 19.15.29.1	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	☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)					
☐ Description of remediation activities						
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and rer human health or the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regular restore, reclaim, and re-vegetate the impacted surface area to the coaccordance with 19.15.29.13 NMAC including notification to the O	nediate contamination that pose a threat to groundwater, surface water, a C-141 report does not relieve the operator of responsibility for tions. The responsible party acknowledges they must substantially notitions that existed prior to the release or their final land use in CD when reclamation and re-vegetation are complete.					
Printed Name:	Title:					
Signature: Callis Karrigan	Date:					
email:	Telephone:					
OCD Only						
Received by:	Date:					
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations.					
Closure Approved by:	Date:					
Printed Name:	Title:					

Form C-141

Revised April 3, 2017

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III $1000\ \mathrm{Rio}\ \mathrm{Brazos}\ \mathrm{Road},\ \mathrm{Aztec},\ \mathrm{NM}\ 87410$ District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico **Energy Minerals and Natural Resources**

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Release Notification and Corrective Action												
						OPERA	OPERATOR Initial Report					Final Report
Name of Co	mpany: M	Iarathon Oil	Permian	LLC		Contact: Callie Karrigan						
						Telephone N	No. 405-202-102	28 (cell) 575-297	-0956 (offi	ce)	
Facility Name: Nighthawk State Com 3H						Facility Typ	e: oil well					
Surface Own	ner: State			Mineral O	wner:	State			API No	30-025-41	950	
				LOCA	TIO	N OF REI	LEASE					
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/V	West Line	County		
O	20	18S	35E	240	South	1	2310	East		Lea		
		_										
		Lat	titude_ <u>32</u>	2.72660771		Longitude	103.47803946	N	NAD83			
				NAT	URE	OF REL			T == = =			
Type of Relea		o <u>ll</u> flowline at we	llhood			_	Release: 22 bbl Tour of Occurrence	10		Recovered: 1 Hour of Dis		
Source of Ker	lease. pory	nowine at we	illicau			unknown	iour or occurrenc	.e		3 09:00 am	covery	
Was Immedia	ate Notice (Yes	No Not Re	quired	If YES, To Olivia Yu	Whom? – Lea County, Ry	ann Ma	•			
By Whom? C	allie Karrig	gan				Date and F	Iour: 5/30/2018 1	1:18 am	1			
Was a Watercourse Reached? ☐ Yes ☐ No					If YES, Volume Impacting the Watercourse. N/A							
If a Watercou	rse was Im	pacted, Descri	ibe Fully.*	k								
N/A				REC	EIVED							
					By Olivia Yu at 3:35 pm, Jun 14, 2018							
Operator arriv	ved onsite f		ls and obs	n Taken.* erved the flowline had about a 1" ho					oarrels of oi	l. The well	was im	mediately
Describe Area Affected and Cleanup Action Taken.* A vac truck recovered standing fluids. The polyline was removed from service and will be replaced. Saturated soils near the source of the rupture were removed and taken for disposal. The release area is currently being assessed, initial soil samples taken and a work plan will be submitted for remaining clean-up.												
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.						ndanger f liability man health						
							OIL CON	SERV	'ATION	DIVISIO	<u>N</u>	
Signature: Ca	allie Kar	riaan							M	_		
· ·					Approved by Environmental Specialist:							
Title: HES Pr	ofessional					Approval Da	6/14/201	8	Expiration	Date:		
E-mail Addre	ss: <u>cnkarri</u>	gan@maratho	noil.com			Conditions of	f Approval:			Attached		/
Date: 6/13/18 Phone: 405-202-1028 Attach Additional Sheets If Necessary						see attac	hed directiv	е			_ _	

1RP-5094

nOY1816556237

pOY1816556459



Operator/Responsible Party,

The OCD has received the form C-141 you provided on _6/13/2018_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-5094__ has been assigned. Please refer to this case number in all future correspondence.

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Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs____ on or before _7/14/2018_. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

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- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- •Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.
- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.
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Jim Griswold

OCD Environmental Bureau Chief 1220 South St. Francis Drive Santa Fe, New Mexico 87505 505-476-3465 jim.griswold@state.nm.us

ATTACHMENT 3

APPROVED

By CHernandez at 2:01 pm, Oct 22, 2018



Spill Remediation Plan:

In the interests of resolving 1RP-5094, NMOCD approves the proposed remediation plan as outlined on September 17, 2018 with the following conditions: Provide both bottom and sidewall confirmation samples at no greater than 50 ft. intervals. Please be advised to excavate further at BH18-01 until permissible chloride levels are reached or submit a variance requesting to utilize a liner. Submit dated photo documentation of the remedial activities, including placement of liner if one is used. Submit scaled map with the confirmation sample locations in relation to the delineation sample points and indicate location of release point.

August 24, 2018

Nighthawk State Com 3H (Section 20 T18S R33E)

API: 30-025-41950

Prepared For: Marathon Oil Permian LLC.

> 2423 Bonita Street Carlsbad, NM 88220

NMOCD District 1

1625 North French Drive Hobbs, New Mexico 88240

Ms. Olivia Yu,

Marathon Oil Permian LLC., requested that Vertex Resource Services Inc. (Vertex) conduct a Spill Assessment and Remediation for a release at Nighthawk State Com 3H, API: 30-025-41950 (hereafter referred to as "site"). The Initial C-141 Report is included in Attachment 1 and the Site Schematic can be found in Attachment 2 as per the lab results. This letter provides a description of the remediation plan to achieve spill closure at the site.

General Information

Client:	Marathon Oil Permian LLC.	Site Location:	Nighthawk State Com 3H
Date:	August 20, 2018	Project #:	18E-02112
Client Contact:	Callie Karrigan	Phone #:	405-202-1028
Vertex PM:	Dhugal Hanton	Phone #:	832-588-0674
Field Personnel:	Robyn Fisher	Phone #:	575-361-7290
Field Personnel:	Jason Crabtree	Phone #:	432-250-3456
Contractor:	Wescom - Kevin Waliezer	Phone #:	701-580-7614

Objective

The objective is to conduct an excavation of material and meet the 600 mg/kg total chlorides requirement. Based on existing results, it is assumed that most of the excavation extent will be at a depth of 4 feet. Vertex will conduct sampling at 4 feet and if the excavation base fails for chloride, a 30 mil liner will be installed. Vertex will source local caliche and backfill for the excavation.

2018 Remediation Plan August 2018

Groundwater, Point of Diversion and Site Ranking

The New Mexico State Engineer website (New Mexico Water Rights Reporting System – Water Column Report) indicates that the nearest groundwater data available for Section 11, T17S, R36E is approximately 1,000 feet from the site. The ground water in the area is reported to be at an average depth of 78 feet below ground surface (BGS). The referenced groundwater data are presented in Attachment 3.

The New Mexico State Engineer website (New Mexico Water Rights Reporting System – Active & Inactive Points of Diversion) indicates that there no diversions within 1,000 feet. (Attachment 4).

The Ranking Criteria for Depth to Ground Water at the site is ranked 10 based on the *Guidelines for Remediation* of Leaks, Spills and Releases (New Mexico Oil Conservation Division (NMOCD), August 13, 1993) and the specific site information listed below:

Ranking Criteria	Distance	Ranking
Depth to Groundwater	78 ft.	10
Wellhead Protection Area	> 1,000 ft. from a water source	0
Distance to Surface Water Body	>1,000 ft.	0
Total Ranking	10	

The following are recommended remediation action levels used for final closure efforts.

Recommended Remediation Action Level					
Benzene (ppm)	10				
BTEX (ppm)	50				
TPH (ppm)	1000				
Chlorides (ppm)	600				

Marathon Oil Permian LLC.
Nighthawk State Com 3H API: 30-025-41950

2018 Remediation Plan August 2018

Initial Site Assessment

The initial spill assessment was conducted on May 30, 2018. Six surface samples were taken to investigate and characterize the soil conditions. Chloride, Benzene and Total Petroleum Hydrocarbons results of the initial investigation are presented below in Table 1. A secondary surface scraping samples of the area were taken on July 15, 2018, these samples were sent to the lab to assess the current soil conditions. Results of the secondary sampling are presented below in Table 1. The lab results are included in Attachment 5.

	Table 1. Soil Characterization - July 7, 2018 and July 15, 2018								
S	ample Descri	ption							
			Vola	atile		Extra	ctable		Inorganic
Sample ID	Depth (ft.)	Date	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Oil Range Organics (ORO)	Total Petroleum Hydrocarbons (TPH)	Chloride
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH18-01	0	5/30/2018	ND	ND	ND	ND	ND	ND	23900
BH18-01	2	5/30/2018	ND	ND	ND	ND	ND	ND	387
BH18-01	4	5/30/2018	_	ı	_	ı	_	-	2480
BH18-02	0	5/30/2018	ND	ND	ND	ND	ND	ND	1050
BH18-02	2	5/30/2018	ND	ND	ND	ND	ND	ND	411
BH18-03	0	5/30/2018	ND	ND	ND	48.9	ND	48.9	4360
BH18-03	2	5/30/2018	ND	ND	ND	ND	ND	ND	518
BH18-04	0	5/30/2018	ND	0.336	29.8	23.3	ND	53.1	109
BH18-04	2	5/30/2018	ND	ND	ND	ND	ND	ND	33.9
BH18-04	4	5/30/2018	_	_	_	-	_	_	21.3
BH18-05	0	5/30/2018	ND	ND	ND	ND	ND	ND	89
BH18-05	2	5/30/2018	ND	ND	ND	ND	ND	ND	48.4
BH18-06	0	5/30/2018	0.00202	0.00578	22.6	43.1	ND	65.7	26.4
BH18-06	2	5/30/2018	ND	ND	ND	ND	ND	ND	12.9
BH18-01	4	7/15/2018	ND	ND	ND	ND	ND	ND	2830
BH18-02	1	7/15/2018	ND	ND	ND	ND	ND	ND	2240
BH18-03	1	7/15/2018	ND	ND	ND	ND	ND	ND	2160

vertex.ca

Marathon Oil Permian LLC.

Nighthawk State Com 3H API: 30-025-41950

2018 Remediation Plan August 2018

Excavation

The excavation will include removing impacted soils with a backhoe and sampling the soil at 4 feet. The soil sampling protocol is designed and implemented to identify and determine changes in soil condition within the vertical and lateral profiles. Soils will be classified utilizing the Unified Soil Classification system as described in *American Society for Testing and Materials D2488* (Standard Practice of Description and Identification of Soils (Visual-Manual Procedure) 2000). Laboratory analysis on select samples will be performed according the following methods:

• Chloride (Method 300)

As benzene and TPH are below NMOCD Recommended Remedial Action Levels, Vertex will be sampling only for chlorides.

Should you have any questions or concerns, please do not hesitate to contact the undersigned at 832.588.0674 or dhanton@vertex.ca.

Sincerely,

Dhugal Hanton, B.Sc., P.Ag., SR/WA, P.Biol.

VICE PRESIDENT – US OPERATIONS

Attachments

Attachment 1. Initial C-141 Report

Attachment 2. Figure

Attachment 3. Groundwater Information

Attachment 4. Diversion Information

Attachment 5. Laboratory Results

Marathon Oil Permian LLC.
Nighthawk State Com 3H API: 30-025-41950

2018 Remediation Plan August 2018

Limitations

This report has been prepared for the sole benefit of Marathon Oil Permian LLC. This document may not be used by any other person or entity, with the exception of the New Mexico Oil Conservation Division, without the express written consent of Vertex Resource Services Inc. (Vertex) and Marathon Oil Permian LLC. Any use of this report by a third party, or any reliance on decisions made based on it, or damages suffered as a result of the use of this report are the sole responsibility of the user.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgement of Vertex based on the data collected during the assessment. Due to the nature of the assessment and the data available, Vertex cannot warrant against undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be considered legal advice.

Kathlene Meadows

From: Dhugal Hanton

Sent: January-11-19 10:57 AM

To: Dennis Williams; Kathlene Meadows

Subject: FW: Remediation Approval Variance - 1RP-5094 & 1RP-5004

Dhugal Hanton B.Sc., P.Ag., SR/WA, P.Biol.

Vice President, US Operations

Vertex Resource Services Inc. 7223 Empire Central Drive, Houston, TX 77040

O 281-977-7886 C 832-588-0674

Linked in profile

From: Dhugal Hanton

Sent: December 19, 2018 3:56 PM

To: Callie Karrigan (cnkarrigan@marathonoil.com) <cnkarrigan@marathonoil.com>; Castro, Isaac (MRO)

<icastro@marathonoil.com>

Cc: Kathlene Meadows (kmeadows@vertex.ca) < kmeadows@vertex.ca>; Dennis Williams < DWilliams@vertex.ca>

Subject: FW: Remediation Approval Variance - 1RP-5094 & 1RP-5004

FYI

Dhugal Hanton B.Sc., P.Ag., SR/WA, P.Biol.

Vice President, US Operations

Vertex Resource Services Inc. 7223 Empire Central Drive, Houston, TX 77040

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Linked in profile

From: Billings, Bradford, EMNRD [mailto:Bradford.Billings@state.nm.us]

Sent: December 19, 2018 2:18 PM

To: Dhugal Hanton < DHanton@vertex.ca>

Subject: RE: Remediation Approval Variance - 1RP-5094 & 1RP-5004

Hi,

Way busy. Did you/will you get pictures before backfill as per new Rule? And notification of when you will backfill to District office? Assume you have approvals for work and moving to new data requirements if you are going to use new rule? Thanks.

Brad

From: Dhugal Hanton < <u>DHanton@vertex.ca</u>>
Sent: Wednesday, December 19, 2018 10:08 AM

To: Billings, Bradford, EMNRD < Bradford. Billings@state.nm.us>

Cc: Karrigan, Callie N. (MRO) < cnkarrigan@marathonoil.com; Kathlene Meadows < KMeadows@vertex.ca; Castro,

Isaac (MRO) < icastro@marathonoil.com >

Subject: [EXT] RE: Remediation Approval Variance - 1RP-5094 & 1RP-5004

Importance: High

Good Morning Mr. Billings,

This is a follow-up email to the one below. Currently, the site has open excavations that are impeding operational activities on the site and could cause a potential safety hazard. As a variance for the use of a liner was approved, Vertex has lined the base of both of the excavations with 30mil liner and is going to backfill with clean, native caliche. I apologize for the urgency related to the site but wanted to keep you informed. Please let me know if you have any concerns with this course of action. A closure request will follow the successful completion of the backfill.

Cheers, Dhugal

Dhugal Hanton B.Sc., P.Ag., SR/WA, P.Biol. Vice President, US Operations

Vertex Resource Services Inc. 7223 Empire Central Drive, Houston, TX 77040

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From: Dhugal Hanton

Sent: November 26, 2018 2:51 PM

To: 'bradford.billings@state.nm.us' <bradford.billings@state.nm.us>

Cc: 'Karrigan, Callie N. (MRO)' <cnkarrigan@marathonoil.com>; Kathlene Meadows (kmeadows@vertex.ca)

kmeadows@vertex.ca; Isaac Castro < icastro@marathonoil.com>

Subject: Remediation Approval Variance - 1RP-5094 &

Good Afternoon Mr. Billings,

Please find enclosed the approved remediation plans for the above mentioned site including the conditions noted in the email correspondence. Currently, Vertex has excavated both of the spill areas noted, found the horizontal extent of the impacts and completed final confirmatory sampling. With respect to the vertical depth, Vertex excavated to the extent possible before hitting the caliche layer in both spill areas. The caliche layer was found at between 1' to 2' in both of the spill areas. Although original delineation sampling was completed to below 4', currently, a caliche layer is preventing further excavation to remove those impacts. Vertex proposes either of the two options:

- 1. A 30 mil liner is installed on the base of the excavation just above the caliche layer to prevent upward migration of the chlorides. Vertex would submit a closure request based on the liner being in place and the horizontal confirmatory sampling being below closure criteria.
- 2. Based on the current NMAC regulation, the impacts present on the site could be left in place as the site falls under the 51 ft. to 100 ft. closure criteria. If approved, Vertex would backfill the excavations with clean locally sourced caliche and submit the site under the new regulations for closure.

Please let me know if you would like to discuss by phone or what your thoughts are to move the site toward closure.

Cheers, Dhugal

Dhugal Hanton B.Sc., P.Ag., SR/WA, P.Biol. Vice President, US Operations

Vertex Resource Services Inc. 7223 Empire Central Drive, Houston, TX 77040

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Kathlene Meadows

From: Dhugal Hanton

Sent: December-19-18 3:01 PM

To: Hernandez, Christina, EMNRD (Christina.Hernandez@state.nm.us);

bradford.billings@state.nm.us

Cc: Callie Karrigan@marathonoil.com); Castro, Isaac (MRO); Dennis Williams;

Kathlene Meadows

Subject: 1RP-5094 & 1RP-5004 - Marathon Oil - Nighthawk #3 - Excavation Backfill

Good Afternoon,

As per a discussion with Brad Billings, please accept this notification that the excavations on the above noted location is going to be backfilled starting December 20, 2018. As per the approved remediation plans, a liner was installed due to excavation activity finding a shallow caliche layer. Remediation activity was also hindered by existing infrastructure rending it a safety risk to proceed any closer to the underground facilities. A closure request will be sent including documentation of the remediation performed in the New Year.

Thank you and Merry Christmas, Dhugal

Dhugal Hanton B.Sc., P.Ag., SR/WA, P.Biol. Vice President, US Operations

Vertex Resource Services Inc. 7223 Empire Central Drive, Houston, TX 77040

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1625 N. French Dr., Hobbs, NM 88240
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District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

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

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

CONDITIONS

Action 282221

CONDITIONS

Operator:	OGRID:
MARATHON OIL PERMIAN LLC	372098
990 Town & Country Blvd.	Action Number:
Houston, TX 77024	282221
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	Remediation approved.	3/18/2024
amaxwell	• The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	3/18/2024